

4-27-2009

US Digital TV Business Models [Slides]

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Ha, Louisa, "US Digital TV Business Models [Slides]" (2009). *Media and Communications Faculty Publications*. 19.
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US Digital TV Business Models

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Paper presented at

Media Transformation in the Digital Era Conference, Tsinghua University, Beijing, China, April 27-29, 2009.

Digital TV development in the

US

- A mandatory innovation adoption to all full-power broadcast TV stations
- Compete with other countries on TV technology e.g., Japan
- A more efficient way to broadcast with compression of digital signals
- Free up the analog airwaves for spectrum auction
- DTV provides crystal-clear pictures and sound, more channels and even free, over-the-air high-definition television (HDTV) for consumers who have HD television sets
- Interactivity and multicast potential

Digital Broadcast Timeline

- **April, 1997**
FCC gives broadcasters \$70 billion worth of spectrum to broadcast digital alongside analog until 2006. FCC also mandates that in 2006 all broadcasts must be fully digital.
- **November, 1998**
PBS, ABC, NBC, CBS, and Fox are committed to broadcasting digitally in the top ten U.S. markets (30% of viewers) by Nov. 1.
- **May, 1999 GOAL**
Broadcasters must have digital channels in top 30 U.S. markets (50% of viewers).
- **2006 -2009**
FCC kept extending deadlines for the switch due to complaints of broadcast TV stations
- Latest analog switch off date: June 12, 2009

US TV station industry structure

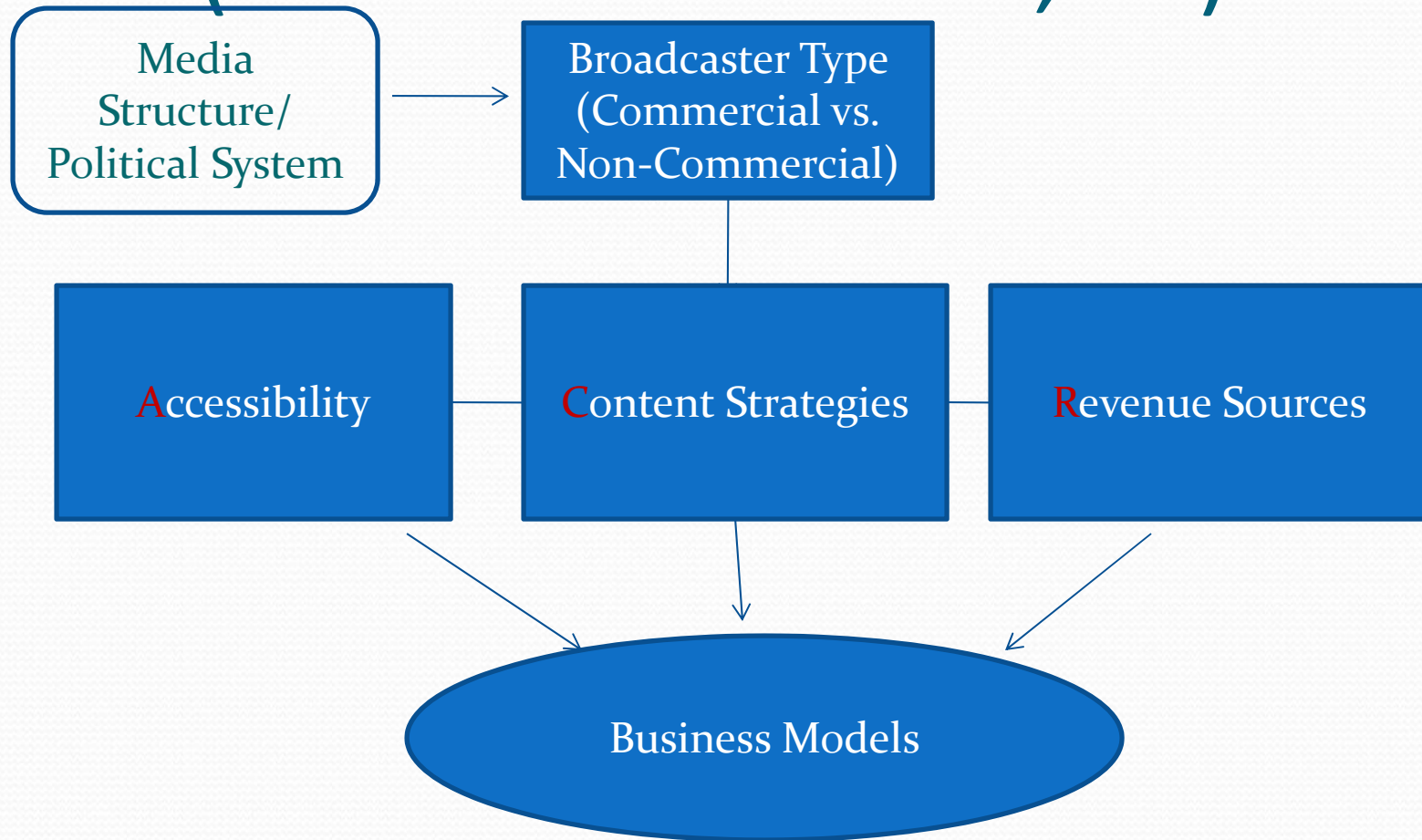
- All local TV stations. 210 markets defined by Nielsen TV rating company.
- No central broadcast television. National broadcast networks are suppliers to local TV stations through affiliate relationships.
- Co-existence of commercial and non-commercial broadcast TV stations (PBS & religious stations)
- Commercial TV stations: either broadcast network affiliate (ABC, CBS, NBC, FOX, CW) or independent

