BSB Bayerische StaatsBibliothek

Information in erster Linie

Klaus Kempf

L‘organizzazione e conservazione del digitale in biblioteca: l‘esperienza bavarese

The Bavarian State Library
Some facts & figures

- 780 employees
- ~ 10,1 million volumes
- ~ 130,000 incoming volumes p.a.
- more than 63,000 current periodical titles
- 24,147 current e-journals (licensed), 680 databases
- 1,2 Mio licensed e-books
- 1,08 digitised books

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Long-term Preservation Milestones

- 1999 First Long-term preservation project
- 2004 Switch from CD to tape storage (Leibniz Supercomputing Centre
- 2005 Implementation of the *BABS* Library Archiving and Access System
- 2006 First successful hardware migration
- 2007 Start of the Google-Project
- 2009 Rosetta-Partnership with ExLibris
- 2012 Rosetta goes live at BSB

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Present Preservation Responsibilities

Digital Objects from the (Mass-)Digitisation Programme

- ~1.08 mio. volumes, >300 mio. Pages

Born-digital materials

- Electronic journals (->Hosting strategy)
- Databases
- E-books
- Legal Deposit of Public authorities
  (legal obligation since 01/2009)
- Deposit of regional publishers
  (voluntary)
- Open Access: BSB‘s special collections fields

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Lots of Digitisation Activities

Maps 16th Century Books Abwehrblätter Newspapers Biographic 100(0) Key documents on German History Literary & Scientific Remains Latin Manuscripts Incunabula Digi20 German Manuscripts Exhibition Catalogs Monumenta Germaniae Historica Reichstag Session Protocols 100(0) Key Documents on Russian History Encyclopaedia Google Music Supplies Digitisation on Demand Block Books Incunabula Journals on Bavarian History Bavarica

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Lots of Legal Deposit Activities

eBooks Biographic Databases Online Dissertations Sound Storage Media Scientific Databases Digitised Maps Subject Portals Bavarian Official Governmetal Gazettes Electronic Newspapers Scientific Journals Photographic Collections Web Resources Literary & Scientific Remains Digitised Books

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Long-term Preservation: Three intersecting Spheres of Activity

Routine operation of the existing infrastructure

- BABS Library Archiving and Access System

Further development and consolidation of the required structures

- Profile and concepts, workflows
- Organisation
- Technology
- Rosetta Project (to be mentioned later on)

→ Technical support + library-related business

Research and development

- Evaluating future technologies through innovative projects

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LRZ: The backbone of BSB‘s LTP strategy

The Leibniz Supercomputing Centre of the Bavarian Academy of Sciences and Humanities

- IT-services for the university and research institutions in Munich
- Part of Munich Scientific Network
- Backup and long-term preservation
- High Performance Supercomputing Centre for all German universities

