



LINKEDTV



Deliverable 7.6 Project Demonstrator (v2)

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¹ • PU = Public

- PP = Restricted to other programme participants (including the Commission Services)
- RE = Restricted to a group specified by the consortium (including the Commission Services)
- CO = Confidential, only for members of the consortium (including the Commission Services))

	<p><i>LinkedTV solution: the Editor Tool, Platform and Player, complemented by demonstrations of the provision of this solution for the content of two European broadcasters: the LinkedCulture and LinkedNews scenario demonstrators.</i></p>
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1 LinkedTV Project Demonstrator: an Introduction

This deliverable presents the LinkedTV Public Demonstrator which will be an online, publicly accessible Website collecting showcases of the key project outputs which form together our LinkedTV solution: the Editor Tool, Platform and Player, complemented by demonstrations of the provision of this solution for the content of two European broadcasters: the LinkedCulture and LinkedNews scenario demonstrators.

1.1 History of the document

Date	Version	Name	Comment
28/08/2014	V0.0	Lyndon Nixon	Draft document created using proposed ToC
15/09/2014	V0.5	Lyndon Nixon	Showcases webpage online, description added to deliverable
24/09/2014	V0.9	Lyndon Nixon	Completed description of the Showcase webpage
01/10/2014	V1.0	Lyndon Nixon	Final version after QA comments

Table 1: History of the document

1.2 Glossary for the document

Editor Tool

A Web based application which allows the viewing, editing and saving of LinkedTV data generated for video content: the chapter segmentation, the annotations and the enrichments of that video.

2 LinkedTV Showcases

The LinkedTV Public Demonstrator is the public face of the project to the world and to potential adopters and users of LinkedTV technologies.

Its focus is on offering external parties an opportunity to get to know and, where possible, have hands-on experience of Linked Television. We are aware of the fact that this type of television experience is still unknown and largely unexpected among the general public, and despite the growth in popularity of the so-called 'second screen' experiences, LinkedTV offers a much closer integration of the TV content and second screen content than known today. A key challenge for the Public Demonstrator is to achieve a clear communication of the meaning of Linked Television in an uncomplicated and non-technical manner, despite presenting highly innovative technology which is potentially disruptive to the traditional TV viewing experience.

The Public Demonstrator complements the existing public Webpage at <http://www.linkedtv.eu> but plays a different role: the webpage already highlights LinkedTV technology and demos (videos and Web UIs) but as part of representing the LinkedTV project as a whole online. Hence the technology and demonstrators are organised primarily as one part of one section of the Website rather than being the central focus on the site for a visitor. Additionally, in the interests of project dissemination, we have focused to date on completeness in dissemination of project results, hence creating a long list of LinkedTV technologies and demos (see also D7.4). In comparison, the Public Demonstrator must, by necessity, simplify the LinkedTV experience to its core aspects (for the end viewer or a technology adopter), keep the message short and be built around a limited number of online demos which can reflect an *integrated* or *holistic* view of LinkedTV technology. Furthermore, since our existing scenarios with RBB and AVRO make use of those broadcasters' own (protected) content which leads to issues around re-use online, the Public Demonstrator needs to offer a Linked Television experience using content with an open license while not losing realism for the visitor. Finally, we need to be aware that a public Website which offers public access to LinkedTV tools or interfaces leads to new requirements on the installed infrastructure; it may be recommendable to keep public installations separated from the current LinkedTV technologies which are being used to process protected content and provide stable realisations of the project scenarios.

Hence we propose the Public Demonstrator to be based around a separate Website from <http://www.linkedtv.eu>. This site will aim to provide all the demonstration material directly from its frontpage, and be organised in such a way that a casual visitor will (1) understand quickly what is the subject of the site and (2) find with minimal clicks the content they would be interested in. We consider two main target groups, who may need to be handled differently in terms of site organisation: (1) the general public (or, more specifically, technology-savvy TV watchers) and (2) potential LinkedTV (early) technology adopters (as defined in LinkedTV WP8).

