



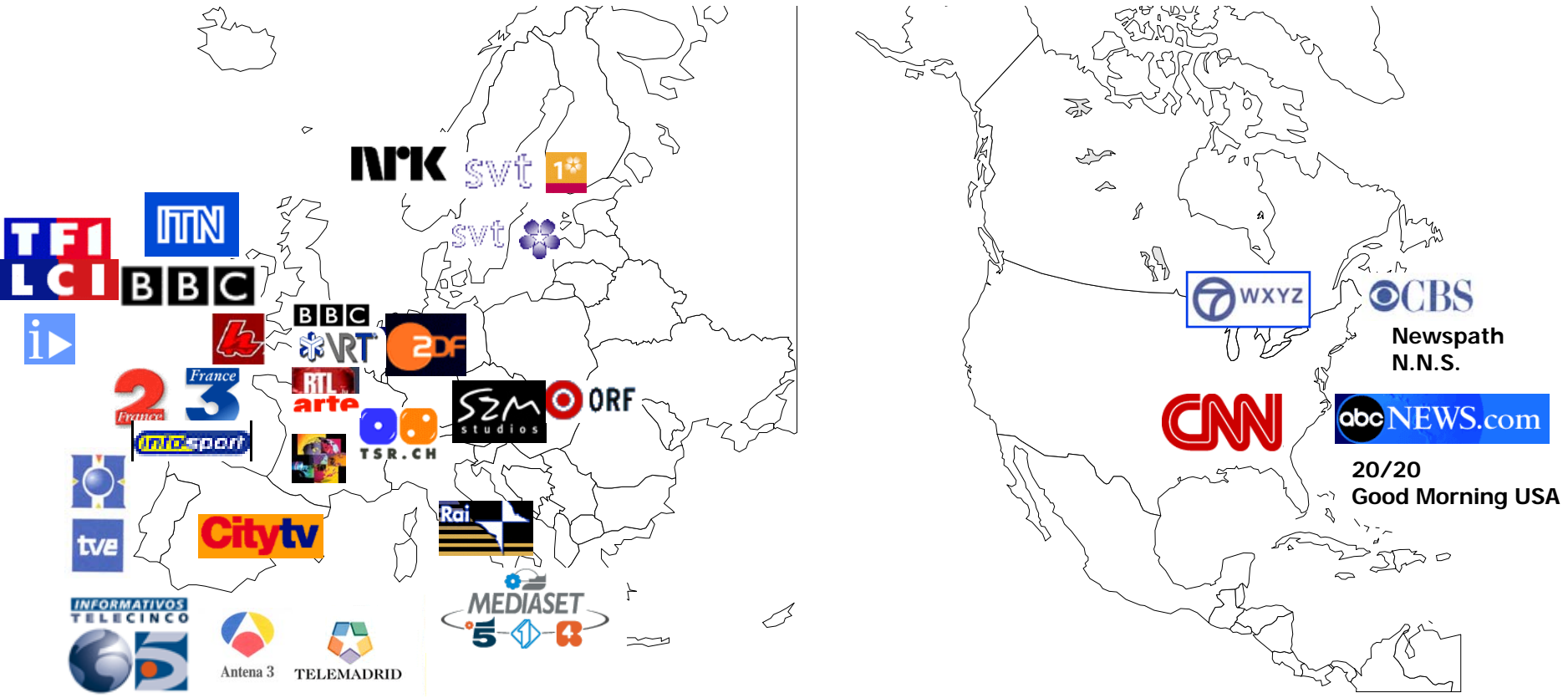
« Newsroom 2003 »

Comparative study
on the technical architecture
and organization of television newsrooms

1. Presentation of the study	2
2. Editorial and business context	3
3. Technical architecture and strategies	4
4. Evolution in newsroom organization	10
5. Evolution in newsroom productivity and creativity	13

1. Presentation of the study

- Architecture of 200 television newsrooms featured among the 11 manufacturers' references
- Work organisation at 70 of these (september 2002)



