

From chaos to order: implementation of work flows

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Digital Resource Management from Data to Knowledge

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What is workflow?

A sequence of tasks, performed by designated people to accomplish an end result

- → define the end result
- → define the tasks required to achieve the end result
- → decide who will perform the tasks
- → define the order in which tasks are required to be completed

Define the end result

1. Outcomes (content published to a well managed web site)
2. Products (eg. PDF files, web ready images, OCR texts, metadata records)
3. Submissions (eg archiving)
4. Project reports (eg production)

Define the tasks required to achieve the end result

1. identify tasks and steps
2. steps to be added or eliminated
3. re-define the order of processes
4. assign persons to tasks

Define the order of tasks

- ▶ Follow in a prescribed order
 - One process completed before the next
 - Small staff
- ▶ Parallel order
 - Simultaneous flows
 - Bigger complement of staff

Important aspects

- ▶ scheduling – ensure deadlines are met
- ▶ tracking – see where holds-ups are occurring
- ▶ accountability – quality control
- ▶ streamlining – minimise frustration and excuses
- ▶ automation – software, macros, batch processes

Where to start?



Identify the processes

Selection of material

Copyright issues

Metadata

Scanning

Derivatives

Archiving

Web publishing

Focus on each process

- Identify the sub-processes
- People linked to the processes
- Identify potential hold-ups (eg lack of skills, hardware on order)

Metadata creation

- ▶ selection of resources completed?
- ▶ copyright issues?
- ▶ metadata creation– by whom and when
- ▶ manual metadata, automated metadata
- ▶ quality control – by whom and when
- ▶ object identifiers
- ▶ people matched to processes

Scanning

- ▶ Creation of directories
- ▶ Scanning – by whom and when
- ▶ Quality control – by whom and when
- ▶ Post-processing of images
- ▶ Derivatives eg. pdfs, thumbnails etc

