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## Framtidens Radio

Ny teknik för en ny värld ?



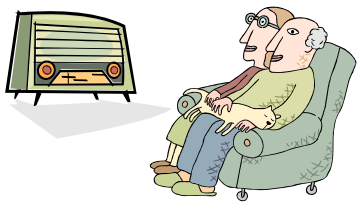
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## Traditional media consumption



- One – to – many communication
- "Live" – listening
- Given program schedule
- Sharing experience
- Limited interactivity

...in the couch

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# Media consumption of tomorrow ?



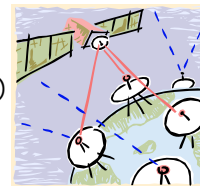
- Individual personalized content
- Non-real time – on demand
- Time-shifting
- Interactivity natural component
- Other devices

... At home or on the move

# Transport technologies - Broadcasting



- Wireless broadcast
  - Analogue terrestrial
  - Digital terrestrial (DAB-T, DVB-T/H)
  - Satellite
- "Wired broadcast"
  - Cable - TV



- Almost synonymous with Radio & TV
- Highly efficient (very low cost per user)
- Same information to all ("near - on demand")
- Limited spectrum

## Transport technologies: Cellular systems



- Personal terminals
- "Anytime – Anywhere"
- Unicast streaming expensive
- Limited coverage



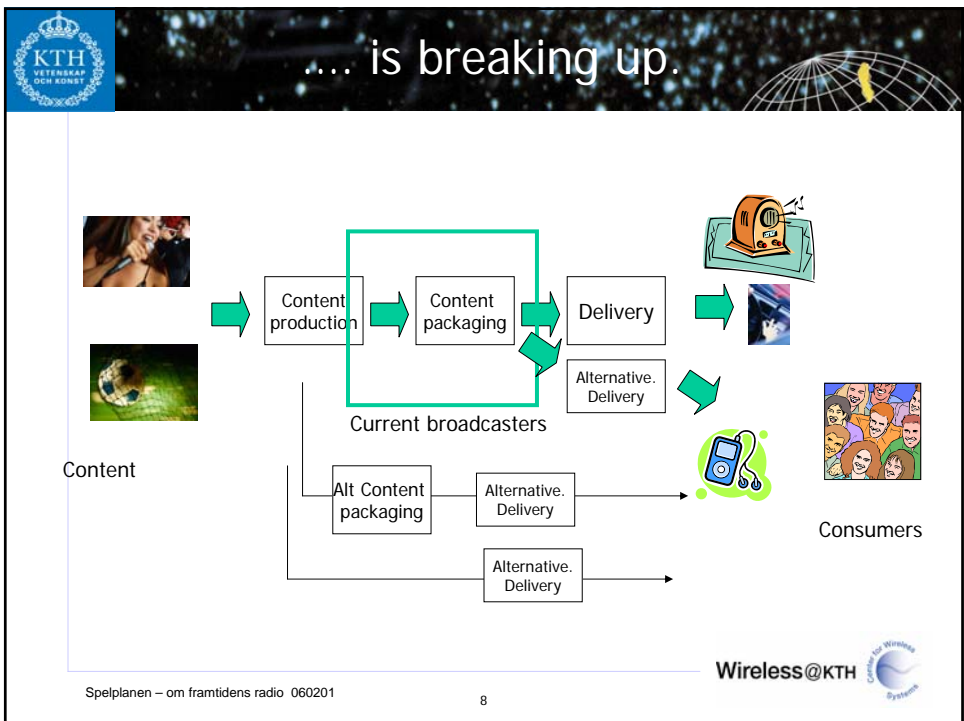
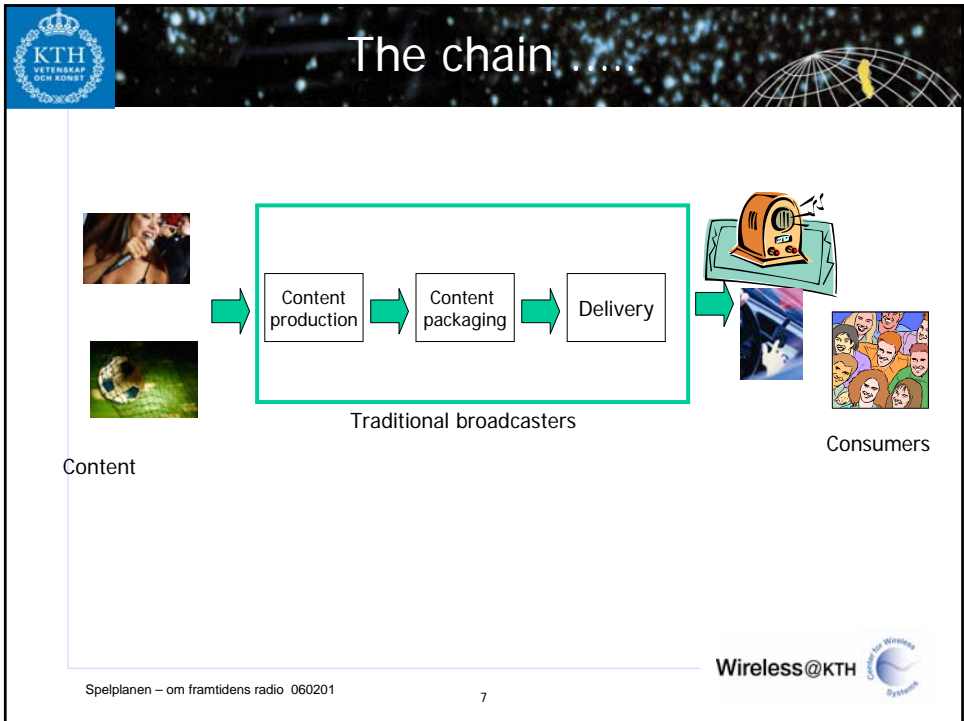
## Broadband Internet access



Ideal for

- Individual consumption
- Non-real time downloading
- Sound, Music & Video clips
- Interactive





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# Intelligence Inside our Outside

The diagram illustrates two network architectures. On the left, the 'Intelligent Network' is shown as a cloud containing a 'Content provider' and several services (Service 1, Service 2, Service n, Service 3). A 'User Terminal' is connected to the network. On the right, the 'Dumb IP-connectivity' is shown as a cloud containing a 'Content provider' and several services (Service 1, Service 2, Service 3, Service n). A 'User Terminal' is also connected to the network.

- High QoS
- Simple Terminals
- Low flexibility

- End-end principle
- Best effort
- Complex Terminals
- High flexibility

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# Example: "Wireless Podcasting" "Interactive" entertainment services

Broadcast radio of tomorrow ?


- Push playlist and news
- Much cheaper than streaming

- Fact:
  - Real-time streaming individual guaranteed service: expensive
- Solution:
  - De-couple time of download and access/play
  - Opportunistic transmission schemes
  - Massive memory terminals (~ 10-100GB)
  - Smart personalized caching


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# Conclusions



- Shift from “live & sharing” to personalization & time-shifting
- Alternative distribution mechanisms appear that will break up the traditional value chain
- Memory-intensive smart applications “pod-casting” for cost-effective consumer solutions

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# Read more!



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