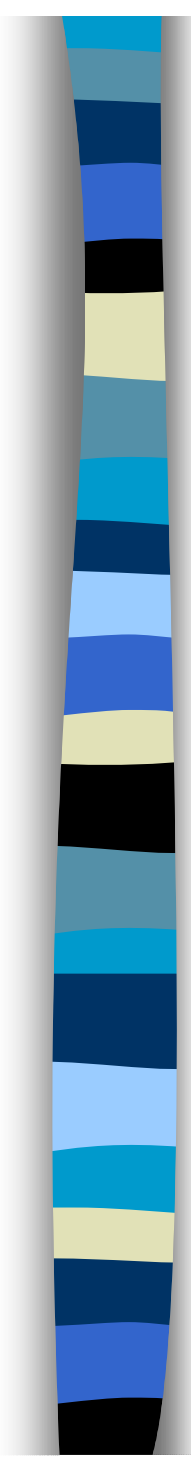
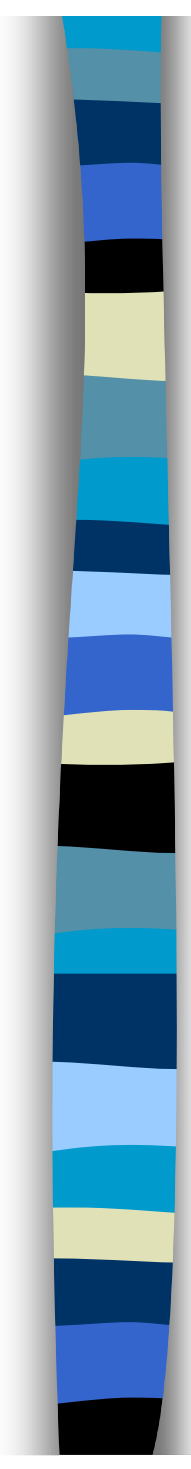


Economic models of digital-only journals

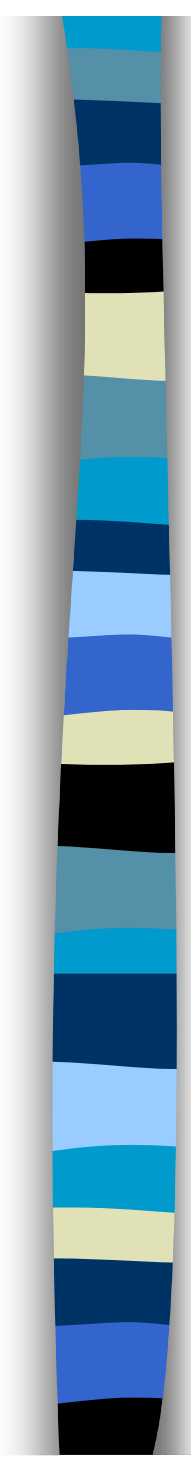
L. Halliday & C. Oppenheim

- 
- Background to the models
 - Ithink
 - The three models
 - Plans to further develop models of digital-only journals

Background

- 
- A vertical decorative bar on the left side of the slide, composed of various colored segments (blue, yellow, black, grey) in a repeating pattern.
- Most innovative models are HE-based
 - They seek a solution to the 'serials crisis'
 - They bypass commercial publishers
 - They involve substantial cost reduction
 - This is based on a 'basic' product

Activity-based costing

- 
- Tenopir and King have costed print journals
 - Activity-based models help us to:
 - understand the activities and roles involved
 - explore alternative cost-recovery and pricing mechanisms



Three models of digital-only journals

- Based on literature and practitioner input
- Part of larger study of models of digital library available at www.ukoln.ac.uk/services/elib/papers/supporting/#ukoln
- UK perspective

Traditional model

- Editorial process and delivery is electronic
- Included for comparison with current practice
- Authors, referees and editors unpaid
- Costs recovered from subscribers

Free-access model

- Academics seek widespread dissemination
- 'Faustian bargain'
- Digital costs can be only 30% of print costs
- Authors pay so that users access content for free