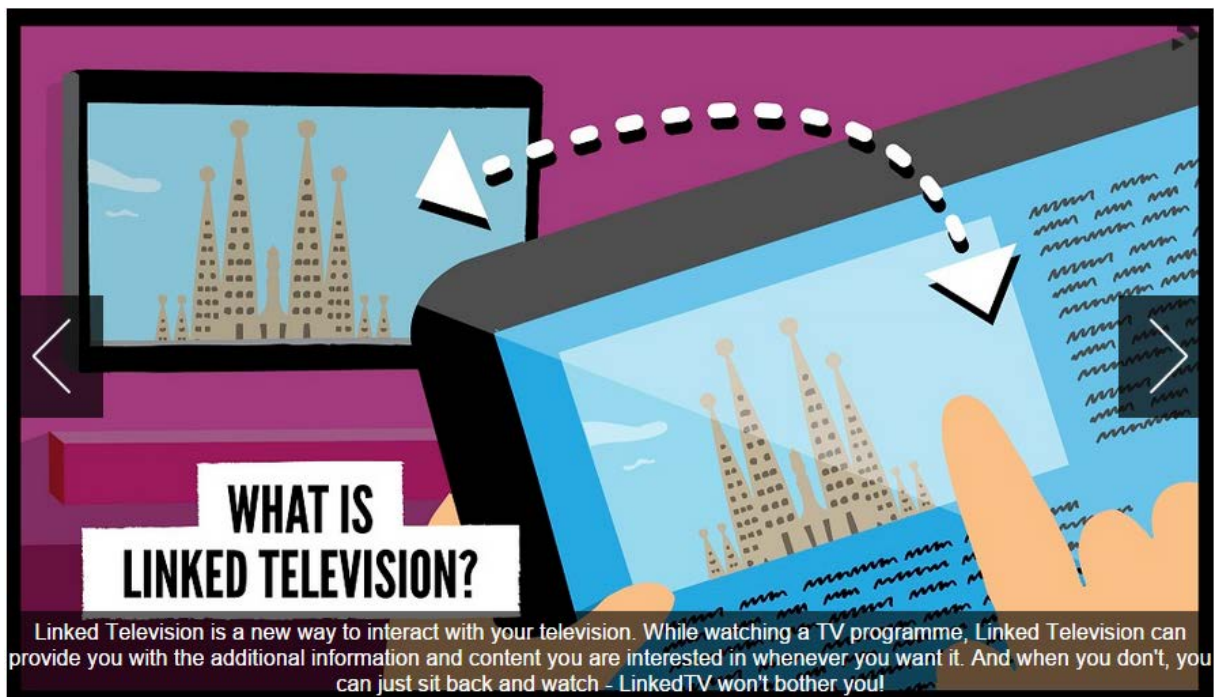
Considering what should be demonstrated to a visitor, apart from initially a general explanation of what (and why) LinkedTV is, we would restrict ourselves to showing four key contributions:

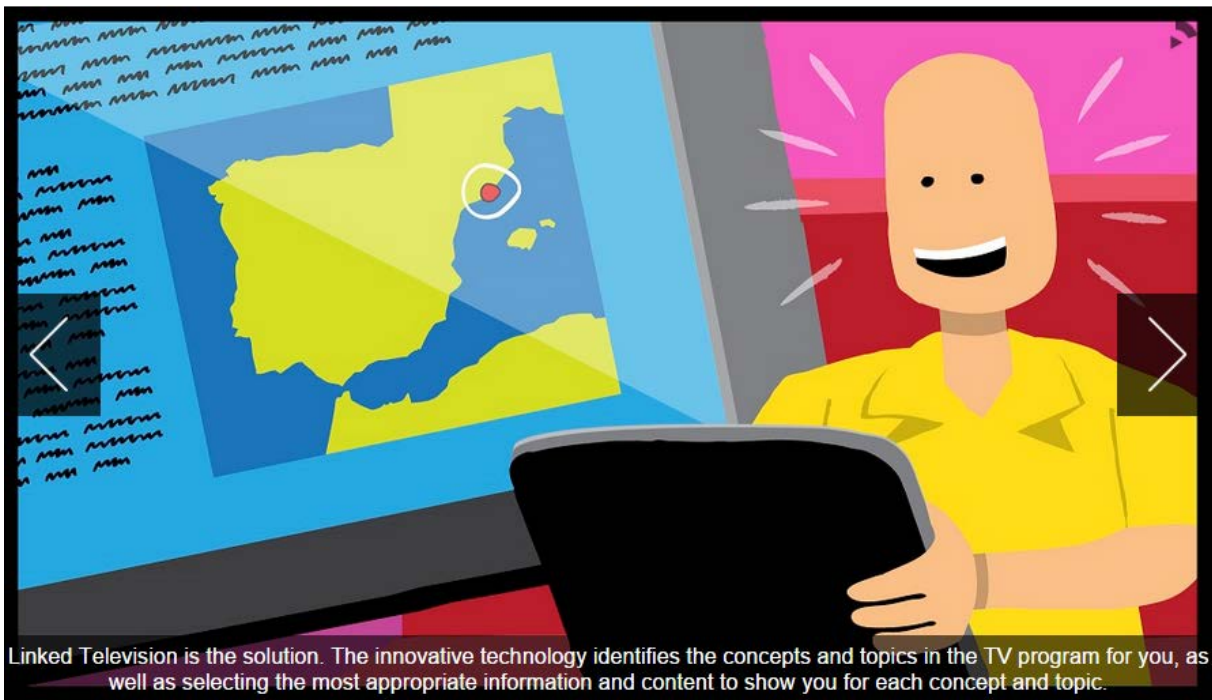
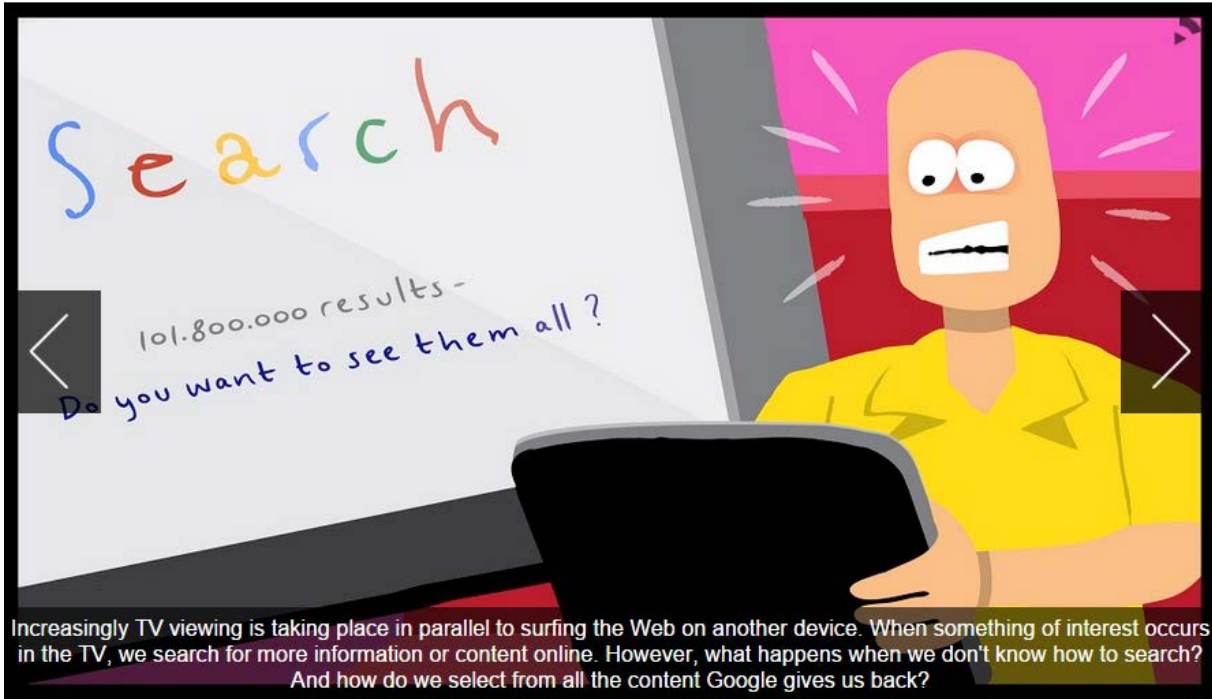
- General public: the LinkedTV Player, preloaded with content and simulating a TV viewing experience with seamless provision of related content via LinkedTV;
- General public: the LinkedTV Scenarios, realisations of a linked television experience with the two scenario partners RBB (Germany) and AVRO (Holland);
- Adopters: the LinkedTV Platform, which for the content owner is the enabler of a Linked Television experience by encapsulating the full LinkedTV workflow of ingest, analyse, annotate and enrich video material;
- Adopters: the LinkedTV Editor Tool, which for the content owner provides the critical ability of an additional editorial proof of video annotations and enrichments before going live.