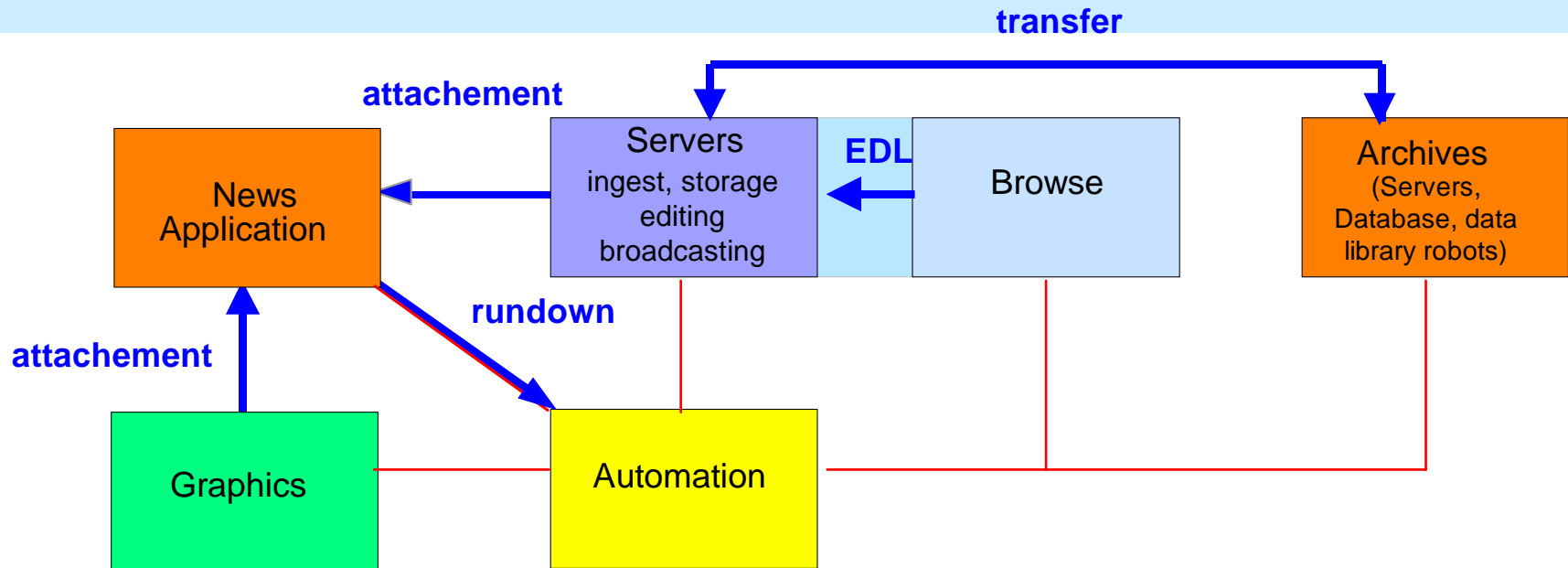
2. Editorial and business context

- Increase (up to 3 x) in the number of hours produced
- Importance of speed in breaking news
- **Most frequent editorial innovations are enabled by technology**

<p style="text-align: center;">SCHEDULING</p> <ul style="list-style-type: none"> - Scheduling changes (22%) - Bulletins duration (22%) - Creating new bulletins(28%) 	<p style="text-align: center;">PRESENTING</p> <ul style="list-style-type: none"> - New anchor (22%) - Age of anchors (17%) - Number of anchors (17%) - Style (28%) - Lightening/camera (22%) - Visual Identity (11%)
<p style="text-align: center;">STORY TELLING</p> <ul style="list-style-type: none"> - Graphics (56%) - Live (56%) - New sources / DV (50%) - Guests & debates (22%) 	<p style="text-align: center;">CONTENT</p> <ul style="list-style-type: none"> - Agenda (22%) - Rythm/story duration (28%) - Local (28%) - Happy news (22%) - Investigation (17%) - Interactivity (94%)



3. Technical Architecture and strategy (1)



- The main task confronting all television newsrooms is **integration** of at least 6 modules of different suppliers : real-time, multi-systems, automation oriented
 - MOS protocol, Active X, APIs, ... : from current interoperability to future compatibility, the market is waiting for standards: formats, transport protocol, interoperability
 - Importance and duration of the integration process: steps and on-going evolutions
- On-line access to archive and graphic automation become new strategic issues

