Summary (1)

- This study was originally commissioned by France Télévisions in Paris. It was subsequently completed by Kane, using a wider circle of contacts and further research; and then revised and updated in 2001, 2002 and 2003.
- Our current sample includes **271 TV broadcasters** in North America and Europe (both East and West) who have already equipped their newsrooms with server technology and who figure in the reference lists of the **11 main manufacturers**.
- In Part 1 (page 10), Editorial Context' we describe how newsrooms are
 undergoing parallel editorial and organizational changes, separate to the introduction of
 new technology: increases in the amount of material produced and transmitted, faster
 speed-to-air, news on demand, new journalistic methods, syndication and sharing of
 camera crews and correspondents, key audience rating factors for mainstream
 broadcasters, and what new trends are observable particularly in emerging channels.
- In Part 2 (page 31), 'Technical Architecture' we classify computerized newsrooms into three major categories:
 - Diffuse/standalone (no sharing of media),
 - Semi-centralized and proprietary (separate playout and production servers),
 - Networked (FibreChannel, SAN-Storage Area Network) and open technologies.
- The networked/open solutions have now become the largest category at 60%, but remain less integrated than the proprietary and semi-centralized solutions of Quantel and Sony. However this strategy is now that adopted by 9 out of 10 manufacturers, since Quantel seems to be joining the 'open' camp with the introduction of its new 'GenerationQ' product line.

Summary (2)

- The solutions illustrate the current technical limitations on: the maximum number of highresolution workstations capable of sharing the same material; disk capacity; and network bandwidth.
- In terms of reliability, we observe extensive use of RAID technology and fault tolerance, and of redundant hardware installations. (page 52, §2.2).
- Our study identifies **6 technical architecture building blocks** (newsroom system, video server, browse server, automation, archiving and graphics) et 8 important interfaces *(page 54, §2.3)*, and emphasizes the importance of the integration process, which is often underestimated in terms of both time and difficulty.
- Our study identifies 3 integration strategies on the market: the fully integrated and proprietary solution (i.e. Sony), the semi-open solution with integration of essential central elements (editing and browsing off servers), the assembly strategy bringing together best-of-breed components, and the search for maximum openness (page 64, §2.6)
- Kane observes the rise in prominence of mass-market technologies (page 69, §2.7) and the use of standard software for newsrooms and for production automation (page 70, §2.8).
- At a time when one standard (the MOS protocol) is in the course of being widely adopted, in part solving the difficult problems of maintaining interfaces between different manufacturers' applications, we comment on various different standardization and normalization initiatives. (page 72, §2.9).

Summary (3)

- The study comments on the technical strategy adopted by the large broadcast groups towards decentralization of resources (page 78, §2.10) and the definition of an inhouse policy. (page 79, §2.11).
- In terms of work organization, (*paragraph 3, page 82*), we have sampled 51 TV newsrooms and identified **4 models** according to the degree to which journalists are involved in video editing.
 - The majority (64%) is clearly towards journalists editing, either sometimes or all the time even if craft editors are still present for complex edits and effects. (page 86, §3.2).
 - In 89% of sites, the journalists pre-edit by browsing rushes on their workstations.
- There appear to be 4 major developments in newsroom workflow:
 - Journalists carrying out all aspects of item production (page 84, §3.1).
 - Multiskilling for hard news (page 85, §3.2) although specialization remains for feature items and magazine programmes (page 97, §3.3).
 - Flexible manning levels for camera crews (page 98, §3.4).
 - Wholesale automation of the control room and studio (page 100, §3.5)

Summary (4)

- We identify 16 functional advances in newsroom systems (page 104, §3.6).
- We analyse existing archive management strategies (page 114, §3.7).
- In the area of job-function evolution (paragraph 4, page 118).
 - We observe significant changes in the jobs of journalists and editors: journalists
 are becoming multi-skilled, while editors concentrate on value added items.
 - We see also the emergence of new value-added jobs: electronic graphics operators, journalist-archivists, image researchers, resource managers, super-users (page 119, §4.1), and of IT-related jobs: media managers, integration managers, system maintenance, network managers. (page 129, §4.2).
 - In total, 11 job functions are changing or appearing, while 9 are diminishing in importance or disappearing: PAs, VT operators, newsdesk secretaries, vision mixers, sound engineers, on-air graphics operators, lighting technicians, studio cameramen. (page 133, §4.3).
 - We summarize the **main career paths** (*page 135, §4.4*), and observe the importance of **training and other key success factors**. (*page 136, §4.5*).

Summary (5)

- On the subject of economic justification of newsroom computerization, (paragraph 5, page 136):
 - Certain sites have saved up to 30% of their budget, but in the majority of cases it is more a case of increasing output (new channels, new regional stations, web publishing) without incurring extra costs. (page 138, §5.1).
 - The economies that have been achieved appear to be as much down to:
 - Basic organizational changes, staff motivation, reduction in travel costs and rationalization of camera crews...
 - ...as they are to gains solely derived from server technology in the newsroom (page 139).
 - On the other hand, one is struck by the level of strategic reorganization and editorial relaunches which tend to accompany technology change, (page 141, §5.2) all the while observing that all too often TV stations think that a project is over as soon as it has begun (once the initial installation has stabilized), and also that they tend not to make the most of their investment in terms of editorial and operational reform.
- The study's conclusions are summarized in *paragraph 6, page 145,* highlighting in particular key success factors derived from our observations.
- Every newsroom faces a triple challenge: **improve productivity** to finance new content and new technology; **maintain editorial quality** while achieving greater speed-to-air; **achieve differentiation** by a sustained redefinition of editorial policy, optimization of both organization and systems; and improved staff motivation.

3.2. Multiskilling for hard news

3.2.1. Editing by journalists

We can distinguish 4 levels of journalist involvement in video editing

<u> </u>	,			
	Journalists editing ?			
	No (editors edit in newsrooms)	No (journalists only visualise rushes on PC)	Yes (simple edit, crafted editors for complex edit)	Yes (no more editors)
A. Fragmented		NRK NRK Stavanger	HTV KGO	Antena3 Telecinco City TV
B. Centralised/semi- centralised AvidMediaserver	NOS/NOB WDR France 2	TV5 M6 Arte	RTVE Barcelone, RTVE CNN ATV	
Quantel		Carlton Central	ITV 24, ITV, C4, C5 TSR CBC Komo	
SONY	ABC Timesquare	SFDRS VRT LNN F3 Reims	Systematically : LCI, Telemadrid, i >télévision, Mediaset Occasionaly : SIC, TV2, TF1, BR	Reuters
C. Network architecture	WXYZ ABC 20/20	WNJU/Telemundo SZM ZDF Deutche Welle	BBC Région, TV Brussels CTV (Toronto), Time Warner, WKYC KABC, New York 1 SVT, SVT 24, SVT Regions	M6 régions (3 regional stations)
% Channels	11%	25%	55%	9%
% Regional Channels	8%	24%	60%	8%