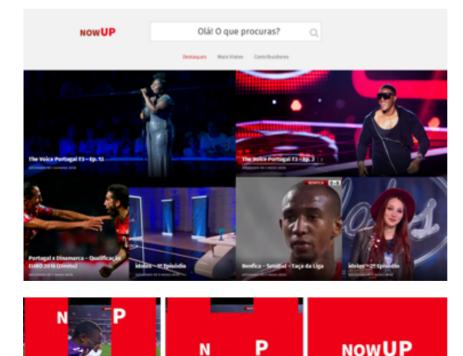# nowUP – a totally automated system for the creation of TV summaries based on Twitter activity

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The main premise that motivated the development of this system relies on the fact that viewers post a lot of TV program-related information on social networks, while they are watching TV, especially during its key moments. Therefore, this social buzz has the potential to be used as an automatic editorial criterion. Having this in consideration, the nowUP main goal was to automatically create TV summaries of popular television programs (like football matches, talent or reality shows) based on the Twitter activity and integrating a part of that activity in the summary. For this, a totally automated system incorporating different modules was developed.

A data-mining engine, developed under the support of a research group of the Telecommunications Institute, headed by Prof. Diogo Gomes, processes continuously the activity of Twitter looking for tweets associated with TV shows. Based on the program metadata it indexes the twitter activity; correlates tweets; and creates clusters of peaks, being the relevant clusters associated with the TV highlights. With this, a video engine automatically creates a full video summary (an edited sequence of TV highlights) and publishes it in an online platform, making it also available to be used in a Catch-up TV service. The TV summaries are enriched with visual separators and with a textual overlay of the most relevant tweet of each highlight serving as a commentary to that segment.

The research team carried a study to compare the outputs of nowUP with official editorial/professional video summaries. The results show that the solution was very successful in achieving the project main goal and users want to have access to this type of social buzz-based video summaries. The nowUP solution also promises potential gains in the value chain of TV producers and broadcasters.