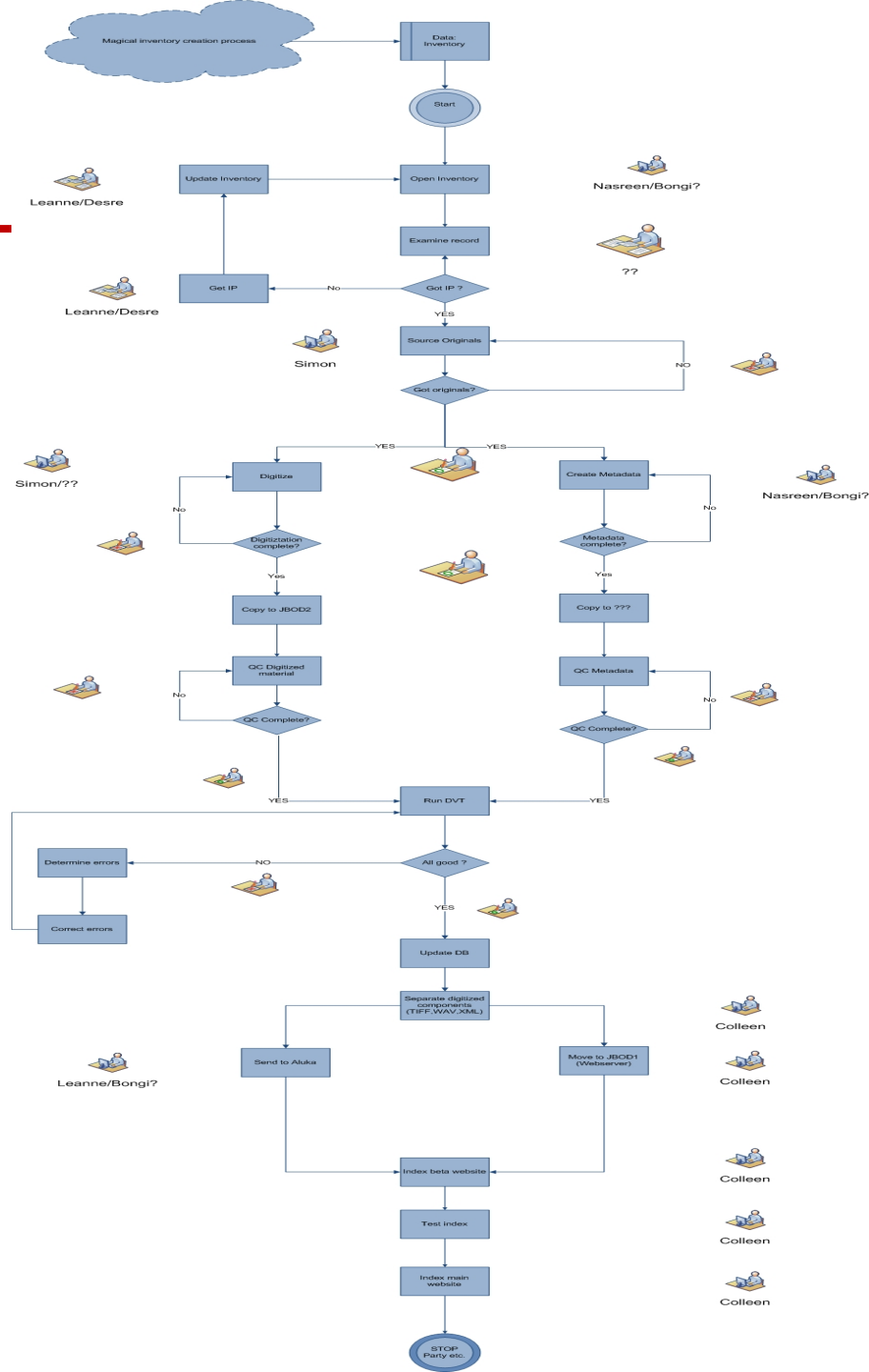
Web publishing

- ▶ Web publishing – by whom and when
- ▶ Web site checking and updating
- ▶ Checking links

Quality control

► Quality control at each step of the process

- define whose responsibility
- define the procedure
- written guidelines
- what can be automated?



Database

- ▶ Track selections
- ▶ Borrowing/ returning physical items
- ▶ Copyright tracking
- ▶ To track production – when and by whom
- ▶ Quality control – when and by whom
- ▶ Archiving – when and by whom
- ▶ Web publishing – when and by whom

Journal database

Disa Database

File Edit View Insert Format Records Tools Window Help

Journal Titles : Table

ID	ISSN	EAD	content	Journal Title	Total pages
1	1684-9728	ch	okay	Abasebenzi	139
2	1562-8140	ch	okay	Afra News	437
72				African Communist	1443
3	1684-971x	ch	okay	Africanist News and Views	77
37	1729-2735	ch	okay	Amandla-Matla	6
4	1684-4459	ch	extra file	Apdusa Views	649
49	1684-8098	ch	okay	Arise Vukani	132
6	0376-4354	ch	okay	Black Review	910
7	1021-5123	ch	okay	Clarion Call	916
8	1684-8101	ch	okay	Congress Resister	60
66				Contact	2196
9	1727-0588	ch	okay	Cosatu News	196
10	1562-7616	ch	okay	Crisis News	304
11	1024-8196	okay	91-94 12 is	Critical Health	3186
12	1681-5785	okay	1 iss miss	Dawn	2426
13	1017-0243	okay	3 iss miss	Democracy Action	1250
39	1727-8414	okay	okay	East Cape Update	8
70	1816-6172			Fighting Talk	2067
14	1562-7624	okay	2 iss miss	Fosatu Worker News	286
15	1683-7118	okay	okay	Frank Talk	326
16	1609-7955	okay	okay	Grassroots	1113
17	1684-808x	okay	okay	Ikwezi	1278
18	1682-4121	okay	okay	Inqaba ya Basebenzi	1704
61	1684-9736	okay	okay	Isisebenzi	74
19	1027-8028	okay	okay	Isizwe	278
60	1684-8071	okay	okay	Izwi lase Township	207
21	1015-2296	okay	okay	Journal Black Theology	1063
65	1729-455X			Liberation	785
22	1021-853X	okay	28 iss mis	Mayibuye	3998
23	1684-4890	okay	okay	NUM News	224
24	1727-1592	okay	okay	Phakamani	204
71				Phambili	235
25	0032-9142	okay	14 iss mis	Pro Veritate	3449

