

DPC/DCC Cost Models
Workshop 26th July 2005

The Prestospace Cost Model



Digital Preservation Coalition



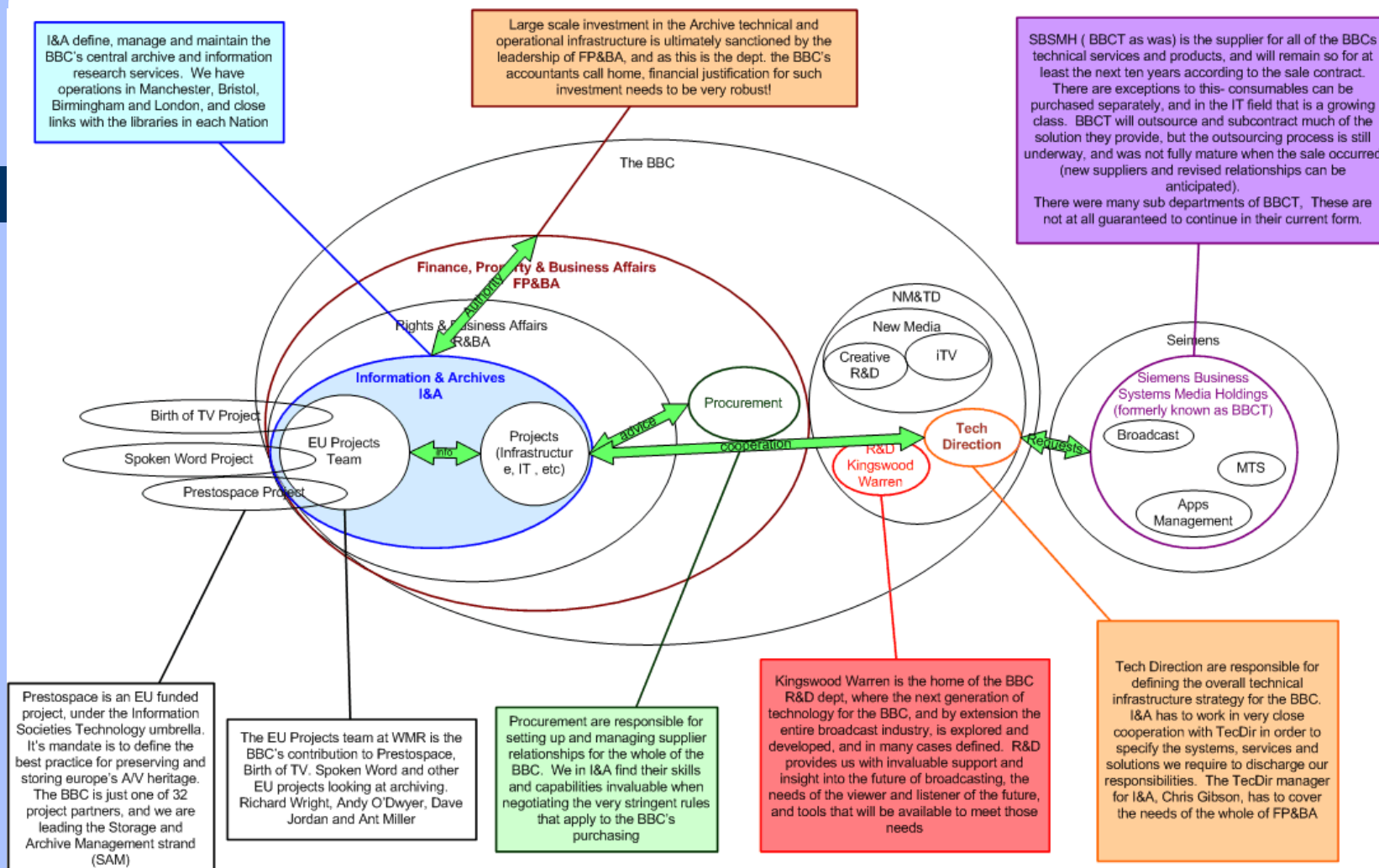
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Prestospace

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Content

- Who we are and what Prestospace is
- Why we have created a cost model
- How the model might be used
- The model in detail
- Our related work (time permitting)



What is Prestospace?

