Mobile TV Business Opportunities: Facts and Fiction

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With the convergence of telecommunication infrastructures, computer technology, and media content services, Mobile TV offerings have become feasible. We define Mobile TV offerings as real-time broadcast transmissions of content to mobile devices. Such defined Mobile TV builds on either Digital Video Broadcasting Handheld (DVB-H)[1] or Digital Multimedia Broadcasting (DMB)[2] as infrastructure technology. To sharpen the market analysis, we prefer such narrow definition, which purposefully excludes all video clips that are available on-demand on mobile devices.[3]

Earlier research on Mobile TV has taken a number of routes: For example Rautio et al. (2004) took an economics approach and investigate suitable pricing strategies. Marilly et al. (2007) focused on the personalization of Mobile TV. Through a media management lens, Hu (2007) explored the diffusion of Mobile TV. Loebbecke et al. (2008) investigate paradoxes of Mobile TV use, and Jarvenpaa and Loebbecke (2009) analyze provider insights to be gained from a consumer value perspective on Mobile TV.

Based on our definition of Mobile TV, in this paper we investigate the attractiveness of Mobile TV offerings, both for users / customers and then subsequently for providers.

We base our insights mainly on data collected from log files and extensive interview rounds with providers and users of 3Italia's Mobile TV offerings.[4] The 3Italia Mobile TV offerings present the first nationwide ones in Europe and the first DVB-H ones in the world. Only South Korea's DMB-based offerings were available nationwide before 3Italia went to market.

Our research on 3Italia's Mobile TV shows that their users are experiencing increasing use, user preferences for time sensitive content, and user satisfaction with content. They watch Mobile TV when away from home. Almost 60% of users watch Mobile TV predominantly outdoors and 28% watch Mobile TV generally in- and outdoors. Most users watch Mobile TV in their professional environment (workplace 38%; university and school 4%), on transits (while walking around 35%; while traveling 28%; while using transportation means 14%), and during social activities (being at a friend's house 8%; at a bar or daily 7%; at a restaurant 6%; at a pub or discotheque 3%). They also watch Mobile TV when waiting

1 DVB-H broadcasts signals at frequencies below 3GHz using a hybrid architecture involving satellites for global transmission and complementary terrestrial stations for cell coverage. It extends general DVB specifications to the requirements and constraints of handheld devices.

2 DMB (e.g., rolled out nationwide in South Korea) broadcasts signals between 174 and 216 MHz using both satellites and terrestrial stations. It is capable of transmitting audio, video, and plain data.

3 We certainly acknowledge broader definitions of Mobile TV as 'any video played on a mobile device' (e.g., Shin 2006) offering content with which users are familiar from traditional broadcast television on newly developed mobile devices (e.g., Karrberg, Liebenau 2007; Orgad 2006)

4 By the time of the ITS Bi-Annual conference we hope to also being able to have analyzed a complete data set (August 2009 to May 2010) of German Telecom's Mobile TV offerings concerning the German national soccer league transmissions.

in public places (see also Creasey 2007). Most 3Italia Mobile TV users are highly satisfied with the available Mobile TV channels (82%-93%) and the available handsets (90%).

Earlier assumptions regarding Mobile TV (e.g., Schatz et al. 2007) implied that long shots are hard to watch on small screens and lengthy programs are hard to follow with only short mobile attention spans. However, it appears that – across channels and content genres – users do not require content to be specifically adapted for Mobile TV. Users accept traditional content on mobile handsets. Thus users allow TV content producers and distributors licensing readily available content with little additional cost and pursuing penetration pricing strategies. Further users are generally familiar with channel names, content types, and schedules; hence there is hardly any need to specifically promote programs broadcasted on Mobile TV. Overall Mobile TV users increase their total media usage through Mobile TV; they prefer time sensitive content, and they do not require specific handset-optimized content for their Mobile TV experience.

In summary, we find Mobile TV offerings to be attractive to users with the actual subscription turning out to be rather sensitive to pricing models. Hence, we expect that – following mobile infrastructure developments – Mobile TV usage will soon to be just another almost ubiquitously used and appreciated mobile service. However, there is a downside to the findings: Even with growing usage, we expect only limited positive business impetus for content providers or any other start-ups.

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Agenda

- Mobile TV: Definition and Research Setting
- Earlier Research
- Data Collection: 3Italia's DVB-H Based Mobile TV
- Use / Demand versus Business Opportunity
- Further Research

Mobile TV: Definition

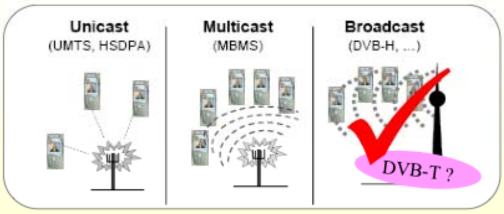
Any video played on mobile device

Real-time broadcast transmissions of 'existing' TV content to mobile devices

≠ IP-Based Transmissions

Mobile TV Transmission Technologies

Back Up

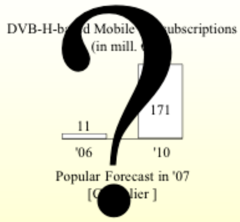


Unicast	Multicast	Broadcast
• Streaming	• Streaming	• Broadcasting
• Browsing	• File Casting	• File Casting
• Download		

Source: Sattler '08

Mobile TV: Global Market Forecast

Back Up



Market ($):
- Mixed feelings
- Few *broadcast* based numbers
- Few players (promoting numbers)

Use (🚹):
- Strong growth
- Flat rate/ for free attitude)

Whose Market? Which Market?