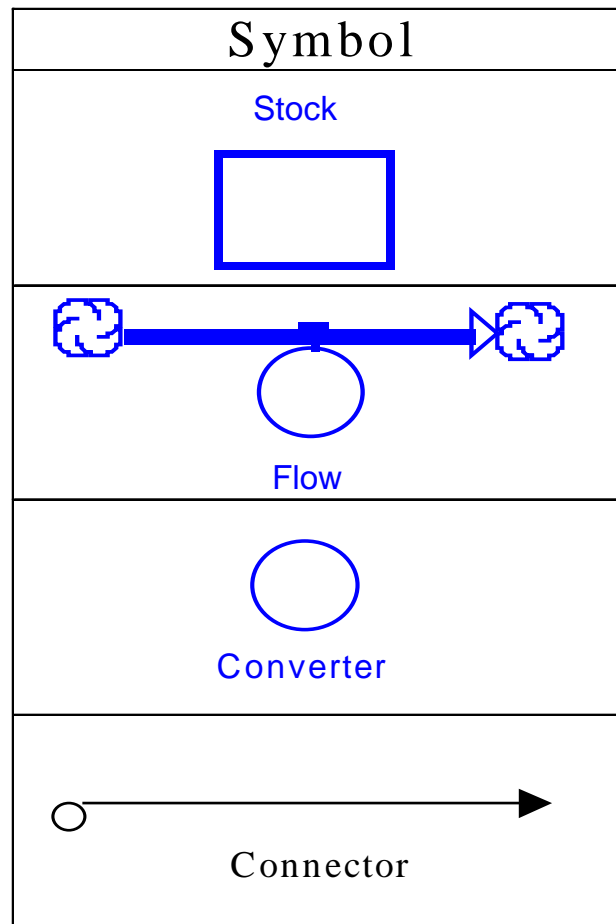
Market model

- Current supply-demand chain is distorted
- Proposed alternative model:
 - Authors and subscribers to pay
 - Editors and referees paid, authors receive royalties
 - Authors who can't pay are covered
 - Access is rationed

