Tell Me the Screen You Use, and I Will Tell You the Content You Watch: The Case of Spanish Internet Users

Digue'm quina pantalla fas servir i et diré quin contingut veus: El cas dels internautes espanyols

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In recent years, the number and range of screens used to watch audiovisual contents has risen, from the traditional television set to Internet-enabled devices. This fact has profoundly changed audiovisual consumption habits in Spain. Firstly, viewing-times have increased across every platform. For example, in the case of conventional television, the average Spanish person watches four hours per day. Secondly, at the same time, younger audiences in particular are increasingly likely to use Internet-enabled screens.

The aim of this article is to analyze which screens are preferred by Spanish Internet users, as well as their reasons for doing so when watching different types of TV contents online, such as fiction series, entertainment shows, films, news and sports. In order to carry out this research, the following screens have

En els últims anys s'ha multiplicat el nombre de pantalles disponibles per veure continguts audiovisuals. Les llars han passat de tenir un o més televisors a comptar amb una àmplia varietat de dispositius connectats a internet. Aquest fet ha transformat profundament els hàbits de consum audiovisual a Espanya. Així, per exemple, el temps de visionat s'ha incrementat en totes les pantalles, inclosa la televisió convencional, amb una mitjana de quatre hores al dia. El públic jove sobresurt com el perfil que consumeix cada vegada més continguts en pantalles connectades a internet.

L'objectiu d'aquest article és analitzar quins dispositius prefereix l'audiència per veure els diferents tipus de continguts —series de ficció, programes d'entreteniment, pel·lícules, notícies i esports—, així com les raons d'aquesta elecció. Per a això, hem tingut en

been taken into account: smart TV, mobile phones, tablets, computers and video consoles.

Of the main findings, two in particular may be highlighted in advance: almost half of Internet users watch TV online, and the most frequently used device to do so is the computer —including laptops and netbooks—. A further clear conclusion is that users choose different program genres depending on the screen.

The results of this study, based on an original survey carried out online, may prove especially significant in order to discover new consumption habits of the Spanish population on the Internet.

Key words: *television, internet, screens, content, audiences.*

compte els suports següents: televisió intel·ligent, telèfon mòbil, tauleta, ordinador i videoconsola.

Entre les conclusions principals destaca que gairebé la meitat dels internautes espanyols veu la televisió a internet, sobretot per mitjà de l'ordinador. Això no obstant, les dades corroboren que els usuaris trien una pantalla o una altra en funció del tipus de contingut.

Els resultats d'aquest estudi, basat en una enquesta pròpia, són especialment rellevants per conèixer els nous hàbits de consum audiovisual de la societat espanyola a internet.

Paraules clau: *televisió, internet, pantalles, continguts, audiències.*

LITERATURE REVIEW

Approximately ten years ago, only one option was available to a Spanish viewer interested in watching television contents: the conventional television set. In recent years, however, audiovisual consumption habits in Spain have been radically transformed by the emergence of a multiplatform environment. Audiences can now avail of a wide variety of devices to access television contents, including computers, tablets and mobile telephones, among others. This transformation has been driven by the youngest segment of the Spanish population, which has pioneered the adoption of new technologies (González and López, 2011: 45-46).

There is a great deal of research literature concerning the impact of digitalization on audiences and consumption habits. In broad terms, a number of experts have studied the emergence of the new digital culture and its consequences for media and entertainment consumption (Jenkins, 2006; Tapscott, 2009; Pavlik and McIntosh, 2011; Jenkins, Ford and Green, 2013). Several researchers have also directly explored the relationship between television, new media and the Internet (Palmer, 2006; Adams, 2009; Ytreberg, 2009; Doyle, 2010; Gunter, 2010; Evans, 2011). The studies about media consumption are especially pertinent to the purposes of this paper (Napoli, 2011; Taneja *et al.*, 2012; Bondad-Brown, Rice and Pearce, 2012).

In the particular case of Spain, most of the research around this topic —carried out in recent years— has covered issues regarding media convergence and technological migration (Ruano, 2008; Feijóo, 2013), or the specific relationship between television and new technologies (Arrojo, 2010; Micó, 2010; Guerrero, Diego and Pardo, 2013). In addition, some scholars have addressed the consumption of television contents (shows and programmes) via new technologies (Lacalle, 2011; Morales, 2011; Castillo-Hinojosa, 2012). Finally, there are a number of studies —mostly based on surveys— that explore the behavior of young population in regard to new technologies (Galán and Del Pino, 2010; Cáceres, San Román and Brändle, 2011; González-Aldea and López-Vidales, 2011; Mendiz, Aguilera and Borges, 2011).