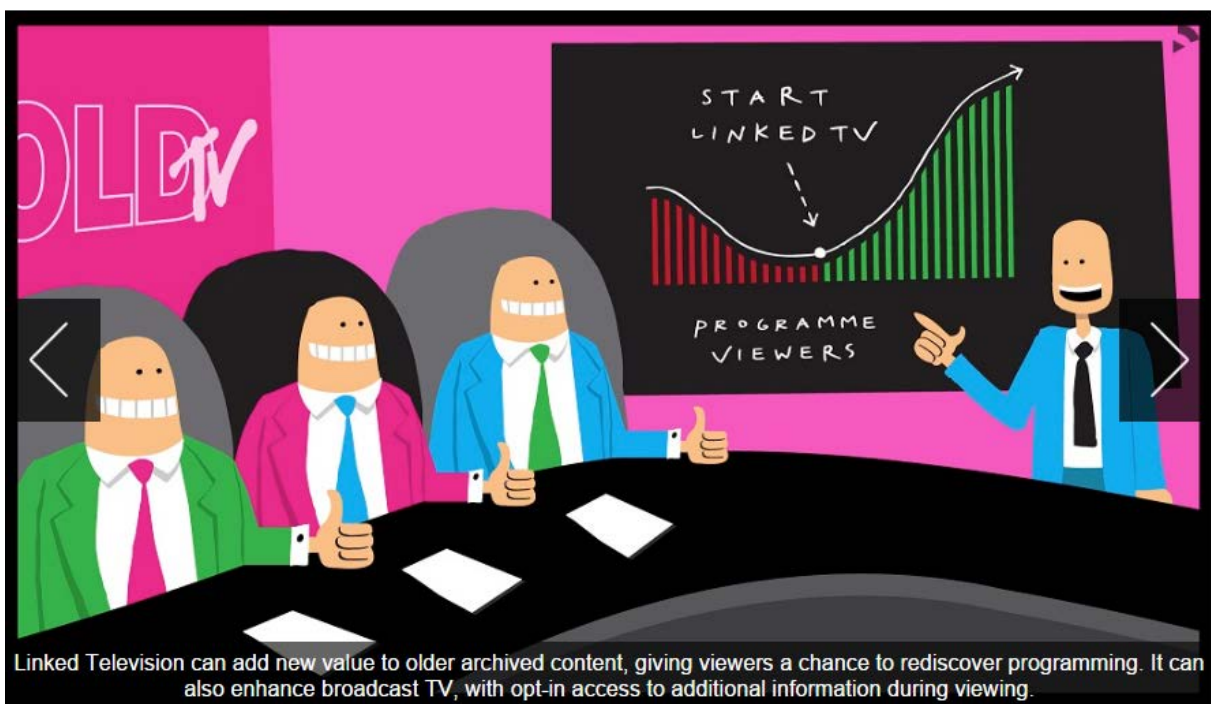
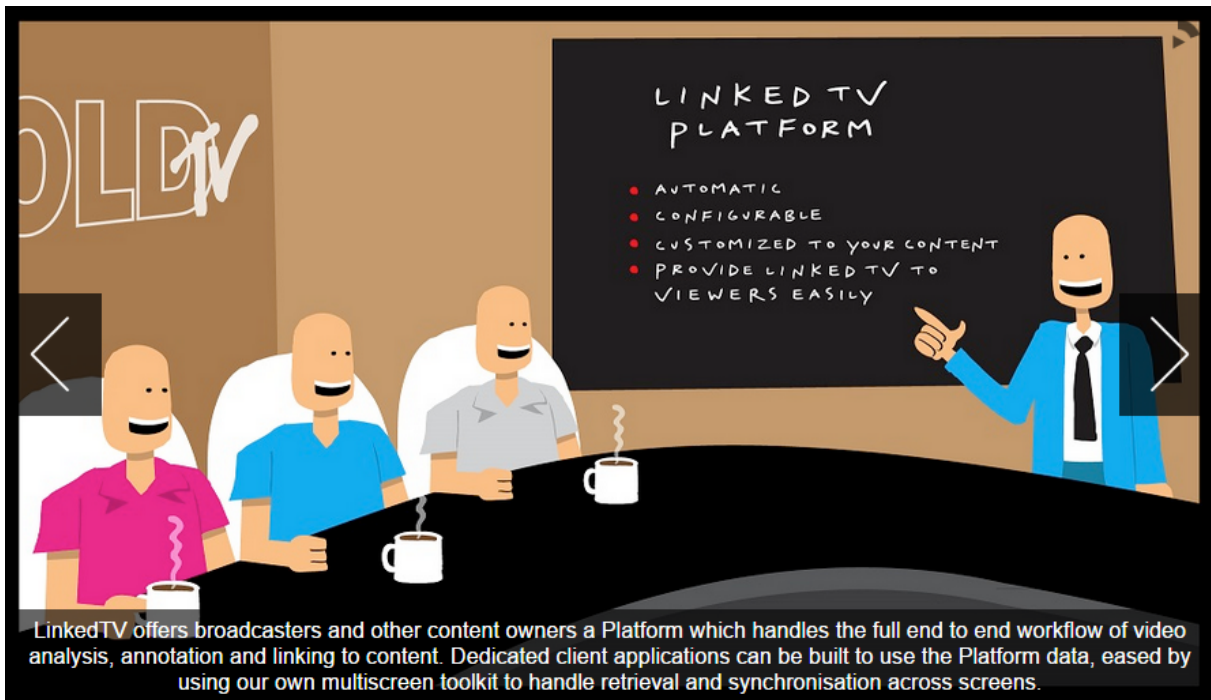
This indeed led to the planning, development and launch (on the day before the start of the IBC Exhibition) of the LinkedTV Showcases page, <http://showcase.linkedtv.eu>.