3. Technical Architecture and Strategy (2)

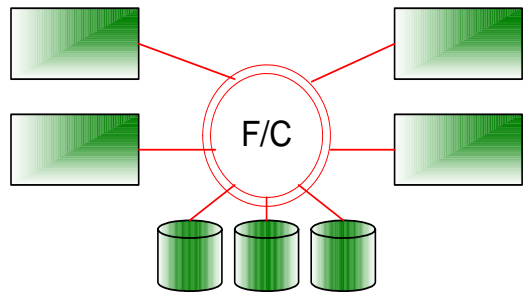
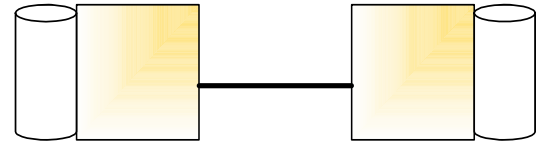
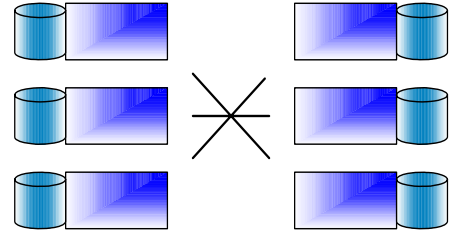
- Everybody has a newsroom application
- « Half » of TV stations have got a « server-based newsroom »
- « Half » of TV stations have got a semi-automation
- A minority has Media Asset Management and « integrated graphics »

Country	TV-station	News application	Server&editing solution	Browse	Automation	MAM	"Integrated graphics"
Germany	ZDF	Avid i-news	Avid Unity	Avid	Avid BCS	Blue order	
	Sat1/Pro7	bespoke "Pronews"	Quantel/Leitch	Peeble Beach	Harris	Blue order	Vizrt
France	France2	bespoke "Gilda"	Avid Unity	Avid MB			
	TF1	bespoke "Star"	Sony Newsbase	Sony Clipedit	Harris	n-o-I Sony	
Spain	RTVE	Avid i-news	Avid Mediaserver/SGI	Avid MB	Avid BCS		
	Telecinco	Avid Newsstar	GVG Profile		Omnibus	Ascential/MSI	
Italy	RAI	Avid i-news	linear + isol. Avid NC			Bespoke/SHS	
	Mediaset	Dalet-ANN	Sony Newsbase	Sony Clipedit		Ascential/SHS	
Scandinavia	NRK	AP-ENPS	linear + isol. Avid NC/GVG Profile		Omnibus		Vizrt
	TV4	AP-ENPS	Fast/PC/ Omneon		Omnibus		
	SVT	Avid i-news	Avid NC/SGI	Ardindo	bespoke "Havrys"	Ardendo/IBM	Vizrt
	MTV3	AP-ENPS	Leitch	Omnibus	Omnibus	Omnibus	Vertigo
UK	Sky News	Avid i-news	Avid Unity/Omneon	Avid MB	Omnibus		
	ITN	AP-ENPS	Quantel Clipbox	Omnibus	Omnibus	n-o-I Panasonic	
	BBC	AP-ENPS	Quantel Generation Q	BBC Technology	Omnibus	Pilote	Pixel Power
USA	NBC	Avid i-news	GVG /Vibrint	GVG			Pinnacle Deko
	CBS	Avid i-news					
	CNN	Avid i-news	Mediaserver/SGI+Quantel Clipbox	bespoke	bespoke/Pro Bell	bespoke/IBM	Vizrt
Canada	CBC	AP-ENPS	Quantel Clipbox	Omnibus	Omnibus		Vertigo



3. Technical Architecture and Strategy (3)

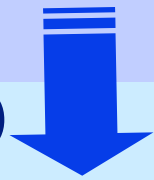
3 architectures

- **A) Distributed/fragmented architecture** (cf. 4000 Profiles Grass Valley)
- **B) "Centralised" solution or "semi-centralised" :76 sites**
 - Avid "Mediaserver"
 - Quantel "Inspiration" Clipbox only and GenerationQ
 - Sony "Newsbase"
- **C) Network solution/SAN-Fibrechannel: 131sites**
 - SGI (Panasonic or Fast), Avid Unity, Leitch, Pinnacle/Vortex, Thomson-Philips, GVG/Vibrint, Omneon, EVS, Dalet



