The art of developing a common digitization strategy for two newly merged libraries

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Boutique versus mass digitization – organisational forms of digitization
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The Royal Library, Copenhagen
The State and University Library
The history of the University Library, Copenhagen

• In 1479 the University of Copenhagen was founded by king Christian I (1426-1481)
• In 1482 The University Library was founded
• The oldest royal collection of books was founded by Christian the 3rd, (1503-1559)
• In 1605 the royal collection was donated to the University Library
• The University Library collections were lost in a fire in 1728
• The University Library was rebuilt and moved to a new building in 1861
The history of The Royal Library, Copenhagen

- The Royal Library was founded in 1648 by king Frederick III (1609-1670)
  - Legal deposit responsibility for printed materials since 1697
  - Public library since 1793
  - Passed to the state in 1849 as Denmark became a democracy
The history of The Royal Library and Copenhagen University Library

• In 1927 the Royal Library assumed university library responsibilities for the theological, philosophical, and social science faculties of the University of Copenhagen
• In 2005 it became university library for all faculties
The history of the State and University Library

• The State and University Library in Aarhus, founded in 1897
  • The Danish Newspaper Collection
  • The National Sound Archive
  • Legal deposit responsibility
    • 1902 newspapers
    • 1997 audiovisual materials
    • 2005 radio and television programs

• From 1934 it assumed university library responsibilities for the various faculties of the University of Aarhus

The State Library in Aarhus. Photograph.
The Danish Art Library, Royal Danish Library
Royal Danish Library 2017 –

• The Royal Library in Copenhagen and the State and University Library in Aarhus merged in 2017
  • Including The Danish National Art Library
  • Including The Administrative Library
• Political aim to consolidate national and university libraries in Denmark, and reduce costs of e-resources and licenses
• 12 locations in Copenhagen and Aarhus areas
• Approximately 44 million objects
• App. 800 employees (full-time equivalents, FTE)
• Annual budget ~ 90 million EUR (2017)
Royal Danish Library – main tasks

• National legal deposit library and preservation of cultural heritage
  • Only newspapers and audio-visual materials are collected in digital form, all other materials are still collected in physical form

• University library

• Main loan centre and depository library for the Danish public libraries

• Dissemination of culture and research
National Library

• As national library Royal Danish Library collects, preserves and gives access to Danish cultural library heritage

• The library has unique special collections of printed books, periodicals, manuscripts, incunabula, photographs, maps, printed music, microforms, sound and video recordings, ephemera, Danish folklore archives, Danish Internet, etc.
University Library

• University Library for
  • Copenhagen University
  • Aarhus University
  • Roskilde University
  • IT University

• Develops and provides services to support the universities' research, education and knowledge dissemination
National Loan Centre

• Develops and delivers services to support the Danish public libraries’ services to the public
• Serves as a central deposit library and loan centre
• Assists public libraries in localizing requested material
• A centre of competence regarding interlibrary loans in collaboration with libraries all over the world
Challenges in the newly merged organisation

• Different internet systems/webpages – external communication and collection access points
• Different intranet systems – internal communication
• Different collaboration platforms
• Different access systems
• Different data management systems
• Different cultures

• Challenges
  • Makes effective collaboration and information sharing difficult
  • Does not promote a common culture in the merged library
The Royal Library, Copenhagen – organisation before merger

- Chief Executive
  - University Library Copenhagen
    - Faculty Libraries
    - Information Resources
  - National Library
    - Special collections (NSA1+2)
      - Physical legal deposit and preservation
      - Digital legal deposit and preservation
        - Danish National Art Library
      - Cultural Activities
    - Digitization
  - Administration
    - Finance and Human Resources
    - IT
      - Building Services
        - Procurement, Operations and Logistics
    - Security
The digitization workflow – main tasks

Appraisal and prioritising of the physical collections → Planning of digitization projects → Preparation of the physical collections → Cataloging

