SMARTPHONES, TABLETS AND COMPUTERS USAGE TO ACCESS TV-RELATED CONTENT: AN USER CENTERED DESIGN APPROACH

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1. Context

The convergence between the television content and the internet occurs through different devices. And each device has it`s own specific characteristics. However, media companies are still poorly adapted to this scenario. Convergence seems to be limited to a "copy/ paste" process, which only offers redundant content in different devices and doesn`t consider their specific characteristics and features - that people could use in each of these devices and in each context of use.

Based on this fact, we proposed the following problem statement: are TV-related content formats adapted to the smartphones, tablets and computers users behaviors and their related contexts* of use?

* e.g. tasks to be performed, location, time available, screen size, mobility of the device and speed connection.

A PhD research was made, between March 2011 and February 2015, to investigate this problem by an user centered design approach.

2. Method

The research was divided into these five techniques:

1) Document analysis in 57 sites and 17 applications, which goal was to gain knowledge about the subject of the research.

2) Documentary research, which goal was to identify the content formats that are offered by television companies through smartphones, tablets and computers.

3) Online screener (questionnaire) with 156 responses, which goal was to select participants for semi-structured interviews and to measure behaviors and opinions about the usage of smartphones, tablets and computers to access the TV-related content formats.

4) 25 semi-structured interviews with users, which goal was to deepen the understand of their tasks to access TV-related content by computers, smartphones and tablets.

5) Comparison of the results of the semi-structured interviews with the results of the online screener (questionnaire), which goal was to verify whether the qualitative data of the interviews would be validated (or not) by the quantitative information of the online questionnaire.

3. Results

The hypothesis of this PhD research was confirmed: TV-related content formats were not suitable for smartphones, tablets, computers and the contexts in which they were used (tasks to be performed, location, time available, screen size, device mobility and speed connection).

It was found the content formats offered by TV companies through the internet (videos, second screen, extended and thematic). Also it was found that the smartphone is all the time with the user (it`s already the first screen), but it isn`t working to access the television content.

When watching TV in the traditional way, people use the internet at the same time (but the activities are unrelated with the TV). Television boosts the internet

usage behavior, but the opposite almost don`t occur (although this occurs via social networks).

For people, only the online videos are the TV-related content, the second screen doesn`t work and extended or thematic contents aren`t seen as TV.

The usage of tablet is very low, because it has the same functions of the smartphone and isn`t portable (used only via WiFi). The computer is only used when people need to focus, usually in activities related to studies and work. People still prefer to access the content directly on the TV set, but are watching less in a traditional way (because the internet offers flexible hours).

Although it was the most used among the 3 types of surveyed devices, the smartphone was considered the least adapted to the TV-related content. Therefore, it was considered the most problematic for this type of use.

Despite the smartphone always be on hand and readily available to internet access, the small size of their screen was not attractive and comfortable for watching movies, series and other TV shows. In addition, other television related content formats (which go beyond videos) were often not optimized for the small screens of these devices - so, users usually abandon the device, because they didn`t find what they were looking for or because the navigation was difficult, only offering scarce features.

4. Conclusion

The mobility of the smartphone enable their user to access the internet in front of the TV. But, usually, the smartphone is used for a different purpose: most of the time, to perform unrelated tasks to what was being watched on television.

It is important to note that, based on the interview results, the smartphone stopped being the second screen and became the first screen for people, even when they were watching television.

After 2 and a half years of the PhD research conclusion, we did a survey to verify if there were some changes in the presented results. According an online questionnaire whith 78 questions, available for 15 days (from 9 to 23 August 2017) and answered by 126 people, the smartphone remains the most used device (77%), followed by the computer (20%) and

the tablet (1,5%). In addition, nowadays, people use the smartphone more than a year ago (66%).

By the survey`s results, we found that, now, the respondents disagree that the smartphone screen is small, that the keyboard is bad to type and the screens are more difficult to navigate than a computer (45%). Also, there has been a decrease in the number of people who doesn`t like to watch videos on their smartphone.

For the tablet and the computer, we didn`t observe some changes in the PhD research results.

Respondents also indicated that, nowadays, they are watching less traditional TV (60%) and increasingly using the internet to access TV-related content (45%).

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