37 %










- Quantel 
- Sony 

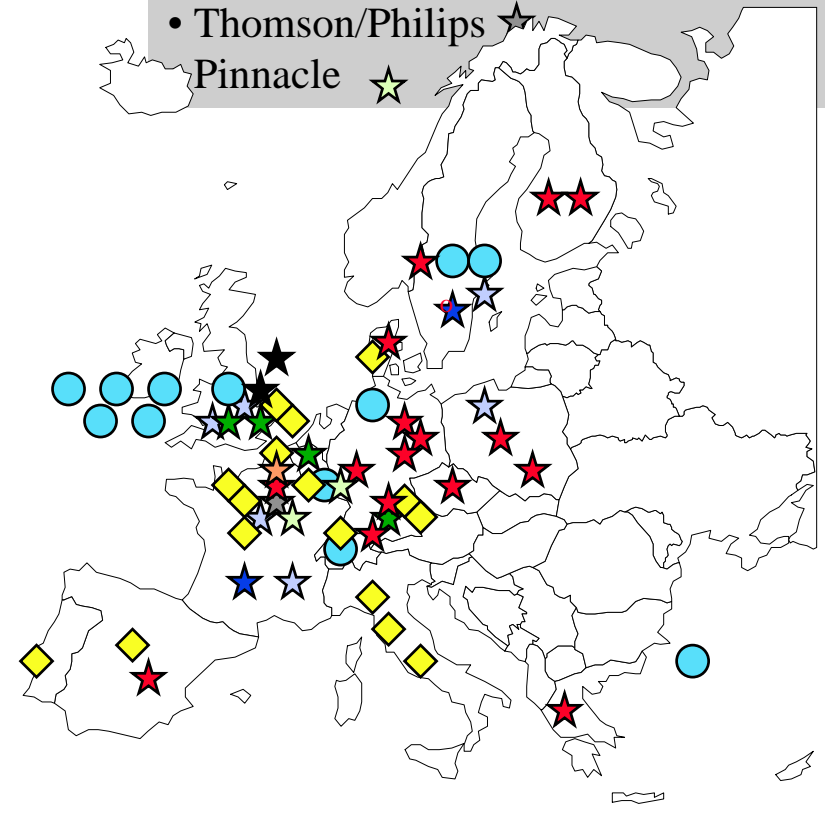
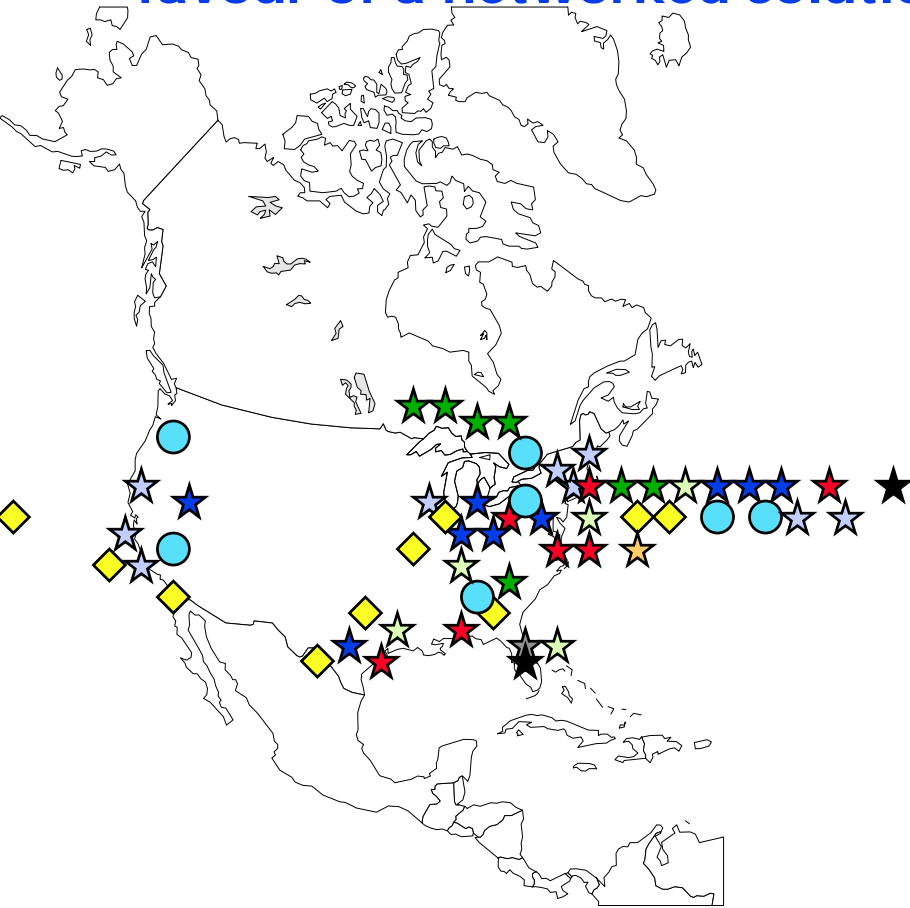


