# HbbTV based Augmented Information Television with **Segment-linked Related Content on TV and 2nd Screen**

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## Television-based Information Content is attracting Attention and 'triggering' the Interest for a Subject



Television or Television-based content is catching our attention with great pictures, animation effects and dramaturgic apsects. TVbased content can provide an excellent overview about and an introduction to an issue and 'triggers' the interest of the viewer to get more information about a certain topic.

## News Magazines and Documentaries consist usually of several different interesting Topics



News magazines or documentaries are becoming increasingly popular formats in TV or as Television-based content in Internet. They consist mostly of several different topics and some of them are especially interesting for the viewer for further information.

### **Problems**:

A) broadcasts are fugitive content B) time-consuming search in the Internet during viewing is distracting C) the search activity will be often postponed after viewing the broadcast, but mostly falling in oblivion...

## Synchronization between Magazine Topics and Additionally Content via HbbTV Stream Events & 2nd Screen



**Solution:** segment-exactly 'live' synchronization between the presented topic within a broadcast and the additionally information (text & picture, videos, geo-information) based on the HbbTV 'Stream Events' technology. The additionally content is appearing as thumbnail or as text line in the beginning of topic-segments on the TV screen or/and in the 2nd Screen device. The viewer can decide, whether they consume the additionally content during the broadcast – on TV or/and on a Tablet as 2nd Screen - or bookmark it for a 'time-shifted' consumption. On the 2nd Screen is running an exactly synchronized timeline to the viewed TV

#### broadcast.





## Rich Interaction and Elaboration about a Subject through 'App-Collaboration' between TV $\leftarrow \rightarrow$ 2nd Screen



Some topics of TV-based information content especially in the area of popular science let often questions like 'HOW it works?' remaining open or explained only in a very superficial manner. Viewers – especially younger people - are often interested in deeper (inter)active exploration of the presented subject on TV screen. Through meaningful interactivity related to the TV content there is enourmus 'learning' but also motivation potential. Fun and excitement through 'playful' interactivities are important function for deeper engagement with and elaboration about a subject.

1: The 'Graffiti Film' or the TV-Channel App on the Tablet is allready running and connected to the TV device.

3: in the painting state user can paint 'Graffiti' graphics on the Tablet with the finger.



The purpose of the presented application was to actively involve children in the topic of graffiti paintings and to give them the opportunity to create their own electronic graffiti paintings on several objects, for instance on an underground train wagon or a wall. The application is 'Converged' due to a seamless connection between the TV and the 2<sup>nd</sup> Screen components of the application based on HbbTV Technology. The 2<sup>nd</sup> Screen App is an 'extension' of the 1<sup>st</sup> Screen App and is controlled & trigerred through the 1<sup>st</sup> Screen App.