- An EU Integrated Project (IP)
- Part of the Information Society Technologies effort (IST)
- Started in Feb 2004- going on for 40 months
- 35 Partners
 - Broadcasters- RAI ORF BBC
 - Archives- B&G INA
 - Accademic Inst.- Uni of Sheffield, Tor Vergata, Sofia, Southampton
 - Industrials (SMEs)- Snell & Wilcox, SSL, Hi Stor, Enginio

Ah... What's it for?

- Preservation of Europe's A/V archives into the digital age
- Creation of new software and hardware and processes to enable the affordable migration of content into sustainable forms
- Affordable restoration tools for the digital domain
- Machine aided metadata creation to support improved access
- Specification of architectures and business processes to support the indefinite storage of archives

Purpose of cost model

- A framework for medium to large archives to build or review a business case
- Report D13.1 '**Planning for Digitisation and Access**'
- Supports an initial Migration Project-
Applicable to ongoing migration issues

Use of the model- Strategy

- Based on Mass Digitisation Strategy
 - Project to digitise all of collection
 - Alternatives:
 - Digitise on Demand
 - Digitise by item analysis and category synthesis
 - Digitise by archive subsection
- Strategic approaches not mutually exclusive
- Mass digitisation includes prioritisation

Use of the model- Business uses

- Hard Finance
 - Budget & resource planning
 - Setting performance metrics/ targets
 - Managing the project
- Softer Business
 - Setting expectations
 - Demonstrating competence for grant application
 - Scaring budget holders into action

Types of Archives- Different Needs

- Commercial
 - Cost reductions
 - Access/ Revenue
- Library Based
 - Access/ Grants
 - Cost reduction
 - Revenue
- Museum
 - Curatorial issues
 - Cultural Heritage
 - Spectrum Compliance
 - Cost reductions

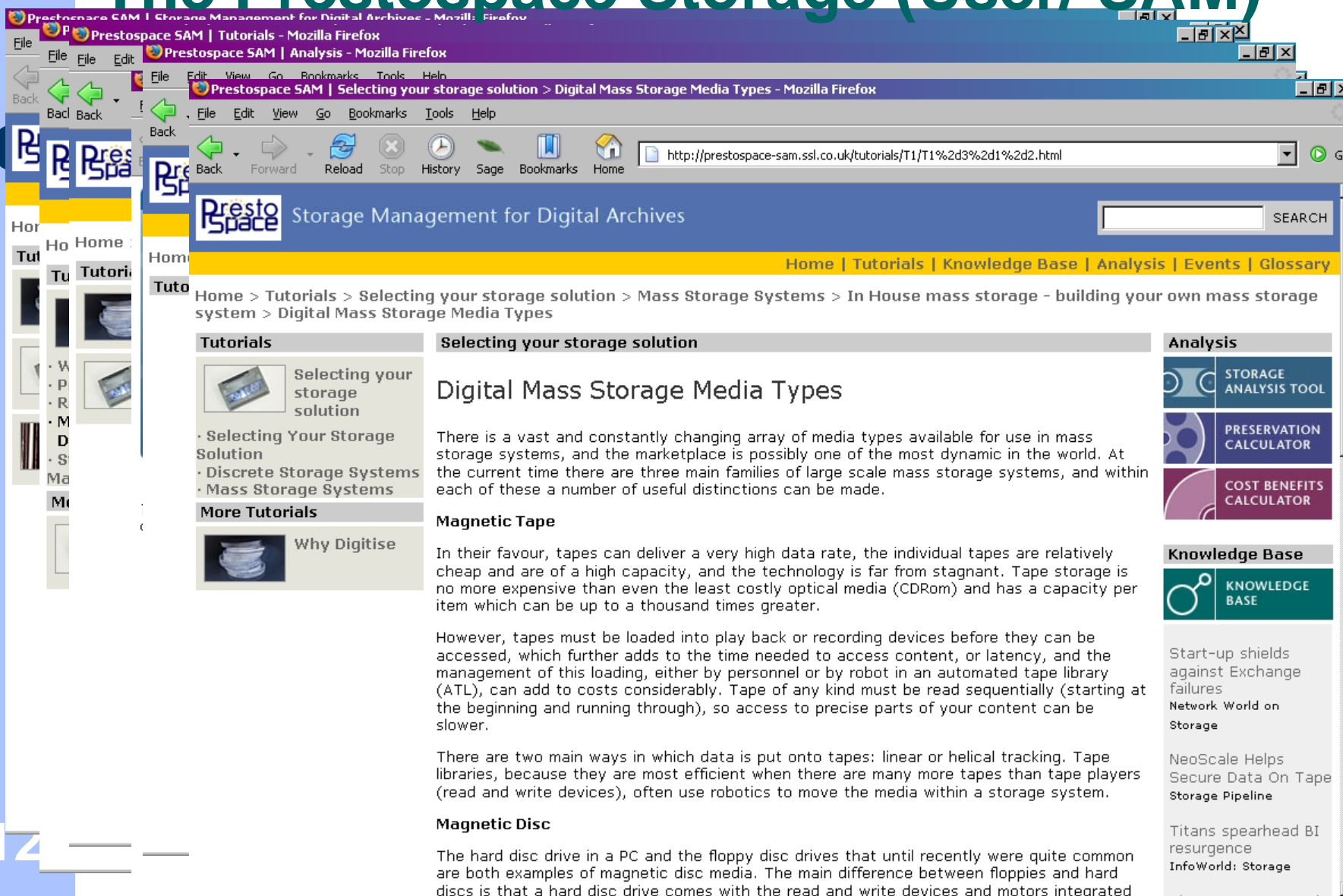
Measuring ROI- Doing more...