3. Technical Architecture and Strategy (4)

- The current trend is 63% in favour of a networked solution

63 %

- SGI/Panasonic 
- Avid Unity 
- Leitch 
- GVG 
- Thomson/Philips 
- Pinnacle 
- Omneon 
- EVS 
- Dalet 



3. Technical Architecture and Strategy (5)

- **3 main integration strategies for newsrooms**

- 1° « One supplier » : more integrated systems, but more proprietary
- 2° « One main supplier » for the « heart » of the solution
- 3° « Best of the breed »: more opened technology but heavy integration

	Crafted Editing	SAN Production	Ingest	Browse	On-air servers
1. One supplier "the big picture" solution					
NBC USA	GVG Vibrint	GVG MAN	GVG Profile	GVG	GVG Profile
WABC USA	GVG Vibrint	GVG MAN	GVG Profile	GVG	GVG Profile
KABC USA	GVG Vibrint	GVG MAN	GVG Profile	GVG	GVG Profile
KGO	GVG Vibrint	GVG MAN	GVG Profile	GVG	GVG Profile
TF1 France	Sony DNE 2000	Sony Newsbase	Sony MAV	Sony Clipedit	Sony MAV
Mediaset Italy	Sony DNE 2000	Sony Newsbase	Sony MAV	Sony Clipedit	Sony MAV
SIC Portugal	Sony DNE 2000	Sony Newsbase	Sony MAV	Sony Clipedit	Sony MAV
France3 Regions	Sony DNE 2000	Sony Newsbase	Sony MAV	Sony Clipedit	Sony MAV
Telemadrid	Sony DNE 2000	Sony Newsbase	Sony MAV	Sony Clipedit	Sony MAV
New York1 USA	Pinnacle Vortex	Pinnacle Mediacore	Pinnacle	Pinnacle	Pinnacle
ZDF Germany	Avid Newscutter	Avid Unity	Avid Airspace	Avid Browse 2000	Avid Airspace
Deutsche Welle Germany	Avid Newscutter	Avid Unity	Avid Newscutter	No browse	Avid Airspace
TVN Poland	Avid Newscutter	Avid Unity	Avid Airspace	Avid Browse 2000	Avid Newscutter
Markinza TV Slovakia	Avid Newscutter	Avid Unity	Avid Airspace	No browse	Avid Airspace
Castilla La Mancha Spain	Avid Newscutter	Avid Unity	Avid Airspace	No browse	Avid Airspace
WKYC Cleveland USA	Avid Newscutter	Avid Unity	Avid Airspace	No browse	Avid Airspace
MBC Dubai	Avid Newscutter	Avid Unity	Avid Newscutter	Avid Browse 2000	Avid Airspace
BBC Jupiter	Quantel Generation Q	Quantel Clipbox	QuantelGQ	Quantel/BBC Tech.	Quantel Clipbox