Resources required

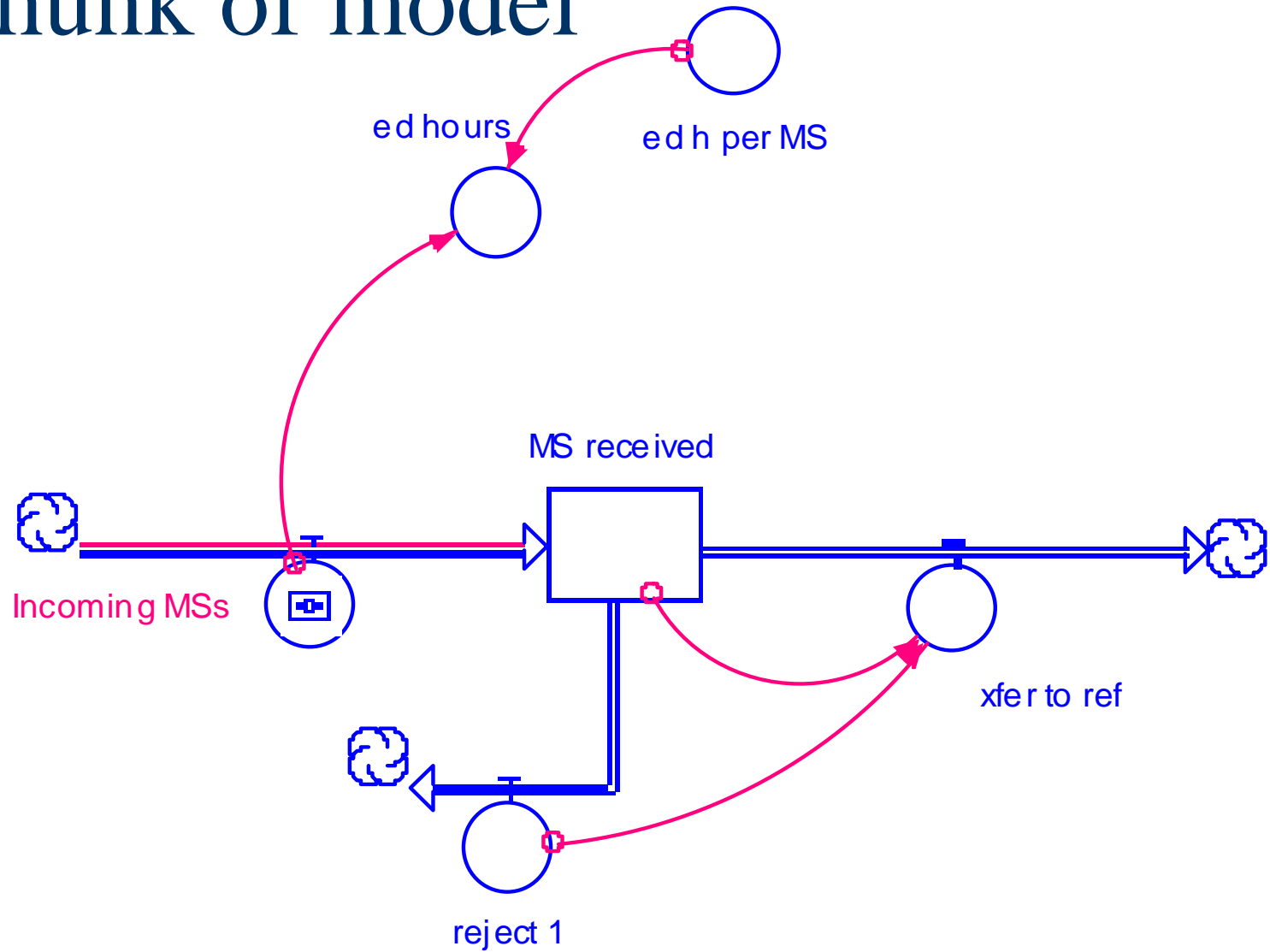
- Staff costs are most significant
- Large organisations like HEIs: 120% overhead
- Free at point of use is not cost free
- Smaller, leaner organisation: 60%
- All models staffed by 2 half-time employees