Mobile TV: Research Setting

Media Content Services
Telecommunication Infrastructures
Computer Technology

Traditional telecommunication companies entering media markets (and vice versa)

'Old Media' *content* in 'New Media' transmission context

"Content is King ?"

… If yes, who is good at content in the converging world?

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Selected Earlier Research

- Economics approach / pricing strategies (Rautio et al. '04)
- Diffusion of Mobile TV (Shin '06; Hu '07)
- Personalization of Mobile TV (Marilly et al. '07)
- Paradoxes of Mobile TV Use (Loebbecke et al. '08)
- Strategic Management Implications of a Consumer Value Perspective on Mobile TV (Jarvenpaa, Loebbecke '09)

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Data Collection

3Italia

- Analyzing 3Italia DVB-H Log Files (4 weeks each in '07, '08, and '09)
- User interviews (via market research company)
- User panel in 2009

3Italia: Company Profile

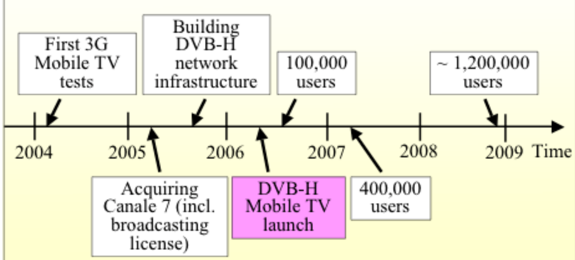
- Largely owned by Hutchison Whampoa Group (> 90%)
- 3rd largest Italian mobile network operator
- ~ 9 mill. customers (August 2009)
- UMTS license in Italy since '00, offering UMTS-based services since '03 (No. 1 in Italy)

&

- In May '06, starting nationwide DVB-H initiative …

3Italia DVB-H Based Mobile TV: Timeline of Offerings

Provider-Centric Model
integrating DVB-H based mobile TV with 3G services



3Italia DVB-H Offerings (2010)

Business Model
Subscription, Pay-per-View, Free-to-Air

Standard Subscription Package:
29 €/month
(incl. 400 anytime minutes, 100 SMS,
2GB Internet, Mobile TV Premium Package)

Pay-per-View 1-9 € per day / week / month

~ 1.2 mill. subscribers (Dec. 2009)

3Italia DVB-H Offerings (2010)

Back Up

Pacchetti TV	Canali Free	Premium				Glamour	
		Sky	Sky Fox	Calcio	UEFA Champions League	Playboy	Hot Sex C.
Piani ricaricabili ››							
1 giorno	0€	1€	1€	4€	4€	5€	3€
1 settimana		2€*	2€*	-	-	9€*	7€*
1 mese		-	-	9€*	9€*	-	-
Piani abbonamento ››							
1 giorno	0€	INCLUSO 29 €				5€	3€
1 settimana						9€*	7€*
1 mese						-	-

Free Channels: La3, La3 Cinema, Best of Mediaset, Boing, Cielo
Premium Channels: SKY (SkySport24, SkyCinema, SkyTG24), SKY FOX (FoxOne, FXMobile, SkyTG24), Uefa Champions League, Calcio
Glamour Channels: Playboy, Hot Sex Channel18

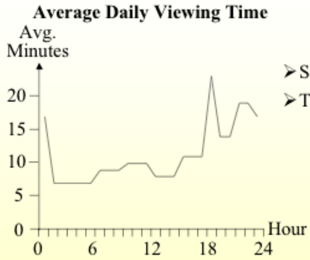
* Subscription automatically renewed

www.tre.it

3Italia' DVB-H Based Mobile TV: Daily Viewing Times

Back Up

Average Daily Viewing Time



Total of 8.5 hours / week

Content
- Same as on stationary TV
- Time-sensitive

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Mobile TV as Business Opportunity

+
- Increasing use at low extra subscription revenue – *demand* ?
- Relevance of national market, technical situation, and regulatory environment

-

New especially produced interactive content ("made-for-mobile")

Questionable business model for specific infrastructure …

Mobile TV: Demand & Business Opportunity

Demand

People watching, listening, switching on (in time units)

✔

BUT:

Business Opportunity ?

Add. revenue (subscription, advertising) > add. cost (in 'money')

Mobile TV:
Demand versus Business Opportunity for Telco

Price (for watching)	'Free'	Included in 'already paid' package'	Add. / higher flat rate	Specific subscription
Device	Commodity-like (e.g., camera)		Scarce, low-end	Scarce, high-end
Content	Traditional 'free' TV		Traditional 'pay' TV	Especially produced
'Standard'	3G DVB-H	DVB-T	DMB	ISDB-T MediaFlo …

Mobile TV:
Demand versus Business Opportunity for Telco

- Strongly growing use and predictable demand
- Field of innovation
- **But: Questionable business model(s) !**

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Ongoing Further Research

- Investigation of business models of *different players in Mobile TV business chain* (telcos, traditional media companies, or technology vendors)

  ➲ Who will make it in the converging world ?

- *International comparison –* markets, technical situation, regulatory environments

…. Questions, Comments, Complaints ?

Thanks for your attention !

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