In this paper, the new paradigm of the second screen in interactive digital television (iDTV) is discussed and analyzed through a systematic literature review. An architecture is proposed for the use of mobile devices as a second screen, so interactivity sent via broadcast can be also used in mobile devices, in a contextualized and synchronized fashion. A prototype was implemented in two modules: the first one to primary screen (TV) with the remote control and the other for second screen in order to compare their use.

References

- Belimpasakis, P. ; Walsh, E R. "A combined mixed reality and networked home
approach to improving user interaction with consumer electronics.

- LI, L. , Yi, R. &quot;MEMS-based digital TV interaction innovation research. &quot;


**Index Terms**

Computer Science
Multimedia

**Keywords**
Interactivity  Second Screen  Dual Device  Middleware Ginga  SBTVD  DTV

iDTV

DVB-MHP

Smartphone

Tablet

Android

Remote Control

Home Network