- Prevention of Loss
 - Increase in saleable material over time (£)
- Enabling Access
 - Increase Cultural Reach
 - Increase in sales (£)
 - Increase in saleable services (£)
- Improving restoration
 - More restored saleable material (£)

Measuring ROI- ...for less

- Digitised storage
 - Smaller physical footprint(£)
 - Lower staffing needs (£)
 - More reliable storage (£???)
 - Cheaper long term migration (£???)
- Digitised Restoration
 - Cheaper kit(£)
 - Wider labour market (£)
- Digital Distribution
 - Cheaper delivery(£)

The Prestospace Storage (User/ SAM)



PrestoSpace Storage Management for Digital Archives

Home | Tutorials | Knowledge Base | Analysis | Events | Glossary

Home > Tutorials > Selecting your storage solution > Digital Mass Storage Media Types

Digital Mass Storage Media Types

There is a vast and constantly changing array of media types available for use in mass storage systems, and the marketplace is possibly one of the most dynamic in the world. At the current time there are three main families of large scale mass storage systems, and within each of these a number of useful distinctions can be made.

Magnetic Tape

In their favour, tapes can deliver a very high data rate, the individual tapes are relatively cheap and are of a high capacity, and the technology is far from stagnant. Tape storage is no more expensive than even the least costly optical media (CDRom) and has a capacity per item which can be up to a thousand times greater.

However, tapes must be loaded into play back or recording devices before they can be accessed, which further adds to the time needed to access content, or latency, and the management of this loading, either by personnel or by robot in an automated tape library (ATL), can add to costs considerably. Tape of any kind must be read sequentially (starting at the beginning and running through), so access to precise parts of your content can be slower.

There are two main ways in which data is put onto tapes: linear or helical tracking. Tape libraries, because they are most efficient when there are many more tapes than tape players (read and write devices), often use robotics to move the media within a storage system.