Record: 1 of 44

Datasheet View

Journal issues

Disa Database

File Edit View Insert Format Records Tools Window Help

Journal Titles : Table

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		Ref	TotPages	Volume No	Issue No	Issue Month	Year	Date Received	On loan from	Date Sent Back	Remote	Sent to s	Received from site	Notes
+		2731	16	Vol 1	No 1	September/October	1984	02-Sep-13	Institute of Cor	24-Mar-04				
+		2006	16	Vol 1	No 2	December/January	1984/1985	13-Sep-02	UCT	24-Oct-02				
+		2020	20	Vol 1	No 5	Sep-Oct	1985	30-Sep-02	Wits	21-Jan-03				Photocopy
+		2007	16	Vol 1	No 4	April-May	1985	13-Sep-02	UCT	24-Oct-02				
+		2021	16	Vol 1	No 6	Mar-Apr	1986	30-Sep-02	Wits	21-Jan-03				Photocopy
+		2008	20	Vol 2	No 1	Review/January	1986/1987	13-Sep-02	UCT	24-Oct-02				
+		2009	20	Vol 2	No 3	March-June	1987	13-Sep-02	UCT	24-Oct-02				
+		2010	24			September	1989	13-Sep-02	UCT	24-Oct-02				
*		Number)	0											
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Record: 7 of 8

Journal production and quality control

The screenshot shows the 'Disa Database' application window. The title bar reads 'Disa Database'. Below it is a menu bar with options: File, Edit, View, Insert, Format, Records, Tools, Window, Help. A toolbar contains various icons for file operations, editing, and viewing. The main area displays a table titled 'Journal Titles : Table'. The table has columns: ID, ISSN, EAD, content, Journal Title, Total pages. It lists several journals like 'Abasebenzi', 'Afra News', 'African Communist', etc. There are also some rows with '+' or '-' signs in the first column. At the bottom, there's a status bar showing 'Record: 1 of 1'.

ID	ISSN	EAD	content	Journal Title	Total pages
+ 42	1684-9728	ch	okay	Abasebenzi	139
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▶ - 2020	20	Vol 1	No 5	Sep-Oct	1985	30-Sep-02	Wits	21-Jan-03				Photocopy
* 04-Oct-02	PL		24-Oct-02	CG		24-Oct-02	CG	24-Oct-02	CG	24-Oct-02	7/8/2004	SM
+ 2007	16	Vol 1	No 4	April-May	1985	13-Sep-02	UCT	24-Oct-02				
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Record: 1 of 1

