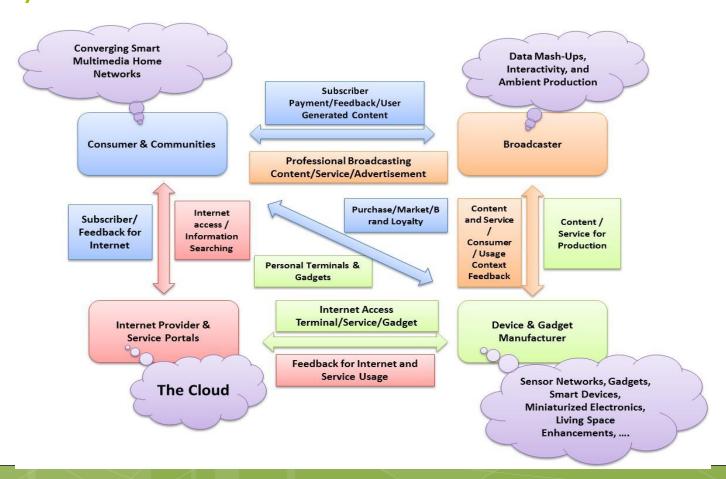
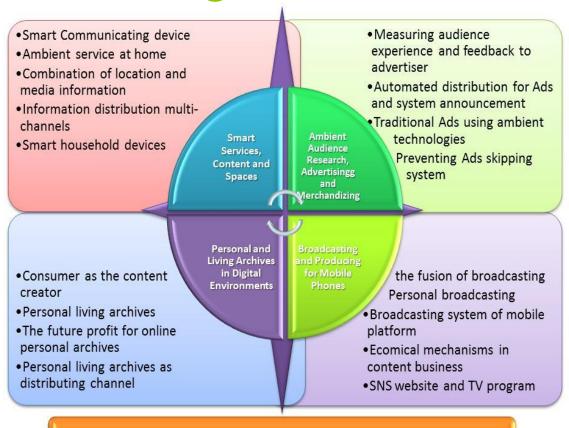
Vision of the Usage of Ambient Media in TV in the year 2016

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Relationship of Consumer and Broadcasting in an Ambient Eco-System

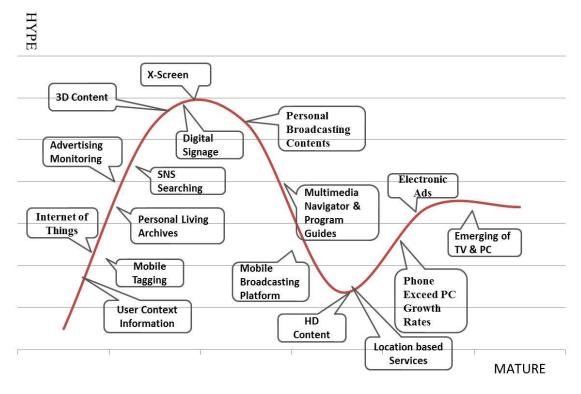


Potentials of Ambient Media in Broadcasting

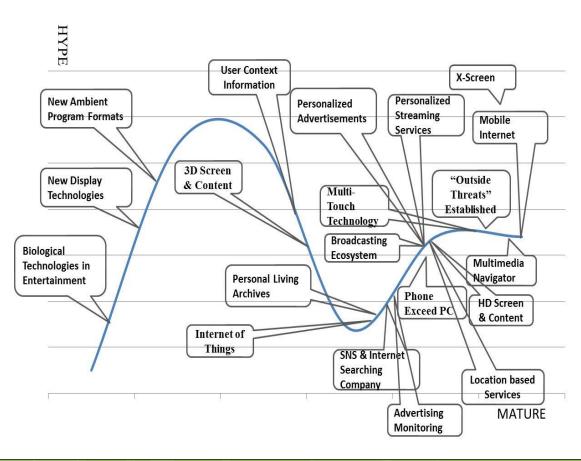


Ambient Pro-Active Systems, Interaction, and Content Consumption

Current Status of the Utilization of Ambient Media in Broadcasting today



Trends and Forecasts of the Usage of Ambient Media in Broadcasting in 2016



Predicted Key-Technologies

- the main wave of mobile Internet will have been setup and established;
- the market of tablet PCs keeps rapidly increasing;
- sales of smart phones further increase, and the growth ratio exceeds laptops by far;
- mobile tagging, and micropayments are gaining popularity
- IPTV increases popularity in mature markets, and shows high growth in emerging markets;
- 3D screens will gradually populate the living room environments;
- TV middleware and operating systems become another competitive market, similar to current mobile phone systems;
- multi-touch technologies enhance the consumer experience and input devices;
- display technologies for TV will change
- multi-screen environments will extend the consumer experience and interaction capabilities;
- near field communication, and short range communication are one additional communication channel;
- technologies for smart integrated home environments, for exchanging content between devices and services are major part of the home environment;
- next generation IPv6 services will be in large-scale use to overcome IPv4 restrictions;
- networks for smart communication and service integration are shaping;
- sensors recognizing the consumer environment are mashed-up within services;
- increased application of sensor networks, data mash-ups, and context information.

Predicated Changes to Content

- Increased consumption and production rate of broadcasting content produced by individuals;
- HD content will be a major content encoding format;
- 3D content especially produced for 3D screens will be on a trial but still not mainstream;
- personal living archives allow consumers to save their personal content online;
- radio-podcasts and personalized streaming services are gaining popularity;
- the integration of consumer data (e.g. usage data, location data) are integrated into service provisioning;
- data-mash-ups from sensors, and invocation of contextual information in content presentation, distribution, and consumption;
- consumer location based information as standard data source for content;
- wide spread application of broadcasting services on mobile platforms;
- converge of home multimedia systems inevitable part for content distribution platforms.

Predicated Changes to Services

- convergence of social network sites searching and normal Internet searching;
- homogenous competition between social network search, and Internet search companies;
- increased advertising preference for the mobile user, and shift of the advertisement budgets to mobile services;
- increased personalized advertisement programmes;
- increased use of electronic media and more efficient methods to monitor consumer reactions on advertisements (e.g. emotions, reach);
- 3rd party content provide TV content, especially out-of-home recording facilities;
- emergence of new forms of electronic programme guides, in form of a multimedia navigator accessing also Internet based services to guide the consumer;
- prioritized real-time web-content, news discovery, and emergency information across distribution channel overriding other content;
- feedback to broadcasters via consumer monitoring, mining, and social media interactivity beyond the current models;
- public data centres are established for commercial and private use.

Predicated Changes to Conducting Business

- Internet providers, telecom operators, and independent content brokers or distributors are more and more a threat to broadcasters;
- broadcasters need to re-invent themselves to provide an eco-system of content and services to cope with the changes;
- increased amount of new not traditional broadcast houses will emerge on the market – the challenge is still opened;
- the model of apple online stores is a potential candidate for providing content and services of broadcast companies.

Conclusions

- A vision of the utilization of ambient media in broadcasting in the year 2016 has been drafted
- Key-signals and technology trends have been identified

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