The page focuses on two aspects: a clear explanation to the casual visitor of WHAT Linked Television is, and links to the individual public showcases concentrated on showcases of the four key contributions identified above.

For the clear explanation, we chose to use a professional illustrator in order to tell the LinkedTV story in an appealing and interesting way. He was commissioned to make 5 illustrations which form a story for the front page of the LinkedTV Showcases site together with explanatory captions:







The rest of the front page is focused on one-click access to the individual showcases.

2.1 The LinkedTV Platform showcase

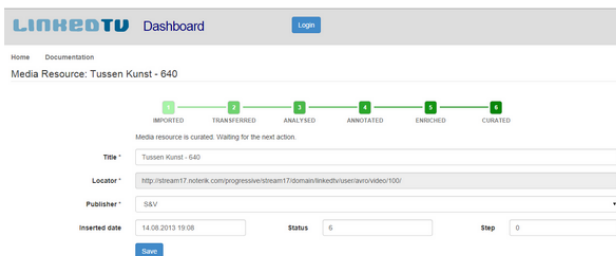
The LinkedTV Platform is presented at <http://showcase.linkedtv.eu/showcase1.html>.

It highlights the functionality of the Platform, provides a contact and links to an embedded video demonstrating the media workflow on the Platform.



Linked Television Platform

The LinkedTV platform allows content owners to perform analysis, annotation and enrichment of their video material and store and manage the resulting rich metadata. This metadata supports improved retrieval and re-use of their video at Media Fragment level, as well as being the basis for LinkedTV added value applications served to client devices.



Video Ingestion:

- Gathering of video sources for analysis and enrichment

Administration and Workflow:

- Selection of video sources and monitoring of the analysis workflow
- Storage of Media Fragments and annotations in a central repository

Content Analysis and Enrichment:

Detection of meaningful Media Fragments and their description by:

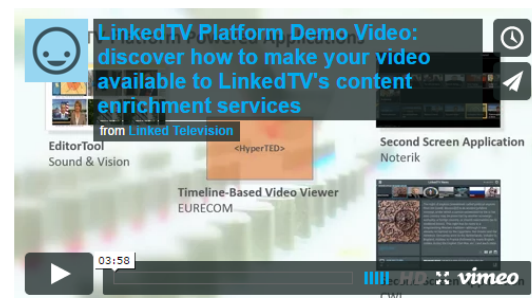
- Shot / scene analysis, ASR, OCR, face recognition, visual object detection (according to configuration)
- Description in terms of concepts extracted from transcripts and identified using Linked Data
- Linking to related information and to content from user provided white lists of trusted content sources



“...schilderij van Jan Sluijters...”

Interested to know more or arrange for an exclusive private tour of the LinkedTV Platform?

Contact:
Rolf Fricke
Condat AG
+49 30 39491109



[LinkedTV Platform Demo Video: discover how to make your video available to LinkedTV's content enrichment services](#)

2.2 The LinkedTV Editor Tool showcase

The Editor Tool is presented at <http://showcase.linkedtv.eu/showcase2.html>.

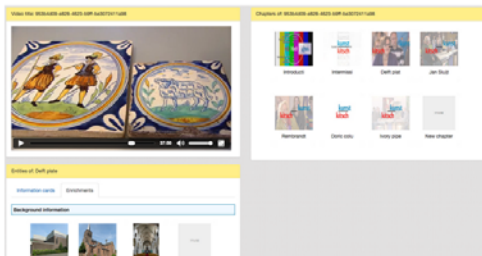
As it is open source software, a link is provided to the software's GitHub page where anyone can access the tool code or branch it to create own customization.

There is also a link to the public online demo of the Editor Tool which is using a short "open license" video.



Linked Television Editor Tool

The LinkedTV Editor Tool (ET) offers a dashboard for broadcaster programme teams to utilize LinkedTV's automatically generated annotations to quickly produce high quality contextual information for their viewers. All automatically extracted information is retrieved from a customizable list of trusted web sites, ensuring high relevance and trustworthy provenance.



Use automatically extracted annotations & hyperlinks to quickly create information queues for your viewers

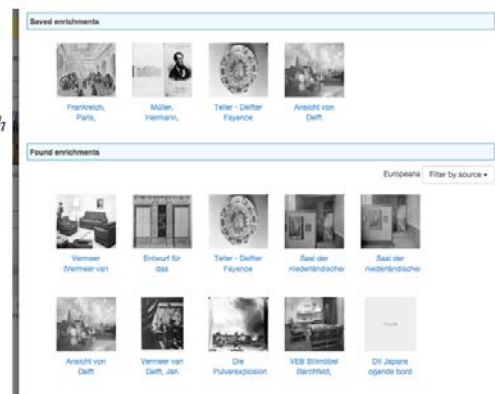
Use autocomplete and dynamic lookup to quickly find information that LinkedTV did not provide for you automatically