Archival material

Microsoft Access									
File Edit View Insert Format Records Tools Window Help									
Type a question for help									
Item Description : Table									
	ID	Con	FileNo	Topic	RecordID	RecordDate			
+	251	1	285	245	mem19740000.032.009.285	1974/01/01	Nkwenkwe Nkomo, "Foreign Investment," 1974, 2 pp. won't scan fully		
+	252	1	285	245	pre19740000.032.009.285	1974/01/01	"Press Release to the Rand Daily Mail," sgd Nkwenkwe Nkomo, [1974?], 1 p.		
+	1056	1	285	245	mem19740400.032.009.285	1974/04/01	'Terrorism Trial' An Appeal for Rededication and Commitment in the Struggle by Way of Finan		
+	1057	1	285	245	let19740904.032.009.285	1974/09/04	Letter from Patrick Mosiuoa Lekota to "Black Brother" [S. Farisani?], Sept 4, 1974,		
+	254	1	286	245	spe19751213.032.009.286	1975/12/13	T. S. Farisani, "National Congress Address," Dec. 13, 1975, 5 pp.		
+	255	1	286	245	pra19751216.032.009.286	1975/12/16	"A delegate's account of the Black People's Convention Congress (BPC), Kingwilliamstown, D		
+	256	1	286	245	joa19751216.032.009.286	1975/12/16	"Future State: A B.P.C. Projection & Call of the Youth," Azania Combat, October/November 1		
+	257	1	286	245	min19751216.032.009.286	1975/12/16	"Minutes of the Fourth National Congress Held at King Williams Town, December 1975," inclu		
+	258	1	286	245	cnf19751216.032.009.286	1975/12/16	Unamended drafts of Commission Reports, Executive Report, and Program, BPC conference :		
+	259	1	286	245	rep19751216.032.009.286	1975/12/16	"Commissions Report 1. Black Consciousness 2. Black Communalism....," prepared for BPC i		
+	260	1	286	245	min19760417.032.009.286	1976/04/17	"Minutes of the Seventh (7th) National Executive Council Meeting Held at D.O.C.C. Johannest		
+	261	1	286	245	cnf19760531.032.009.286	1976/05/31	Hlaku K. Rachidi, "Black Communalism; As Seen Through Labour Perspectives," [May 1976 t		
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+	264	1	287	245	pra19770428.032.009.287	1977/04/28	Thami Zani, "Black Consciousness and its Origins," Cape Times, April 28, 1977, 1 p.		
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+	267	1	287	245	min19770716.032.009.287	1977/07/16	"Minutes Of The Meeting Of Black Organisations Called By The Black People's Convention,"		
+	268	1	287	245	mem19770700.032.009.287	1977/07/01	"B.P.C. Leadership Training," [July 1977 ?], 4 pp.		
+	269	1	287	245	pre19770800.032.009.287	1977/08/01	"A Blueprint for Education," Rand Daily Mail, August 24, 1977, 2 pp. [incomplete]		
+	270	1	287	245	pre19770927.032.009.287	1977/09/27	"Statement by B.P.C. Vice President Rev. Drake Tskenkeng," attacking Gatsha Buthelezi, Se		
+	271	1	287	245	let19771012.032.008.287	1977/12/10	Letter from Lybon Mabasa to the Secretary, IDAMASA, announcing meeting on education to t		
+	272	1	287	245	mem19771000.032.009.287	1977/10/01	"Blue-Print of The Proposed Educational Policy," [Oct? 1977], 5 pp.		
+	273	1	287	245	pre19771200.032.009.287	1977/12/01	"Christmas Statement by Leaders of the Black Peoples' Convention in Indefinite Detention," D		
+	274	1	287	245	mem19770000.032.009.287	1977/01/01	"To: Ranwedzi Harry Nengwekhulu - Memorandum on B.P.C. external affairs programme," 197		
+	275	1	287	245	spe19780112.032.009.287	1978/01/12	Sipho Buthelezi, "On the Current Political Trends in South Africa in the Context of the Struggle		
Record: 246 of 955									

Archival production

Microsoft Access

File Edit View Insert Format Records Tools Window Help

Type a question for help

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			DCRecord	DCRecordB	QCindex	QCindexB	Scanned	ScannedBy	ScansReceived	QC	QCBy
			19-Jan-05	SM	07-Jul-05	PL	12-Oct-04	WHP	15-Oct-04	15-Oct-04	CG
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Record: 1 of 1