Ithink model elements



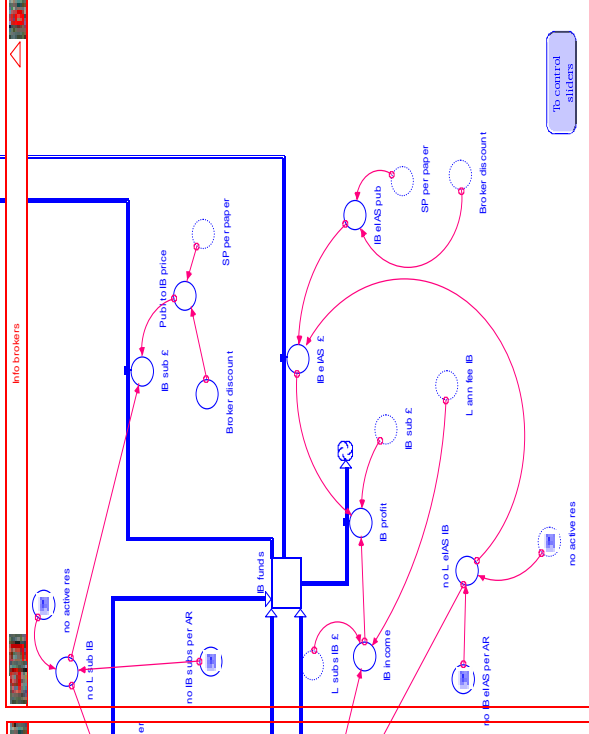
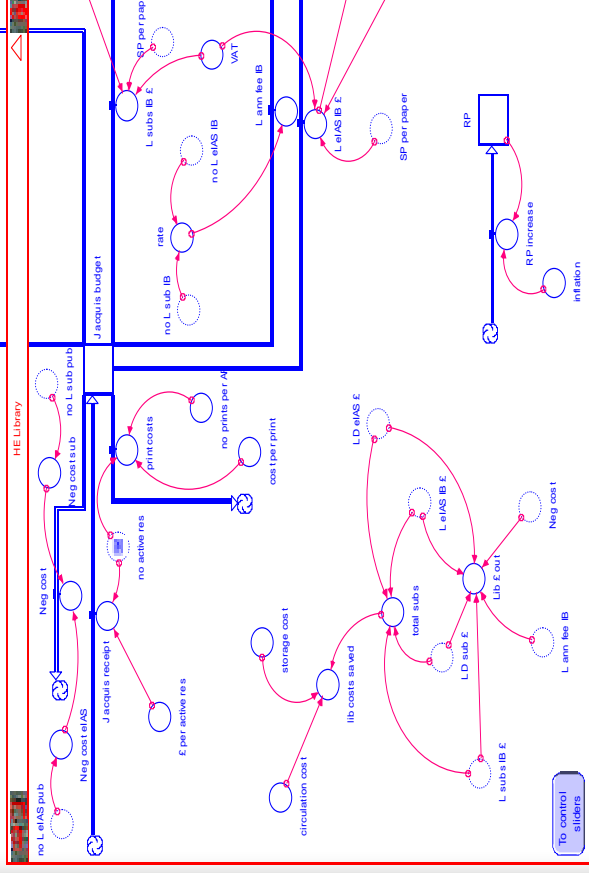
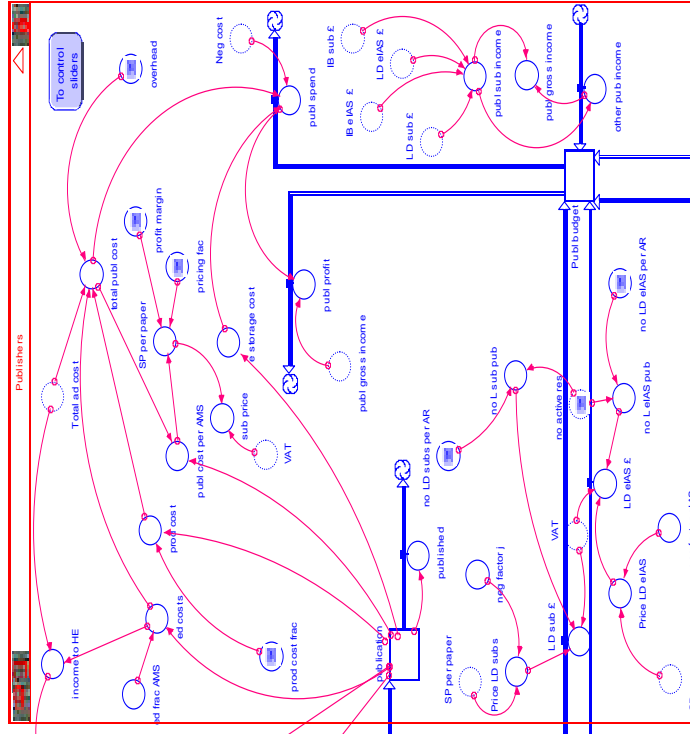
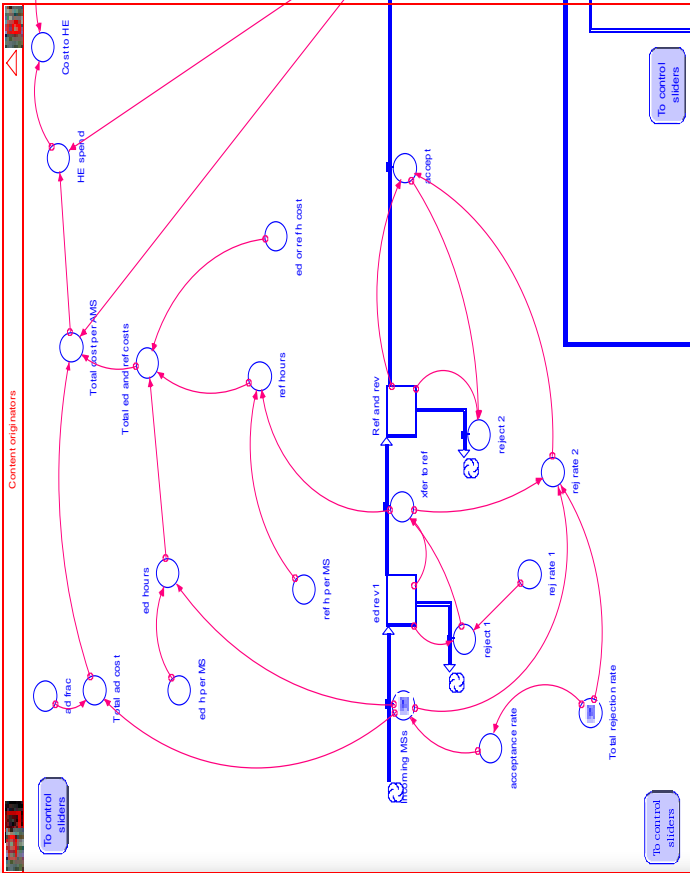
www.hps-inc.com/bus%5Fsolu/ithink/demo_gate.htm