Not only has this new multi-screen environment had an impact on the audience's viewing habits; the television industry has also felt the foundations of its traditional business model begin to crumble, while new opportunities and their associated risks have also arisen at the same time. Thus, the sector faces a changing situation in a state of constant development. Following an initial period of uncertainty, television production companies and channels acknowledged the need to address these new challenges. Many researchers in the field have focused on analyzing the relationship between television business models and new digital media, especially the Internet. See, for instance, Forrester (2000), Griffiths (2003), Vizjak and Ringlstetter (2003), Hoskins *et al.* (2004), Blumenthal and Goodenough (2006), Vukanovic (2009), Ulin (2009), Gershon (2009), Arrojo (2009), Álvarez Monzoncillo and Menor (2010), Artero (2010), Evens (2010), Voguel (2011) and Izquierdo-Castillo (2012).

Doyle (2010: 433) argues that a television operator may avail of the following options in designing a multiplatform strategy:

1. Distribute the contents produced for conventional television broadcasting on other platforms.
2. Alter and adapt existing contents to the defining features of other platforms, adding new 'layers' that update and enrich them.
3. Create original contents for online platforms to complement the programming range on offer via linear television channels.

These options are not mutually exclusive: they may be combined in a multiplatform strategy. Nevertheless, given that one of the defining features of digital content is its versatility and ability to cross the boundaries between different media, the debate about content-format should not be limited to the nature of the distribution platform. Content-format and distribution channel are rendered separate by digitalization (Vizjak and Ringlstetter, 2003: 5).

HISTORICAL BACKGROUND

At this point, however, it may be worthwhile to offer a brief overview of the historical context so as to enable a clearer understanding of the present situation.

The emergence of a private television sector in Spain in the 1990s also led to the development of a new production model for audiovisual contents (Diego, 2010; Guerrero, 2010). For the most part, television channels opted to outsource to independent production companies rather than to favour an in-house production system; that is, to entrust the production of a significant proportion of their programming schedules to companies specializing in television contents (Bustamante, 2009: 108). Thus, the television network funded the project, and the production company provided the creative input. This situation gave rise to an industrial nexus of production companies expert in the creation of entertainment (quiz shows, reality TV shows, comedy programs, talk shows, etc.) and fiction products (sitcoms, drama series, soap operas and TV movies).

The commercial life of most of these productions was relatively 'short-lived' (Diego, 2010: 35). In short, contents were produced exclusively for broadcast —and possible, future repeat broadcasts— on conventional television. The success of television as a medium shaped its commercial development: the sale of formats and contents. Within this framework, the production company and the television network exercised total control over the distribution of the product. Nevertheless, the spread of the Internet undermined the dominance of both agents insofar as they acted as guardians or gatekeepers to television contents (Palmer, 2009: 80-81). Production companies and television networks were shocked to discover that their products were being distributed illegally over the Internet, and that they would receive absolutely no remuneration or compensation in return. This evolving situation prompted them to set up their own online content players, whereby users could access their back-catalogues of series and programs for free or on a pay-per-view basis (premieres, without commercial breaks or in HD format) (Guerrero, Diego and Pardo, 2013: 370). To date, free access to television contents following their broadcast on conventional television is the preferred model. However, that audience rating figures remain the key measure of a given product's commercial success should not be overlooked.

As a result, the linear television strategy is shifting towards an à-la-carte approach, where the user becomes the programmer —choosing what to watch, as well as when, where and how to watch it— and even the producer of his/her own contents (Diego and Herrero, 2010: 334). Hence, the need to map the new audiovisual consumption habits and their impact on the content production industry and its business models is acute.

The purpose of this paper is to explore whether Internet users in Spain use different screens or platforms when they view different types of content online (fiction series, entertainment programs, films, news, sports, etc.), as well as their reasons for doing so. A related objective is to establish whether the use of different media devices —Smart TV, mobile telephones, tablets, computers and video consoles (Wii, Playstation, Xbox, etc.)— is complementary or competitive. The results of this study are of interest to both production companies and television networks in terms of content creation and product scheduling across a variety of platforms.

The paper is structured as follows: first, the technological context in Spain is described; then, the methodology used for the purposes of this study is outlined, based on data from an unpublished survey carried out among Internet users. This background information frames the analysis of results that follows. Finally, the main conclusions as regards the television contents most frequently viewed on each screen, as well as the reasons why, are discussed.