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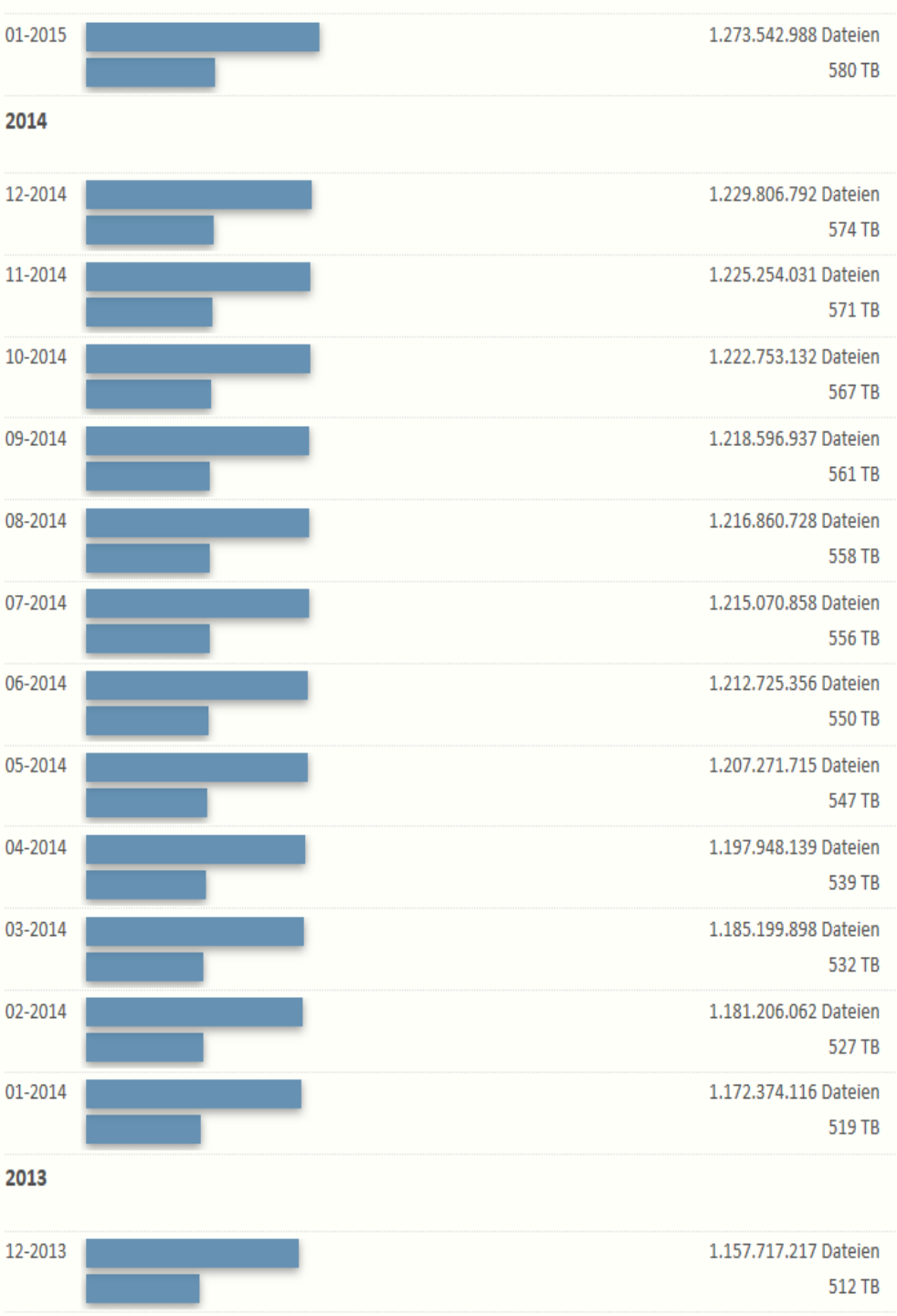
Status Quo 01/2015

