What If Devices Take Command: 
Content Innovation Perspectives for Smart Wearables in the Mobile Ecosystem 

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ABSTRACT
The new generation of wearables, marketed as consumer electronics products, can be interpreted as a sign of radical innovation leadership from mobile device producers. Since the appearance of the iPhone—and also later of the iPad—, terminal vendors had lost traction as triggers of innovation within the mobile content ecosystem, giving way to the current platform-based paradigm of leadership. This paper proposes examining the innovation potential of wearable devices on the whole mobile set of actors, starting from a two-scenarios premise: one of sustaining innovation, and a second scenario of more prominent influence. The research finds significant innovating potential for the smart kind of wearables, with a range of influence that can modify the course of all current mobile players. Also, it points at the possibility that a strong development of these items can eventually give birth to a new kind of media, specifically conceived for the wearable experience.

KEYWORDS
Augmented Reality, Digital Media, Google Glass, Media Innovation, Microsoft Hololens, Mobile Communications, Mobile Devices, Mobile Devices, Mobile Ecosystem, Mobile Media, Smart Glasses, Smart Watches

INTRODUCTION
Wearable devices have entered the consumer electronics market as an extension of the mobile handsets. Market for wearables is growing at a pace (IDC, 2015a) strong enough to become attractive to both terminal vendors and content producers.

Thus, vendors of wearable devices have retaken command in the innovation game after a 6-7 year period in which other mobile ecosystem players—particularly aggregators. The irruption of a new generation of handsets, led by Apple’s iPhone in 2007, paved the way for dramatic transformations both in the content and the telecommunications industries. The app store economy, the platform-ruled mobile media ecosystem, now a Google-Apple duopoly, started in the first place with the eclosion of a new family of devices. In the pre-iPhone era, mobile network operators drove the evolution and the innovation within the mobile content business. An innovative step from the terminal vendors’ sector changed the rules of the game forever.

However, little decisive innovation steps from the device makers have changed the picture in the mobile content business after that arrival of the iPhone, which was coincidental with Google’s Android platform.

Amid this ongoing discussion on the future of the mobile ecosystem, the aim of this paper is bringing some ideas on the evolution of leading strategies in mobile content for the next future. Communication studies have often envisaged the mobile space as a mere channel, disregarding the fact that it involves a whole new experience that deserves more attention. However, over the years
we can benefit of a remarkable corpus of research on user behavior, on cognitive aspects of mobility, and on the eclosion of mobile media. Moreover, innovation lies among the research topics that need more attention efforts from the communication scholars’ community.

The kind of methods and materials we will use in order to fill both scenarios will be basically of the same kind. Secondary sources of different kinds are the base on which this paper builds.

This study collects data and insights from the original equipment manufacturers (OEM) sector; the network and communications equipment providers; content aggregators and the platform leaders; also from the consulting business, which produces a regular flow of data and insights; also international bodies of various kinds, and scientific institutes devoted in several ways to connect with our field of study, have sourced this work.

Furthermore, the impact of mobile ecosystem news on media agenda is being recorded by news providers of all types, bloggers and a number of individuals that have helped us to build our prospective picture in terms of strategies and their effect on the media and on the telecoms businesses.

The devices that drive most of our attention are the “smart wearables” (IDC, 2015a). These terminals are able to run third-party applications, which allow a dissemination of value among the applications/services/content community of developers. Therefore, this paper is focused mostly on the potential of smart watches and glasses.

In order to offer a pragmatic, not too perishable approach, we will deploy a two-fold study, based on two basic scenarios: in scenario number one, we will adopt the hypothesis of an ecosystem mostly driven by sustaining innovations, in which innovations in content, services and devices are mostly aimed to perform better the kind of tasks they have been conceived for so far; in scenario number two, we will start from a scenario of disruption, led by the impact on the different players of the new generation of wearable devices.

All the above written leads us to state the objectives of this piece of research through the following Research Questions (RQ):

**RQ1:** Do wearable devices have the potential to influence the development of the mobile media ecosystem to trigger innovation in a similar way the iPhone and the likes did in the past?

**RQ2:** In which ways can this eventual sequence of innovations become visible in a near future, particularly in the content production and distribution activities?

Despite we deal with one of newest fields within the new media studies discipline, we assume that the task of building a thorough, coherent corpus of knowledge on mobile media largely exceeds the exclusive communication studies view. As Goggin and Hjorth point: “the process of theorizing mobile as media is still only in the early stages of being integrated into, taking advantage of, and enriching and complicating the heritage and traditions of studying media, so we still discern a ‘disconnect’ between mobile studies, on the one hand, and media studies, on the other hand, just as much work in media studies is blissfully unaware [even still] of the state-of-the-art in, say, Internet studies” (2014, p. 1).

This paper aims at contributing to fill the above-mentioned gap of interest from communication studies by underlying the most relevant trends emerging from the wearables experience, and its impact on the whole mobile content ecosystem. Moreover, our perspective can also help researchers from disciplines less familiar with content issues to complete their understanding of the processes happening in the mobile communications space.
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