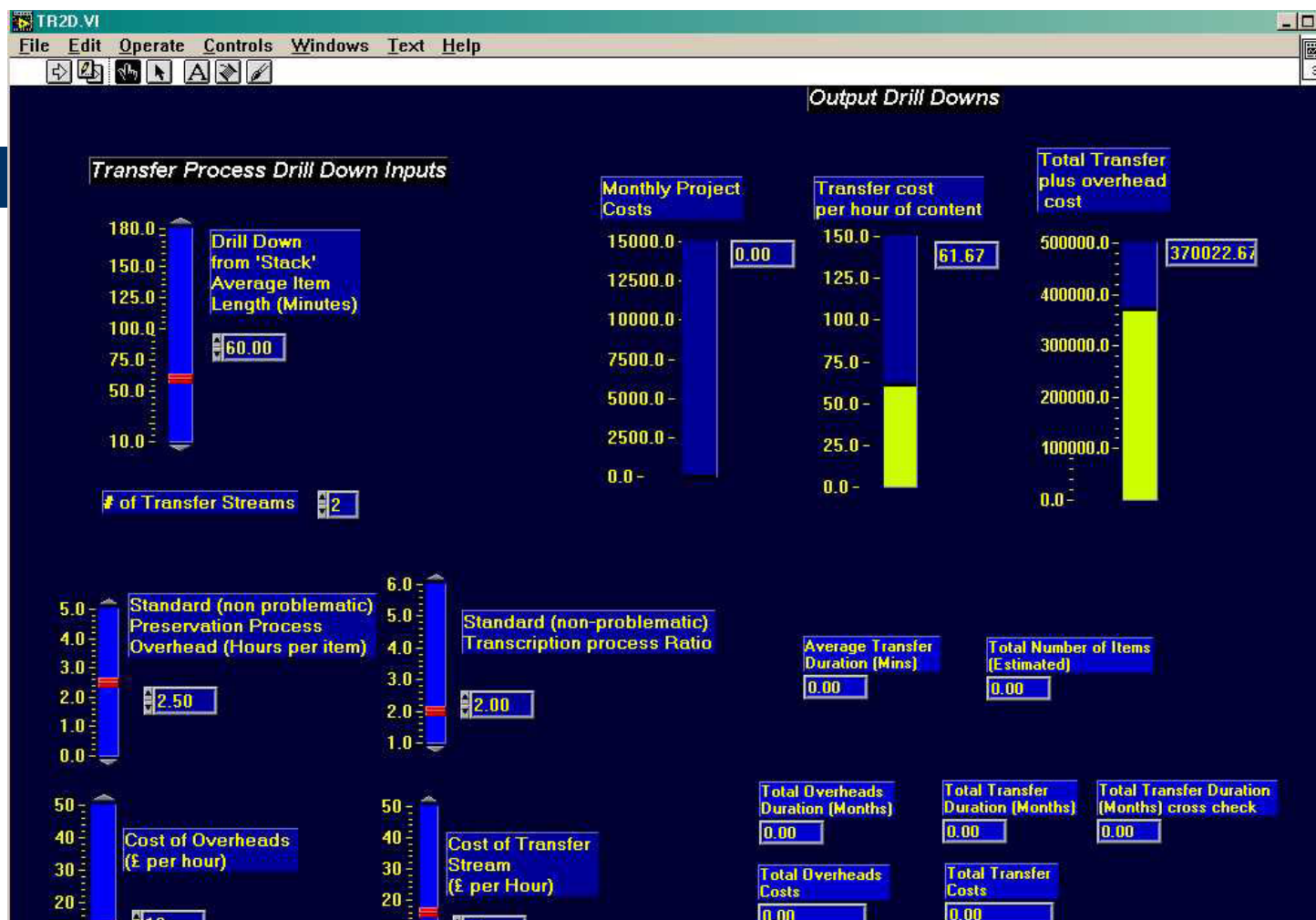
Magnetic Disc

The hard disc drive in a PC and the floppy disc drives that until recently were quite common are both examples of magnetic disc media. The main difference between floppies and hard discs is that a hard disc drive comes with the read and write devices and motors integrated

Web Site- Tools

- Preservation Projects
 - Long term, massive investment, complex counter intuitive
 - Critical to plan well to get funding
- Storage needs
 - Multiple current measurements (Shelf Length, Hours, Feet, Items)
 - Complex encoding rate decisions
 - Easy to get wrong by factors of 1000 (or was that 1024???)
 - Need to integrate with Preservation Project- What storage is needed when?

Quick reference modelling tool



Migration Costs Diagram from Tutorial

