

**Broadband Delivery Systems:**  
distribution infrastructure responsible for content delivery to the home.

Industry leaders:

- Adelphia
- Cablevision Systems
- Charter
- Comcast Cable
- Cox Communications
- DirecTV
- EchoStar
- Insight
- Time Warner Cable

**Network Content Providers:**  
a broad category spanning all distributors of educational and entertainment content that provide the base for interactive TV.

Industry leaders:

- CNN/HBO/Turner
- Discovery
- Disney/ESPN/ABC
- GameShow Ntwk
- PBS
- Viacom/ShowTime/CBS
- Weather Channel

**Data Collection and Response:** purveyors of technologies that harness addressable data to deliver personalized, targeted content.

Industry leaders:

- C-COR
- NDS
- Nielsen
- OpenTV (SpotOn)
- SeaChange
- TandbergTV

**Hardware:** primarily consists of digital set-top box (DSTB) embedded with application-specific microchips.

Industry leaders:

- Motorola
- Pace Micro
- Philips
- Samsung
- Scientific-Atlanta
- Sony
- Thomson / RCA
- Toshiba

**Middleware:** functions as a transition/conversion layer of network architecture that ensures compatibility between the basal infrastructure and diverse upper-level applications.

Industry leaders (with respective operating systems):

- Liberate / C2 (Java)
- Microsoft TV (XML)
- NDS / MediaHighway (Java)
- OpenTV (Spyglass)

**Interactive Application Platform:** interface that facilitates viewer interactivity and selectively delivers content.

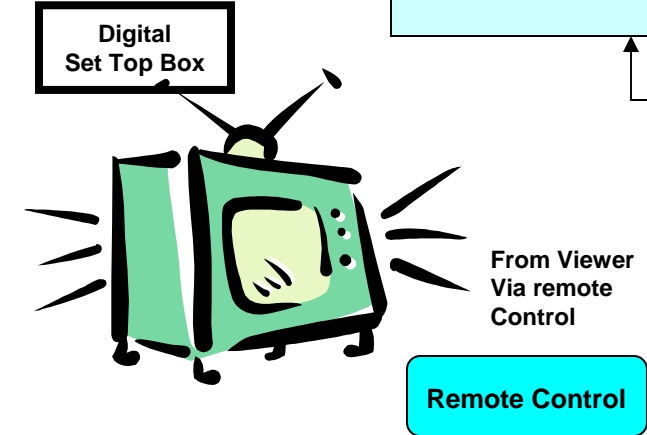
Industry leaders:

- GoldPocket
- ICTV
- C-Core (nCube)
- NDS
- OpenTV (Wink)
- SeaChange
- TandbergTV (N2)

**User-level Applications:** a diverse category that spans the following primary services and their respective leading providers.

Industry leaders:

- Interactive gaming  
*digeo, NTN, OpenTV/Static, Universal*
- Interactive Programming Guides (IPG)  
*DecisionMark, GuideWorks, TV Guide, Tribune Media Service, Wave Systems*
- Digital Video Recording (DVR)  
*digeo, EchoStar, Motorola, Sci Atl, TiVo*
- T-commerce (stand-alone applications)  
*Cauldron, OpenTV / Wink, Target TV*
- Video-On-Demand (VOD)  
*Concurrent, C-COR, NDS, SeaChange, TandbergTV, TVN*



**Interactive Production Services:** provided by creative production studios that develop interactive interfaces and furnish tools necessary for specific interactive applications.

Industry leaders:

<b>Production</b>	<b>Tools</b>
• Ascent Media	• eMuse
• BeyondZ	• Ensequenc
• Brainstorm	• GoldPocket
• Proteus	• NDS
• Schematic	• Zetools

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