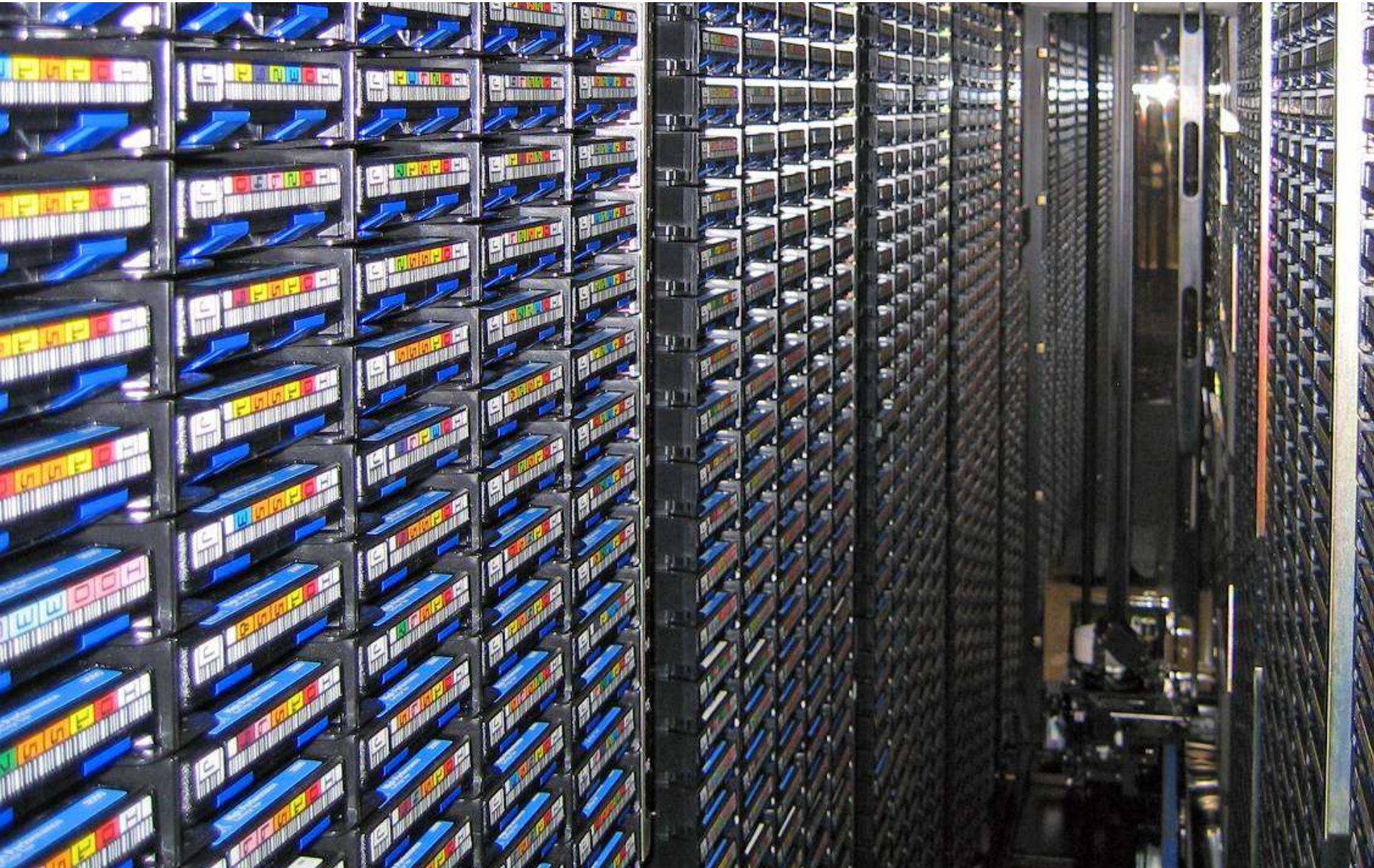
→ Growing electronic archive

- 1,27 Billion Files
- 580 TB
- + ca.3- 8 TB/month

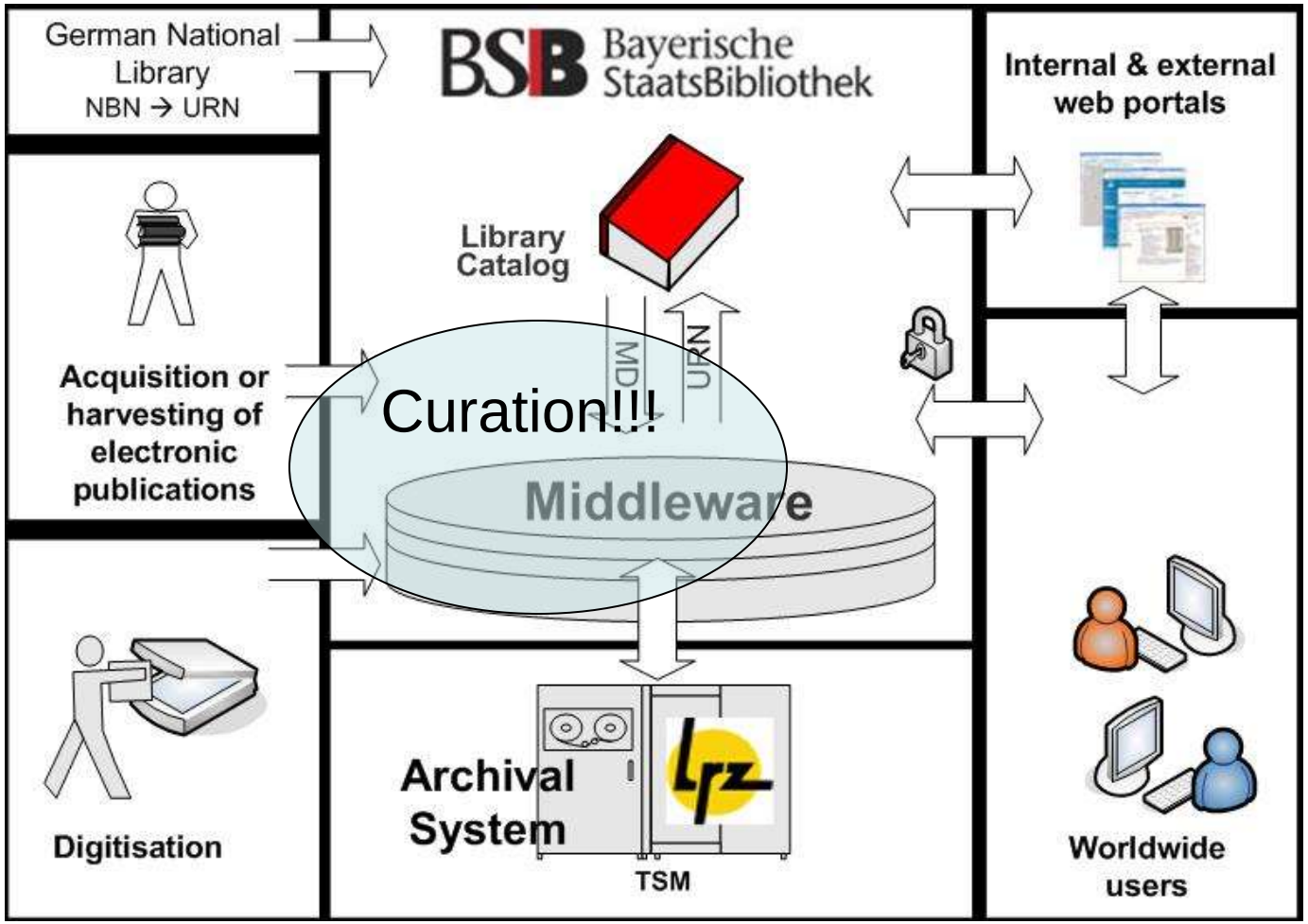


Shelfie 1: In the age of print

Shelfie 2: In the digital age



How it is done: Existing Architecture (BABS)



BSB‘s Preservation Philosophy for curated data

- Increasing importance of selection in the digital age
- Well defined workflows and processes
- Legal basis (law vs. license/contract) for archiving has to be clear
- Adoption of international standards and specifications
  - Open, widespread und well documented formats for all digital objects and metadata
- Permanent access for all users (not a dark archive)
- Combine expertise through cooperation
  - Strategic partnerships and projects

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What a curated AIP needs

AIP= Archival Information Package

- Content (files)
- Bibliographic metadata
- Metadata needed for Preservation
  - Persistent identifiers
  - Technical information
  - Structural metadata
  - Provenance
  - Documentation of all changes
  - Documentation of legal status and access rights