3. Technical Architecture and Strategy (6)

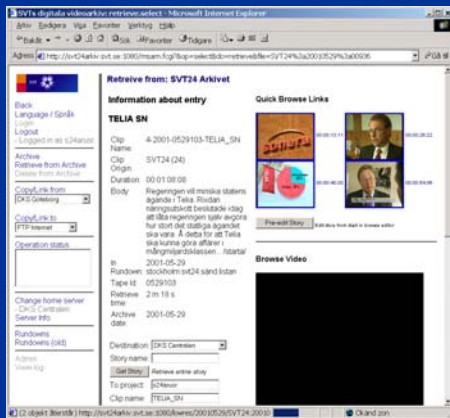
	Crafted Editing	SAN Production	Ingest	Browse	On-air servers
2. One supplier for the "heart of the solution"					
France2/France3 National	Avid Newscutter	Avid Unity	Avid Newscutter	Avid Browse 2000	SGI
ABC Australia	Avid Newscutter	Avid Unity	Avid Newscutter	Avid Browse 2000	GVG Profile
Alter 5 Greece	Avid Newscutter	Avid Unity	Avid Newscutter	No browse	GVG Profile
YLE Finland	Avid Newscutter	Avid Unity	Avid Airspace	"Kapso" maison	Avid Airspace
ITN	Quantel Editseats	Quantel Clipbox	Quantel Clipbox	Omnibus "Hybrow"	Quantel Clipbox
TRT	Quantel Editseats	Quantel Clipbox	Quantel Clipbox	Omnibus "Hybrow"	Quantel Clipbox
TSR	Quantel Editseats	Quantel Clipbox	Quantel Clipbox	Omnibus "Hybrow"	Quantel Clipbox
CBC/SRC	Quantel Editseats	Quantel Clipbox	Quantel Clipbox	Omnibus "Hybrow"	Quantel Clipbox
CNN (project)USA	<i>Pinnacle Vortex</i>	<i>Pinnacle</i>	<i>Pinnacle</i>	<i>Several browses</i>	<i>Pinnacle</i>
3. "Best of the breed" option					
SVT Sweden	Avid Newscutter	SGI	SGI	Ardendo	SGI
Sky News Royaume Uni	Avid Newscutter	Avid Unity	Omneon	Avid Browse 2000	Omneon
ORF Austria	Pinnacle Fast	PC/Matrox	PC/Matrox	No browse	PC/Matrox
SWR Germany	Pinnacle Fast	SGI	SGT	SGT	SGI
WWSB Sarasota USA	Pinnacle Fast	Omneon	Omneon	No browse	Omneon
RFOFrance	Panasonic DNA	Panasonic DNA	Panasonic DNA	SGT	Pinnacle
RTL Lux	Quantel Editseats	Quantel Clipbox	Quantel Clipbox	S4M	Pinnacle
Sat1/Pro7	Quantel Editseats	Quantel Clipbox	Quantel Clipbox	Blue Order/Peeble	Leitch

- Integrators are present in certain countries, in other countries it is the main supplier who plays that role.
- Importance of contract definition, realistic needs specification, and good relationship with main supplier, as 3 key factor in integration success

4. Evolution in newsroom organization (1)

- 2 major changes :
 - Multi-skilled newsroom
 - Variable level of staff for crews
- Job evolutions
 - Reduction in gallery and studio numbers
 - New « value added » jobs and IT jobs, ...

