How can personalisation improve media-related services?

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Media-related services

- The media industry...

- ... plays on three markets
  - Content market
  - Consumer market
  - Advertising market
Shifts in the Mass Media Value Chain (1)

The Old Way: Mass Media Value Chain

**Attention** of mass audience is a critical part of the value chain - demanded by advertisers, but advertising and distribution capture the most value in non-networked media. *Whoever controls these resources will most effectively aggregate attention from audiences.*

Mass Media companies are characterized by:
- Media outlet distribution such as newspaper, radio, television
- High fixed production and distribution costs
- Slow pace of innovation
- Sells eyeballs delivered to advertising: requires mass audience
- Entering this market requires significant capital and labor investments

Source: Umair Haque, *The New Economics of Media*
Shifts in the Mass Media Value Chain (2)

The New Way: New Media Value Chain

Technology and new web-based models reduce barriers to production, publishing, marketing and distribution of media. It drives growth in competition for focused attention. Once consolidated, attention of consumers is now fragmented.

New Media companies are characterized by:
- Low fixed production & distribution costs: production, search and filtering.
- Fast pace of innovation
- Audience of one is viable: Sells the right (personalization) eyeballs delivered to advertising
- Entering the market requires low capital investments
- Digital production, distribution, search and filtering

Source: Umair Haque, The New Economics of Media
What is personalisation?

- Personalization concerns adapting to the individual needs, interests, and preferences of each user.

- Includes
  - Recommending
  - Filtering
  - Predicting

User value: managing information (content and services)

Operator value: targeting offerings to maximise revenues; reduced churn
Personalisation is already here!

- **Amazon**

  Recommended for JEROME PICAULT

  Recommendations for you are based on [7 items you own] and more.

  view: All | New Releases | Coming Soon | Bargains | Your Watch List (Beta)

1. **Rope**
   
   DVD ~ James Stewart  
   Average Customer Review: ⭐⭐⭐⭐⭐
   Release Date: March 6, 2001
   **Our Price: $15.98**  Used & new from $12.50

   Why was I recommended this?

   Rate this item ⭐⭐⭐⭐⭐  □ I own it □ Not interested

2. **Citizen Kane (Two-Disc Special Edition)**
   
   DVD ~ Orson Welles  
   Average Customer Review: ⭐⭐⭐⭐⭐
   Release Date: September 24, 2002
   **Our Price: $20.24**  Used & new from $14.50

   Why was I recommended this?

   Rate this item ⭐⭐⭐⭐⭐  □ I own it □ Not interested

- **Several Google patents**

- ...
How does personalisation work?

Usage monitoring (real-time)

"Wild Bear Leaves Bavaria After Officials Order Him Killed"

Content sources

Usage history
How does personalisation work?

The system analyzes the user has got a steady interest in wildlife, so this knowledge is abstracted in the user profile.

Usage monitoring (real-time)

Content sources

Later...

“Elephant Seal Pups Released Back Into The Wild”
How does personalisation work?

“Whaling community on frontline of hunting-ban campaign”

Usage monitoring (real-time)

Now the system can suggest news related to that topic.

Usage history

Long-term semantic user prefs.

User preferences

Reasoning

Personalized filtering & retrieval (real-time)

Proactive personalized content delivery

Content sources

"Whaling community on frontline of hunting-ban campaign"
Personalisation and media services (1)

- Personalisation in mass media value chain

- Personalisation plays a role at the end of the chain
  - No change in content/media production
  - Automatic **filtering** of all received media based on user preferences

- Benefits: for the user only
Personalisation and media services (1)

- Example: TiVo
  - Relies on old media distribution

- But: only the consumer benefits from the system; solution criticized because it breaks the standard model (ad skipping, loss of attention)

**Without**
Thousands of programmes per day, hence hundreds of EPG pages to read to find shows

**With**
About ten programmes per week, automatically recorded on HD for on demand viewing
Personalisation and media services (2)

- Personalisation in new media value chain

- Personalisation plays a role at the beginning of the chain
  - Selection of a particular targeted consumer population, aggregates content for that population
  - Do not need to filter received content anymore, because it fits the targeted population; personalisation as prediction
  - Personalisation is THE enabler for the shift of value chains
Benefits of personalisation in this chain

- Personalisation enables greater revenue to be achieved from media assets
  - Possibility of selling more (better match between offer and demand)
  - Possibility of monetizing the long-tail, i.e. under-exploited media content (e.g. content archives where specialized content is discovered on behalf of the user)

- Personalisation achieves stickiness in services

- Personalisation can help retaining users in a very competitive market

- Can assist with targeted advertising
Example: Personalisation for the news industry

- Personalisation is part of the overall content production chain
- This enables e.g. the **automatic creation of advanced personalised multimedia summaries** thanks to
  - Advanced user modelling
  - Learning user preferences at different scales (e.g. long term preferences and short-term interests)
Questions?

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Backup
Personalisation and media services

Personalisation enables new services

- Targeted advertising
  - Improved impact
- Personal creation of media content
  - Natural extension to blogging
  - Personal created media + narrow diffusion
  - Niche markets
  - Personalisation tools let you find the right target
- Social consumption
- True personal content delivery
  - E.g. MESH
- -> More added-value services – win/win solution
Difficulties & perspectives

- **Technology**
  - Bad personalisation is worse than nothing at all!
  - Technology is not mature enough
  - Lack of tools

- **User acceptance**
  - Privacy