Physical preservation → Digitization → Data processing → Quality Control

Return of physical collections → Digital preservation → Digital access → Dissemination of digitized collections
Boutique & mass digitization workflows

• The required workflow relates to the nature of the original works
  • Value of original work
    • Higher value → boutique
    • Lower value → mass
  • Material condition/obsoleteness
    • Fragile/unstable → boutique (substitute)
    • Good/stable condition → mass (copy)
  • Quantity (number of works)
    • Smaller quantities → boutique
    • Larger quantities → mass, Mediestream case
  • Quality of digital copy and metadata
    • Higher quality → boutique
    • Lower quality → mass,
Digitization strategy

• Enable users to digitally access physical collections on demand
• Leverage the amount of physical collections digitally accessible
• Make the digitised collections more comprehensive, searchable and (re)usable
  • Explore new business models
  • 5 – year digitization plan
  • Increase effectiveness (the right things) and efficiency (the things right) of digitization
5-year digitization plan (2019-2023)

- List of all potential digitization projects – prioritized according to significance, demand, preservation, rights, metadata

- Digitization programmes
  - On demand (user driven)
  - Access (curator driven)
  - Preservation (curator driven)
  - Treasures (curator driven)
On demand (user driven)

- Goal: complete works to build comprehensive digital collections
  - Photo studio special digitization (boutique)
    - Orders from Commercial Clients (book Publishers etc.)
    - Orders from non-commercial users (Scientist’s and library loaners in general)
  - Danish books on demand (mass)
    - PDF/OCR and datasets
Access (curator driven)

- Exhibitions (mass)
- Memorial days/years etc. (mass)
  - E.g. in 2020 the library will digitize materials related to the commemoration the reunion of North Slesvig with Denmark in 1920 and make an exhibition
Preservation (curator driven)

• Paper based collections (mass/boutique)
  • Material degradation
  • Difficult to handle

• Photographic collections (mass/boutique)
  • Material degradation

• Audio-visual collections (mass/boutique)
  • Media degradation
  • Media player obsolescence
Treasures (curator driven)

- Digitization of the most vulnerable parts of the collections (boutique)
  - H.C. Andersens manuscript etc.
- Multispectral and special digitization (boutique)
Challenges due to rights and data protection legislation

- Copyright
  - Books before 1900
  - Reading room access on stand alone machine
  - Licenses
- Other restricted or confidential materials
- Danish data protection legislation
  - The General Data Protection Regulation (GDPR)
  - The Data Protection Act (Hjelmslev case)
Digitization centers

Copenhagen (2D/3D objects)
- 1 Head of digitization
- 1 Project manager
- 6 Operators (photographers / repro photographers)
- 25-40 Students (12 hours/week)

Aarhus (Newspapers/audio-visual objects)
- 1 project manager
- 4 operators (photographers, repro photographers, assistents)
Digitization facilities – Copenhagen (2D/3D)
Digitization facilities – Aarhus (Newspapers/Audio-Visual)
Workflow management system
Quality assurance

- Quality control of digitization equipment
  - QC manager
    - Automatic
    - Manual
- Quality control of digital files and metadata
  - operator teams
    - Automatic
    - Manual

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- Quality control at ingest
  - collection managers
    - Automatic
    - Manual
Quality control tools

ISO19264 targets (device & object)
Preservation of digitised collections – differentiated preservation levels

• Access driven imaging
  • Lowest level of security

• Preservation driven imaging
  • Protection: Medium level of security
  • Replacement: Highest level of security (born digital)
Access systems on www.kb.dk

- Mediestream (newspapers, audio-visual materials)
- Cumulus/COP (images/text)
- Text portal (text)
- Library system Exlibris (Digital on demand books in pdf)
Next steps

• Implementing and adjusting the 5-year digitization plan

• Adjustment of digitization strategy
  • According to the new Royal Danish Library Strategy 2020-2024

• Development of new business models
  • Catalogue of potential digitization projects
  • Cooperation with funds and private enterprises
  • Cooperation with the university sector
Questions?