Business Models Driving Specifications

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"Start by doing what's necessary, then do what's possible, and suddenly you are doing the impossible."

Saint Francis of Assisi
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CONTENTS

• **Necessary** - TV-Anytime Forum and Business Models Group

• **Possible** - Phase One Services and Features

• **Impossible** - Post-Phase One Services and Features
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TV-Anytime Forum over 160 member companies
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• The TV-Anytime Forum is a non-profit association of organisations which seeks to develop specifications to enable audio-visual services based on persistent local or online storage

• Membership is open to all who sign the Memorandum of Understanding and attend meetings

• Full information at: http://www.tv-anytime.org
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TV-Anytime Challenges for Business Models WG

• Keeping up with industry developments, so that TVAF standards are not too little, too late
• Ensuring content providers are encouraged to develop material for personal TV services
• Documenting new revenue-producing business scenarios which capitalize on TV-Anytime standards to provide interoperable systems and services to large groups of users
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- Stakeholders interests
- Scenario Development
  informative
- Specification Verification
- Specification Development
- Industry adoption

Business Models

System Design

Metadata

Content Referencing

Rights Management Protection

Interoperability Group

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Business Models Group Purpose & Objectives

• TV-Anytime specification requirements definition for all stakeholders
  • Content/service providers, including advertisers
  • Manufacturers
  • Consumers

• Work with TV-Anytime technical groups to determine which requirements to enable in each phase of the TV-Anytime specifications
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The Three TV-Anytime Models

Model 1: **Broadcast**
(uni-directional)

Model 2: **Consumer Response**
(bi-directional)

Model 3: **Broadband**
(bi-directional)
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TV-Anytime Example Phase 1 Features

- Multi-user preference support and portable profiles
- Personal book marking/indexing of recorded content
- Playback content as virtual programmes (e.g. highlights)
- Dynamic segment insertion during playback (e.g. targeted advertisements)
- Updating recorded content with newer versions (e.g. keeping news, fresh)
- Verification of usage of content on PDR
- Consumer-controlled secure transfer of content from local to remote 'personal' storage
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TV-Anytime Conceptual Connectivity Diagrams from document Specification SP001
Number 6 of 6 - Mobile TV-Anytime implementation
"Change is the progress by which the future invades our lives."

Alvin Toffler, Future Shock, 1970
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TV-Anytime Post-Phase 1 Considerations

• What services/products do consumers want?
• What capabilities are currently being developed and deployed by the industry?
  • Integrated TV/PC/mobile/internet hardware and services
  • Removable media; content archiving
  • Targeted, personalised content delivery systems
  • In-home servers/personal networking
• What services/products does industry want to provide?
• What services/products will generate revenue?
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TV-Anytime Post-Phase 1 work

• **NEW SERVICES** (some aspirational, some already in the market)
  eg: 1- virtual communities and families sharing content. 2-editing applications. 3-home broadcasting. 4-non-linear content. 5-personal networking. 6-proprietary application support - iTV/games etc).

• **SUPER-DISTRIBUTION** scenarios - including storage external to the local/physical device such as mobile/PDA/3rd party NDR

• **RIGHTS GROUP** synchronisation. Such as consumer vs providers domains in hybrid PDR/NDR environments. (The complexities of removable media, mobile devices, personal networks etc)

• **ADVANCED STANDARDS**. Synchronisation, collaboration and identification with other standards bodies in advanced stages and close links with interoperability groups.
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Service & Content Providers

The Home

3rd party NDR

PDR

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**Consumer Domain example 4 of 5 - External Storage (user access)**

*From SP001 Appendix A*

This example also uses a 3rd party NDR to provide adequate storage for the content required by the consumer. However in this example, the consumer directly selects and accesses the 3rd party NDR. It may be essential that the links to the consumer have similar capabilities. The benefit to the consumer is that they can off-load the storage requirement from their PDR to the NDR (e.g. archiving).
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*Post-Phase 1 applications (non exhaustive)*

- Targeting - Location or geographical based targeting
- Targeting - Pre-load content
- **Time Dependent TCommerce** (non-extensive)
  - PPV/rental - VOD or audio
  - PPP - Games
  - Pay for ownership of eg: av content
  - Gambling/betting
  - Shopping. E.g.: downloaded av, html, interactive catalogues
  - Shopping. Real time linked to shopping channel or show or ???
  - Shopping. **Linked to targeted time-shifted advertising**
  - Shopping. Product placement
- **Interactive TV TV service support**
  - Multi stream
  - Post-syncing audio & video
  - Cross linking video streams (live & recorded)
  - Enhanced TV (data with video)
  - Interactive TV (programmes requiring return path)
  - Alternative audio & video streams
- Personalised content editing, indexing, integrated user created content
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*Post-Phase 1 Benchmark System Features (a).*

- **Super Distribution.** Sharing content between consumers - between personal area networks
- **Peripheral device** support - such as (a) printer (b) external expansion drives (c) supplementary display/s etc
- **Inter-linkage** between multiple IP and TV content
- **Mobile devices** PDA, mobile phone connectivity (PDR links and alerts to other devices)
- **Community theatre/cinema distribution**
- **Smart appliances** *linkage* to PDR in the homes (lighting, fridge, grocery)
Post-Phase 1 Benchmark System Features (b)

- Portable recordable media - DVDr or Cartridge or other
- Personal Networks (PN) 4 types. Definition - Connection between two or more devices, within the consumer domain, that can share content.
  - 1 Single PN contained within the home aka Home Network
  - 2 Multiple personal (area) networks contained within the home aka Home Network
  - 3 Distributed personal/family networks between multiple homes locally and globally
  - 4 PN that include the home and external links (e.g. mobile) to it
  - 5 PN completely outside the home using mobile storage devices - non-localised PN “networks on the move”
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Scenarios generated for Post-Phase 1 document

- Remote Storage Management by Multiple Service Providers
- Distributed pay per view storage using a 3rd party NDR
- Mobile Storage Devices/non-localised personal network
- Transfering content ownership over global personal networks
- Removable/recordable Media (DVD, cartridge, memory card/sticks)
- Remote global news highlights
- Re-Syncing New Audio/Closed Caption Info
- Printing Time-Sensitive Info from a PDR
- Audience Participation
- PPV for feature (action films) model
- Personalized News Segmentation
- Distributed pay per view storage using a 3rd party NDR
- Ad supported PPV for feature (action films) model
- Pay per view for feature film
- Promo Link / Trailer Selection
14 ‘REAL’ ADVERTISING OPPORTUNITIES

1 Targeted advertising - we now know who is out there

2 Non-skipping options - for additional fees advertisers can force non-skip - regardless of where they are inserted.

3 Ad free or ad free - depending on channel.

4 "the ad loyalty card" - watch my ads we give you benefits such as free programme or coupon.

14 Dynamic Insertion - ads can ‘drop’ into relevant content and viewers.

12 Virtual ad channels - viewers choose to go to relevant ad channels.

13 Story lines - repeat viewings - created via stored ‘soap operas’

5 Commercial exclusivity - on demand.

10 Infomercials - extending the short form ad.

9 Direct response - instant eCommerce gratification.

8 Updating of commercials on the PDR to retain timeliness.

7 Relative ad loyalty - card loyalty.

6 Viral ad channels.

3 Infomercials.

2 Commercial exclusivity - on demand.

1 Targeted advertising - we now know who is out there.

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THE END

Contact

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The difficult is done at once; the impossible takes a little longer