Datasheet View

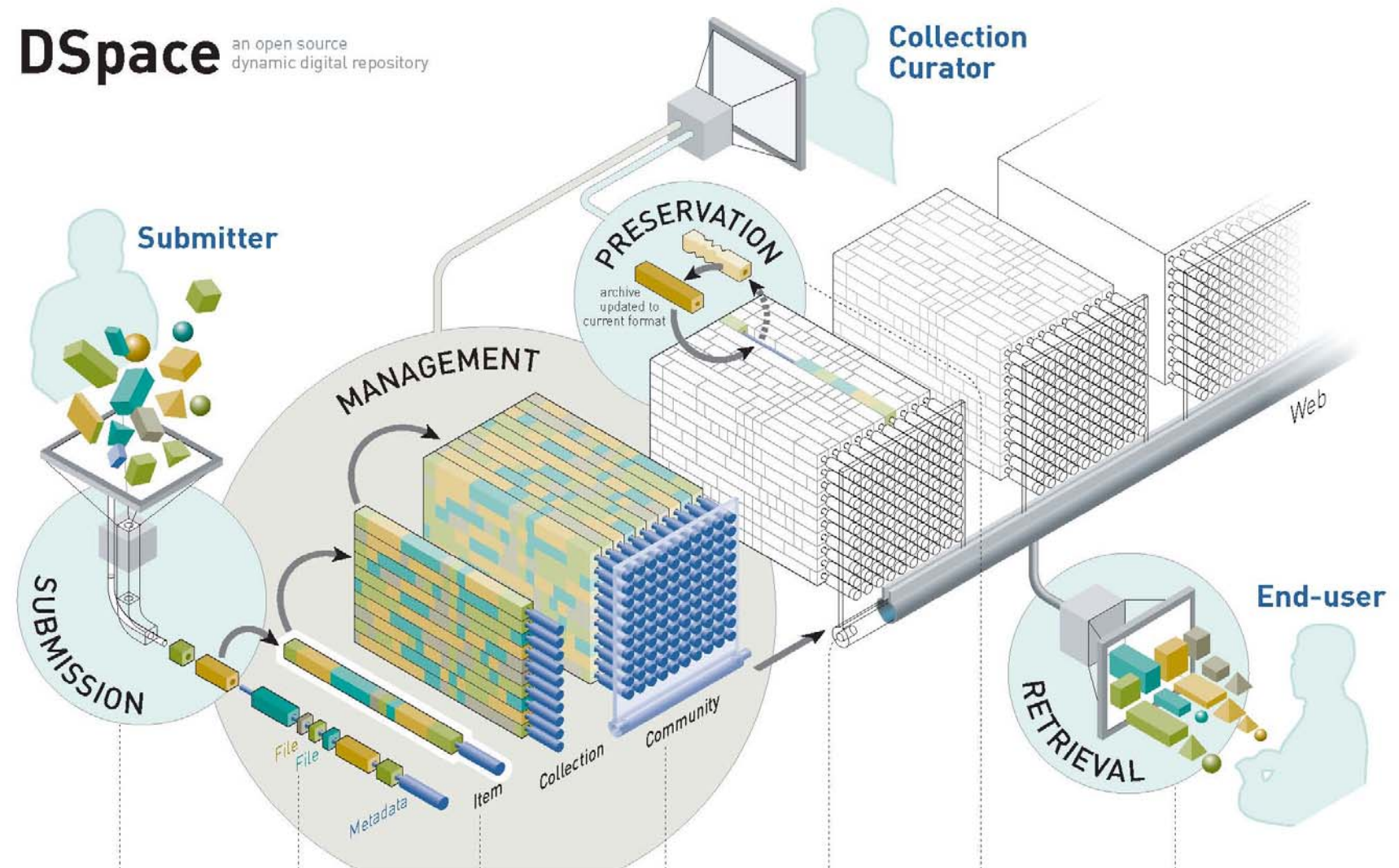
NUM

Software

- ▶ Freehand
- ▶ Visual mind
- ▶ Visio
- ▶ Some CMS (eg. DSpace) have built in workflows

DSpace

an open source
dynamic digital repository



1 Web-based interface makes it easy for a submitter to create an archival item by depositing files. DSpace was designed to handle any format from simple text documents to datasets and digital video.

2 Data files, also called bitstreams, are organized together into related sets. Each bitstream has a technical format and other technical information. This technical information is kept with the bitstreams to

3 An item is an "archival atom" consisting of grouped, related content and associated descriptions (**metadata**). An item's exposed metadata is indexed for browsing and searching. Items are organized into **collections** of logically-related material.

4 A **community** is the highest level of the DSpace content hierarchy. They correspond to parts of the organization such as departments, labs, research centers or schools.

5 DSpace's modular architecture allows for creation of large, multi-disciplinary repositories that ultimately can be expanded across institutional boundaries.

6 DSpace is committed to going beyond reliable file preservation to offer **functional preservation** where files are kept accessible as technology formats, media, and paradigms evolve over time for as many types of files as possible.

7 The end-user interface supports browsing and searching the archives. Once an item is located, Web-native formatted files can be displayed in a Web browser while other formats can be downloaded and opened with a suitable application program.

Benefits of workflow

- ▶ Improve efficiency and effectiveness
- ▶ Avoids duplication, oversights and overlaps
- ▶ Accountability (audit trails)
- ▶ Meet production targets and deadlines
- ▶ Eliminate hold-ups
- ▶ Review and reporting functions
- ▶ Consistent implementation of production standards
- ▶ Saves time, money and frustration

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**'It's the latest innovation in office safety.
When your computer crashes, an air bag is activated
so you won't hang your head in frustration.'**