Digital TV as emerging media

- No uniform platform for delivery
- Different units of display: Standard Definition, Enhanced Definition, and High Definition
- Increasing use due to government's mandatory switch off policy

The ACR Model

(Ha & Ganahl 2004, 07)



Accessibility of Digital TV

- Type and number of transmission methods
 - 1) Over-the-air broadcast
 - 2) Satellite and cable
 - 3) Mobile Phone (open mobile video coalition)
- Usability and affordability
 - 1) Converter box : convert digital signals to analog signals in analog TV set (government issued \$40 coupon to buy converter box) – low cost
 - 2) Satellite and cable set-top box
 - 3) Digital TV set (high cost)

Content Strategies

- Single channel vs. multicast
- Low cost vs. High cost content
- Proven success vs. originality

Revenue

- Single vs. multiple revenue sources
- Type of revenue sources (direct vs. indirect consumer payment)
 - Advertising/sponsorship (I)
 - E-commerce (I)
 - Content Syndication (I)
 - Corporate/government funding (I)
 - Subscription (D)
 - Pay-per-use/view/download (D)



Research Questions

- What content strategies are used by digital broadcast TV stations in the U.S.?
- What are the business models of the digital broadcast TV stations in the U.S.?

Population

- As of April 17, 2009, 1655 Stations in 210 U.S. markets, Virgin Islands and Puerto Rico are delivering in digital
- 1150 Full Power US Broadcast TV stations

Two Studies

- A census of all Ohio broadcast TV stations
- A national random sample of US broadcast TV stations