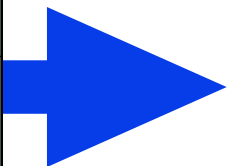
Digital Newsflow at SVT



4. Evolution in newsroom organization (2)

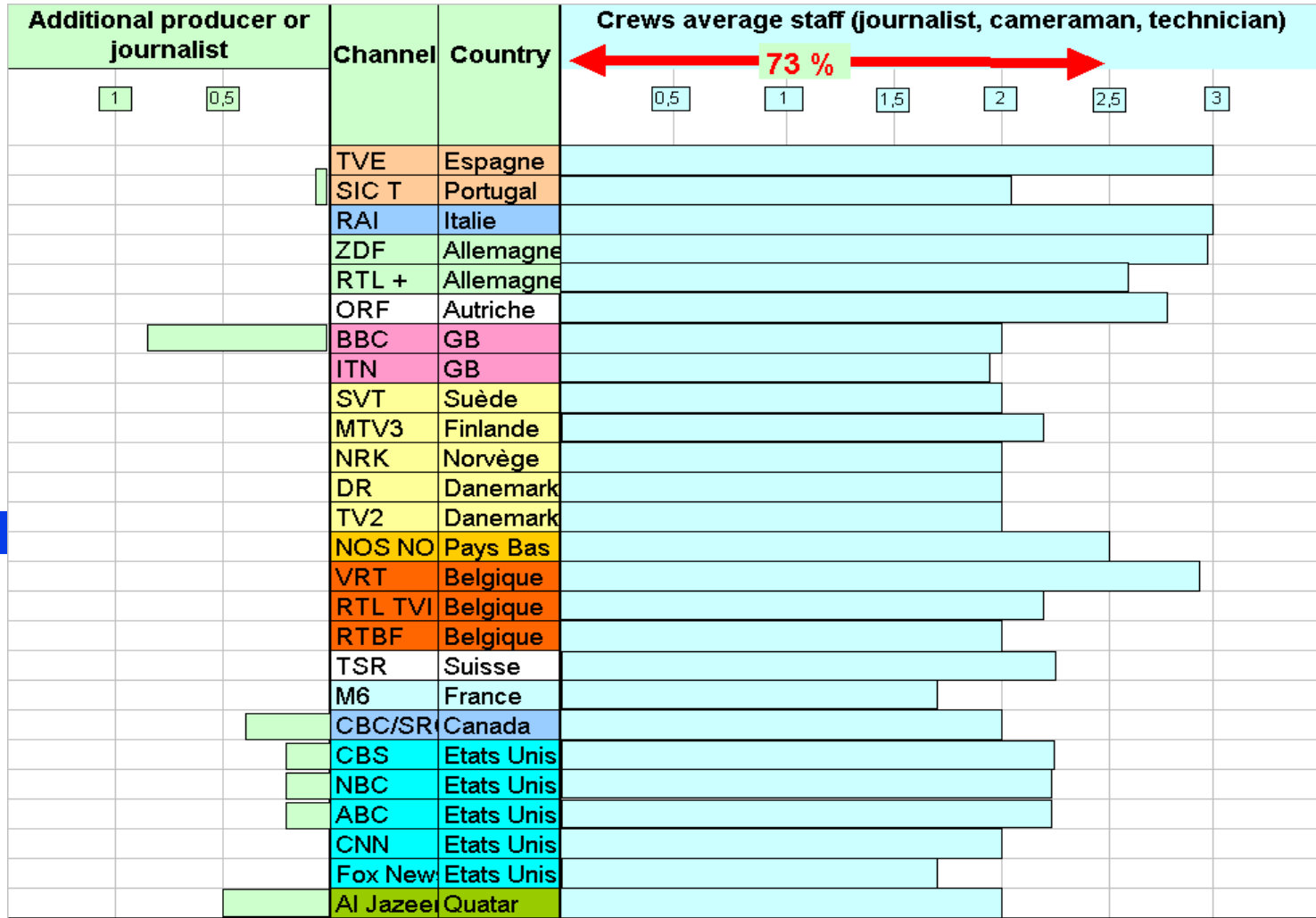
- Editing made by journalists vs. craft editors (64%)

	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 Occasionally : 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%









4. Evolution in newsroom organization (3)

- Generalization of 2 men crews (73%)



5. Evolution in newsroom productivity and creativity

- As a result of server-based solutions, TV stations may save **30% in staff numbers**
 - 10% with automation/integration,
 - 20% with multiskilling and 2 men crews
- But, most of sites justify investments by **increasing number of channels, and by increasing number of hours** with constant staff or minimum additional staff
- Very important editorial gains:** new ways of telling stories (graphics), new style (DV camera), new format (interactive TV), higher credibility by better use of archives, better team working (shared media), higher reactivity ...

	Staff reduction More Production	Staff reduction constant Production	Constant staff More Production	More staff More Production
		 	 	
Staff	-13%	- 16% -32% -1%		+ 2%
Production	+ Bulletin in French		+ 17%	+ 25%