Chunk of model



Content of models

- Four interconnected sectors
- Production of 120 10-page papers
- Graphic representation
- Numerical definitions
- Fully documented in model and report
- Simple models of complex systems



Traditional model: subscription fee

Overhead rate	120%			60%		
Profit margin	0%	10%	20%	0%	10%	20%
	Subscription fee (\$)					
No. of subs						
200	1062	1167	1274	772	849	927
500	425	467	510	308	340	371
1000	212	233	255	154	170	186
2000	105	116	127	77	85	93
20 000	11	11	13	8	8	9

Free-access model: author fees

Overhead	30%		60%		120%	
Rejection	10%	90%	10%	90%	10%	90%
Author fee (\$)	816	58	1005	112	1383	154
[per page]	[81]	[6]	[101]	[11]	[138]	[15]



Implementation of free-access model

- *New Journal of Physics* (www.njp.org)
- Institute of Physics Publishing
- Authors pay \$500 per accepted paper
- 27 papers published in last 18 months

Market model simulations

- Financial cost is high because everyone is paid
- Various pricing mechanisms proposed
- Author fee pays referees and editor + 10% of production costs
- Royalty is 5% of income
- Admin of royalties and unfunded papers increases cost

Market model: author submission fee

Overhead rate (%)	60		120	
Rejection rate (%)	10	90	10	90
Submission fee (\$) [per page]	651 [65]	562 [56]	703 [70]	579 [58]

Market model: subscription fee

Overhead (%)	60			120		
Profit margin (%)	0	10	20	0	10	20
	Subscription price (\$)					
No. of subscribers						
200	695	765	834	955	1051	1147
500	278	305	333	382	420	458
1000	138	153	167	190	211	230
2000	69	77	83	96	105	115
20 000	6	8	8	9	11	11



Market model: author royalty

- Incentive to publish high-quality work
- Based on journal income
- Journal income is static
- Royalties increase only relation to other papers
- 22% of income from a journal volume would recoup author fee

First drafts

- Flaws and omissions
 - subscriptions admin and maintenance not isolated
- Staff costs not yet clear
- Useful for developing our understanding and eliciting feedback

Revision plan

- Use elements from traditional and free-access models
- Omit market model
 - It may replace current faults with new ones
 - It has no support among key stakeholders
- Develop ‘cottage-industry’ and large organisation models
- Explore commercial - non-commercial status
- Explore cost recovery mechanism

Economic models of digital-only journals

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