Ultimately publish all edited information to the LinkedTV platform and enable viewers to watch your broadcast in your own LinkedTV player

"The editor tool also helps out our website editors in finding trusted, high quality information"

"This tool actually supports archiving a contextualized version of our show, which is great for future referencing"

"Our editing team needed little training in order to use the tool"



Do you want to contribute to or customize the Editor Tool for your own specific needs?

Find us on [GitHub](#)

[TEST THE EDITOR TOOL NOW](#)

2.3 The LinkedTV Scenarios showcase

The two LinkedTV Scenarios are presented at <http://showcase.linkedtv.eu/showcase3.html>.

Contacts and the scenario videos are provided to show the LinkedTV experience based on two European TV programmes.



Linked Television Scenarios

Experience what is Linked Television with our content partners:

- LinkedNews from RBB (German daily news)
- LinkedCulture from AVRO (Dutch cultural heritage)



"LinkedNews" gives news viewers the chance to dig deeper into the background of news stories!

Professional news content produced by RBB is linked to sets of related information and videos from German broadcasters, providing viewers a deeper understanding of and more relevance from regional news.

The "Hyperlinked Documentary" demonstrates how a popular arts programme Tussen Kunst & Kitsch can be enriched by linking to content related to the art objects in the show.

The Antiques Roadshow format program's viewers are interested in the cultural + historical aspects of the objects being appraised. LinkedTV gives them immediate + easy access to explore information, discover similar objects, their creators etc.



Contact details for **Linked News**:

Mr. Nicolas Patz
+49 (331) 97 993 50042
nicolas.patz@rbb-online.de

Contact details for **Linked Culture**:



[LinkedNews demo](#) on [Vimeo](#).

2.4 The LinkedTV Player showcase

The LinkedTV Player, based on the Multiscreen Toolkit, is shown at <http://showcase.linkedtv.eu/showcase4.html>. It highlights the software's HbbTV and HTML5 support.

The GitHub project page of the Multiscreen Toolkit is linked to two videos which demonstrate the toolkits capabilities with respect to second screen / multiscreen content synchronization.



Now with HbbTV support the LinkedTV Player can be easily integrated into broadcast environments directly offering its features to HbbTV compatible televisions.



For more details of our open source efforts, see <http://noterik.github.io>

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Linked Television Player

The LinkedTV Player is a multiscreen player that runs on both televisions and mobile devices. Combined together with the LinkedTV Platform a powerful second screen becomes possible that provides additional and relevant information accompanying your videos. Bookmarking interesting moments and personalised recommendations ensure the perfect user experience using the LinkedTV Player.

The out of the box player provides a generic user interface to accessing and browsing annotations and enrichments coming from LinkedTV, but this interface can be customised to any customer using regular Web technologies (HTML, CSS)



The LinkedTV Player is built upon the open source Springfield multiscreen toolkit. The toolkit answers a growing need to be able to work seamlessly with video across devices and screens. The HTML5 based toolkit provides a basis for building and prototyping a wide range of multiscreen solutions.

For more information, please see [Multiscreen Toolkit site](#)



3 Conclusion: the launch of the Public Demonstrator

The Public Demonstrator has been launched September 11, 2014 at <http://showcase.linkedtv.eu>. It was online hence since IBC Amsterdam, and the URL is highlighted on LinkedTV public relations materials, including the updated Year 3 project newsletter, as well as giveaway materials used at IBC which are available also for future events.

Clearly this is a raw first version, and in the remaining time we plan to improve the website appearance and add further demo videos or online demos as such become available. As the site is hosted permanently under linkedtv.eu, the LinkedTV Showcases will remain online and available to interested visitors after the project ends.