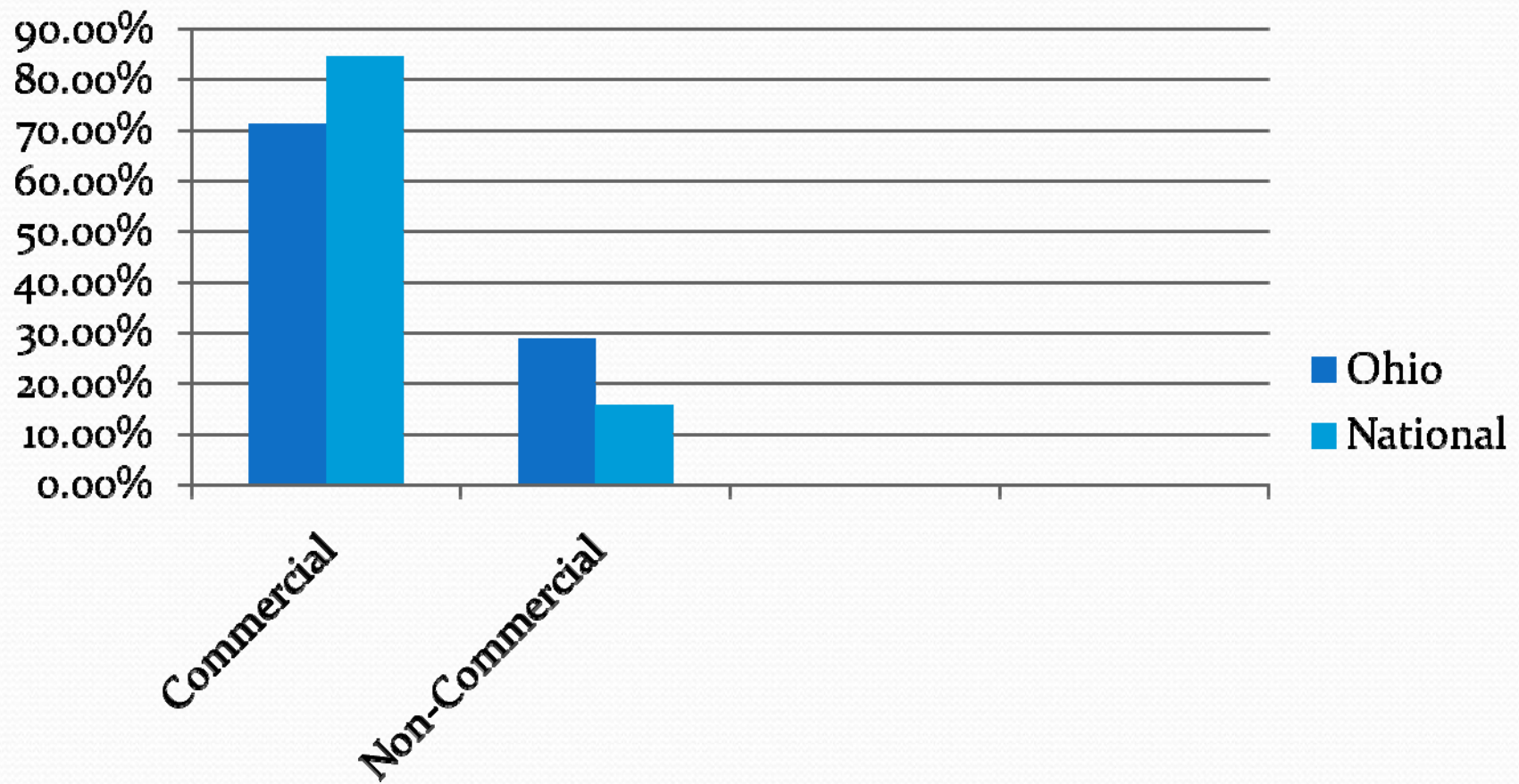
Sampling

- Simple random sample of 112 broadcast TV stations in the U.S. from the list of TV stations in Broadcasting and Cable Yearbook.

Sources of Information

- US Federal Communication's DTV Quarterly Activity Reports 388 filed by TV stations
- TV web sites of the stations
- Digital TV program guides

National vs. Ohio Sample



Digital TV Business Models of TV Stations

N

National Ohio N (%)

Branded Content

No change, same as analog 45 (68%)

Multicast, repackage main channel programs 7 (11%)

High Definition only 2 (3%)

High Definition and Multicast/repackage main channel 8 (12%)

Content Aggregator

Multiple network affiliate 4 (6%)

FCC DTV education requirement for TV stations

- A. Run at least 3 PSAs and transition crawls everyday (commercial) **OR**
- B. 16 PSAs and transition crawls per week and 1x 30 minute program per quarter and 1x 100-day countdown everyday (commercial)
- C. Air 180 sec per day consumer education, at least 22.5 minutes per month between 6 p.m. and 12 a.m. AND Run 30 minute DTV related program (non-commercial only)
- D. Additional DTV on-air initiatives, TV station web site, outreach efforts such as speaking engagement, community events and other (all broadcasters)

Digital TV Promotion

Ohio

- Average Number of PSAs/Quarter (Prime-Time)=99
- Average Number of PSAs/Quarter (All Times)=333
- Av. Number of 30-min educ programs=0.88 (less than 1 per quarter)

National

- Average Number of PSAs (Prime-Time)=112
- Average Number of PSAs/Quarter (All Times)=380
- Av. Number of 30-min educ programs=4.9

Examples of Additional Efforts

- WCPO, WSYX, WTTE, WLMB adopt phone bank for viewers to call in with their questions. WLMB also uses emails to reach viewers who have transition problems.
- WTLM locally produced spot inviting viewers to call the station for help and apply for \$40 converter coupon.
- WLWT takes advantage to youtube.com to post DTV informational video
- WUPW sends out a monthly DTV transition E-blast to approximately 1800 subscribers.