



# Lessons Learned: Initiating and Coordinating a Tech Project Across Disparate Organizations

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CollectionSpace is an open-source, webbased software application for the description, management, and dissemination of museum collections information – from artifacts and archival materials to exhibitions and storage.



# -: collectionspace



#### **Project Partners**

- Museum of the Moving Image, New York
- University of California, Berkeley, Information Services and Technology Division
- University of Cambridge, Centre for Applied Research in Educational Technologies
- OCAD University, Adaptive Technology Resource Centre, Fluid Project





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#### **Funding**

- The Andrew W. Mellon Foundation, Program in Scholarly Communications and Information Technology
- Institute of Museum and Library Services (IMLS)
- Collaborations with Mellon-funded projects
  - ArchivesSpace
  - OLE Project
  - ConservationSpace
  - Fluid Engage
  - Project Bamboo



#### **Community Source**

CollectionSpace development is based on the community source model:

"A hybrid model that blends elements of directed development, in the classic sense of an organization employing staff and resources to work on a project, and the openness of traditional open-source projects like Apache...the distinguishing feature of the Community Source Model is that many of the investments of developers' time, design, and project governances come from institutional contributions... rather than from individuals. The project often establishes a software framework and baseline functionality, and then the community develops additional features as needed over time."



#### Why am I here?

- Where's the Big Data in Museums & Archives?
- Why do they need Enterprise solutions?



#### **ECM** as a Platform

- Fills many needs, has wide support
- Major OSS players: Alfresco and Nuxeo
  - Alfresco has strong US presence, nice application
  - Nuxeo has strong platform focus for developers
- CMIS (OASIS) standard for interop
- Initially a hard sell in Higher Ed, seeing greater adoption with time

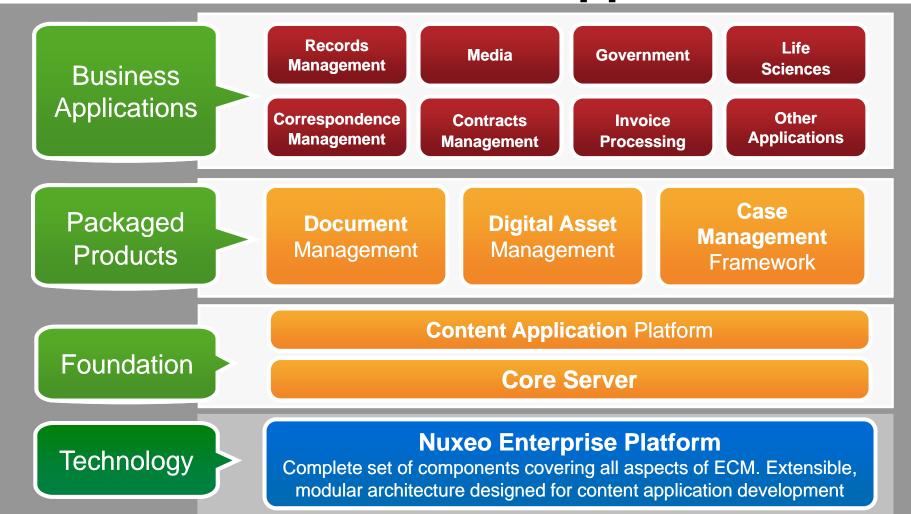


#### **Nuxeo Background**

- Focused on Enterprise Content Management, for 10 years
  - 500+ customers, 5000+ installations
- A platform approach for content applications
- Open platform, open company, embracing OSS
  - Sells support & maintenance subscriptions, with added value software and customization tooling, as services



#### **Nuxeo Platform Approach**





#### **Community Source Project - Lessons**

- Engaging your User Community
- Considering Partners for Development
- Project Roles
- Funding & Sustainability



#### **Engaging Your User Community**

- Community design workshops
- Open communications
- Keep asking them questions
- Think early about adoption workflows
- Find and use natural domain communities



#### Data Architecture as Social Engineering

(common semantics)

Domain-Community specific extensions (common across many institutions)

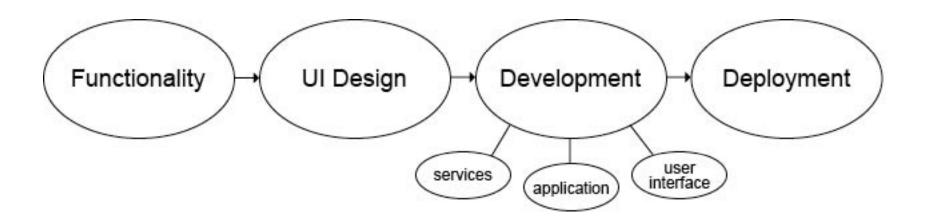
Deployment-specific extensions (specific to one deployment, workflow)

Schema model for a customized service deployment



#### **Partners for Development**

- Ensure your partners have skin in the game
- Localized vs. Distributed expertise
- UI/UX/UCD matter!





#### **Project Roles**

- More PM work with consortial projects
- Functional lead is essential, challenging
- Technical leadership crucial but delicate
  - Responsibility with limited Authority
  - Politeness can sink your project
- Cost/benefit of Test and Build support
- Supporting additional contributors



#### **Funding and Sustainability**

- Development vs. Deployment vs. Production
  - Different sources, different goals
  - Partner vs. Consortial
- Planning for sustainability
  - Chicken and Egg problem for adoption
  - Will your community pay?
  - Foundations, foundations.



#### **Communications lessons**

- Try various media (email, wiki, IRC, Skype, Connect) and see what works for what/whom.
- Don't fight time zones
- Invest in webinars
- Marketing (internal and external) matters.



#### **Development lessons**

- The many ways of Agile/XP...
- Get a stack up early!
- Use CI servers and automated testing.
- Hold periodic F2F dev camps
  - Trust underlies effective distance collaboration
  - Guided walkthroughs and shared tasks
  - Look costly on paper (for travel), but worth it.



#### **Community Source and Governance**

- Funding and internal governance is standard negotiation, etc.
- Technical governance is more of a challenge because of local constraints
- Services (SOA/ROA) governance combines local and peer project constraints.
- Traditional models need adaptation



#### Thanks! Questions?

- Email the team: talk@lists.collectionspace.org
- Visit the website: www.collectionspace.org
- Browse the wiki: wiki.collectionspace.org