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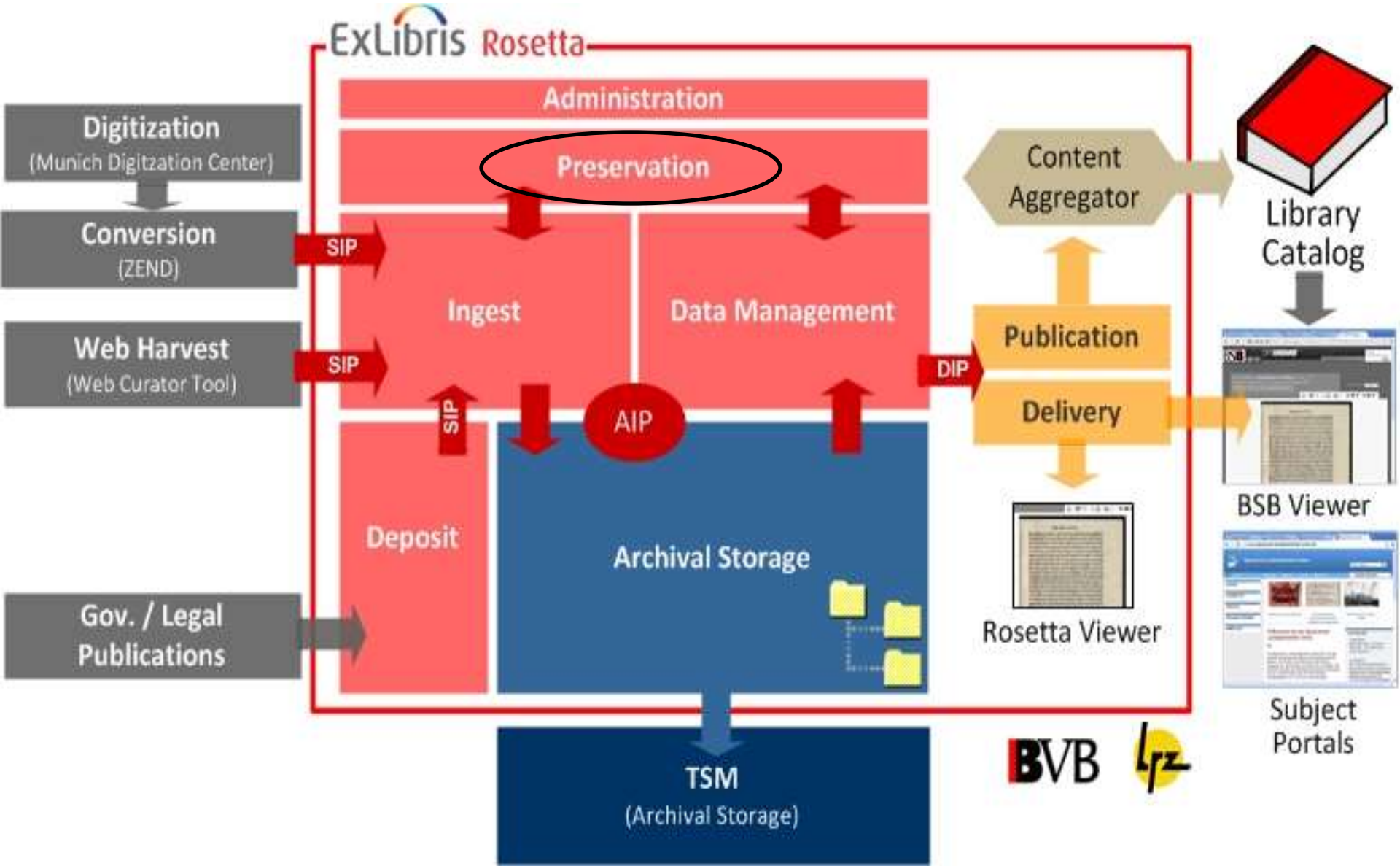
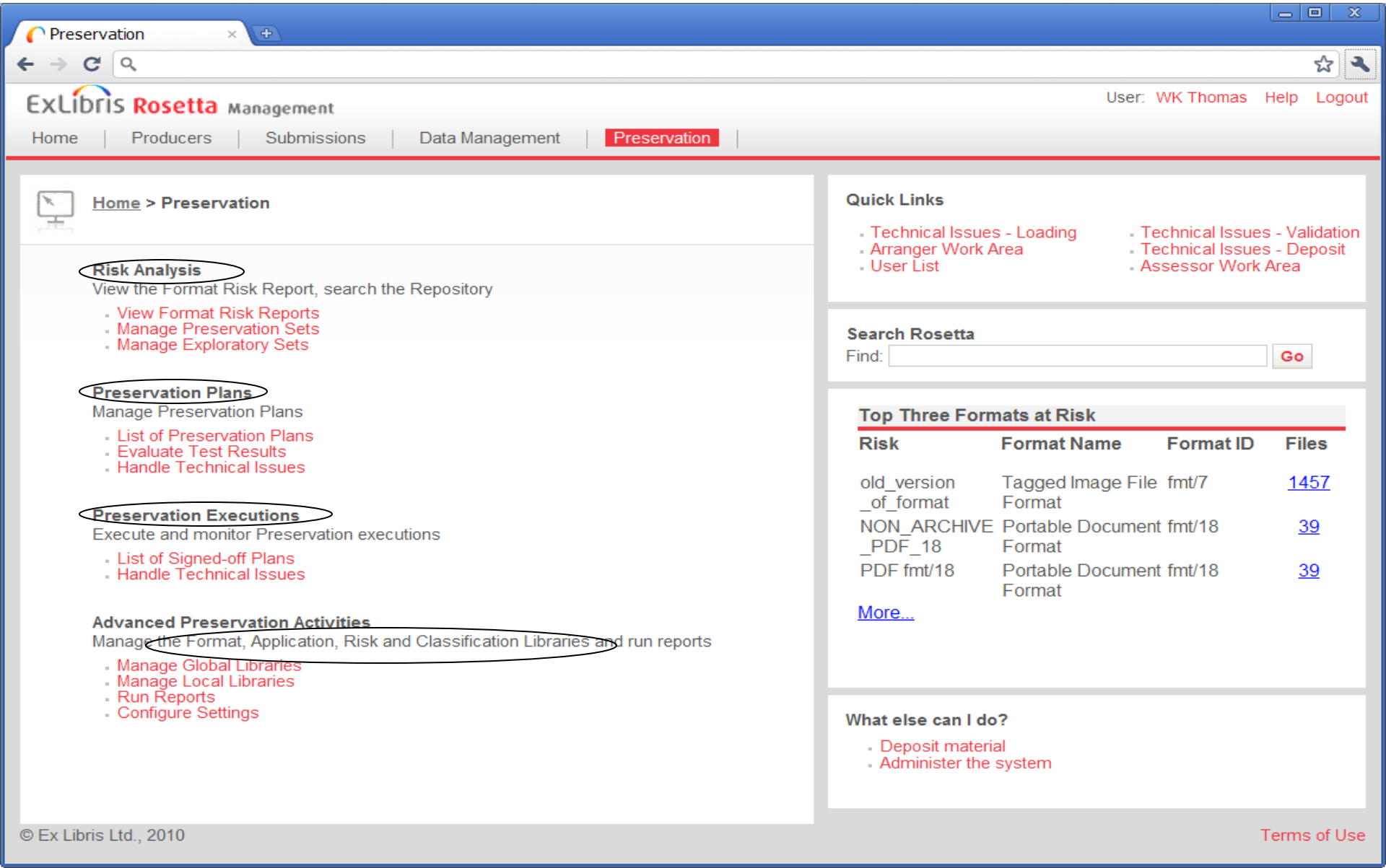
Example: Curation Decisions for retrodigitization

- Do it once, do it right!
- Images in stable and widely used formats (tif, jp2, jpeg)
- XML for structural metadata
- Use of persistents identifiers for every object: URNs
- All Images and structural metadata are saved (redudant storage)
- Quality Control and Checks for Integrity (checks)
  - Format Validation with JHOVE
- Preparation and occasional testing of migration scenarios

What's new: Rosetta at BSB: System architecture for unified preservation



Rosetta's Preservation Module



Rosetta: Still Challenges…

- Scalability
  - Original goal: 1000 Books a Day (for large scale migration of digitised objects) could not yet be reached, but BSB's daily production could be processed
- Improvement of viewers
  - Hierarchical collections (e.g. e-journals)
  - Multimedia objects
- Better integrated support for research data
- Documentation of the system

Long-term Preservation at the BSB
Overall Objectives

- To be a trusted partner in a cooperative solution for the preservation of the digital heritage of Germany
- To preserve digital media from different sources
- To keep everything accessible and available

  (= No dark archive)

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Grazie per l'attenzione!

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