TECHNOLOGICAL FRAMEWORK

So as to offer a comprehensive description of the technological context shaping the television industry and the patterns of audiovisual consumption in Spain, data from the three main sources of statistical information for the country have been taken into consideration: Eurostat, the *Instituto Nacional de Estadística* (INE: Spanish Statistical Office) and the *Centro de Investigaciones Sociológicas* (CIS: Center for Sociological Research).

It should be noted that no general consensus has yet been reached as regards the definition of Internet user as such. Eurostat, for instance, defines an Internet user as any individual, aged between 16 and 74, who has accessed the web at least once a week during the previous three months. Although it refers to the same population and timeframe, the INE does not take frequency of access into account (an Internet user as such is required only to have accessed the web at some point in the previous three months). Finally, like the INE, the CIS does not take frequency of access within the same three-month timeframe into account; however, it also changes the population age-group to individuals aged 18 or older.

The number of Internet users has grown steadily year on year in the main European markets. The figure has doubled over the last ten years in almost all of the countries (table 1). The UK has registered the highest rate of Internet users in relation to the population as a whole: 84% in 2012. At the same time, the rate of increase has been highest in Spain in recent years. According to Eurostat, the figure grew from 31% to 65% in less than ten years. The figures supplied by the CIS are more or less the same, which registered a percentage of 63.6% Internet users. The INE figure is higher, however, because it does not take frequency of access into account, but does encompass a wider range of young people (table 2).

Table 1. Evolution of Internet Users in the main European markets

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Germany	50	54	59	64	68	71	75	77	78
Spain	31	35	39	44	49	54	58	62	65
France	..	..	39	55	63	67	72	74	78
Italy	26	28	31	34	37	42	48	51	53
United Kingdom	49	54	57	65	70	76	80	81	84

Source: Eurostat. Figures in percentages.

In absolute numbers, there were 13.5m Internet users in Spain in 2004; the INE figure for 2012 reached over 24m (table 2). In terms of frequency of access, 72.6% of Internet users go online every day, and 20.5% at least once a week. To sum up, 93.1% of Internet users access the web at least once a week (22,413,941) —that is to say, 65% of the total population aged between 16 and 74—. There is a more marked trend in the younger population segment (aged between 16 and 24) to go online every day: 85.3% of Internet users in this age-group access the web every day, as compared with 72.6% of the total population.

Table 2. Evolution of Internet Users in Spain

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Internet users	13,534,664	15,1314,20	15,970,998	17,580,587	19,572,899	20,741,237	22,207,773	23,196,058	24,075,125
%	40.4	44.4	47.9	52	56.7	59.8	64.2	67.1	69.8

Source: INE.

The desktop computer is still the device that is most frequently used to access the Internet; 63% of users do so, although the number of laptop/netbook users is not much lower: 57%. The CIS data also discloses a strikingly low uptake in smart TV use among Internet users in Spain (table 3).

Table 3. Connected screens and Internet users (everywhere)

Screens	%
Computer	63.0
Laptop/Netbook	56.9
Tablet	3.5
Smart TV	1.1
Smartphone	36.5
Video console	1.5

Source: CIS, June 2012.

If the analysis of the data is limited to mobile devices used outside the home or normal workplace, the mobile telephone is the screen that is most frequently used to access the Internet (44.1%), followed by the portable computer (laptop/netbook) (32.8%) and the tablet (10.2%). 56% of the total number of Internet users access the web using some kind of mobile device (table 4).

Table 4. Mobile screens and Internet users (excluding home and workplace)

	Laptops/ Netbooks	Tablets	Mobile phones (including smartphones)	Other	Mobile devices (total)
% of Internet users	32.8	10.2	44.1	6.5	56

Source: INE, 2012. Note: The total figure for mobile devices is not the same as the sum of the numbers for each type of device because each user may use more than one screen to access the Internet.

The INE data (table 4) do not take an account of mobile device use outside the home or normal workplace, although these are the preferred locations for Internet access according to the CIS (table 5).

Table 5. Places and Internet users

Places	%
Home	90.5
Workplace	34.2
Anywhere: tablet/smartphone	31.8

Source: CIS, June 2012.

As regards technological equipment at home, amounting to a total number of 15,529,687 households in 2012 according to the INE, the most common devices in Spanish homes are the television set and the mobile telephone (table 6). According to ComScore (2013: 14), 66% of the mobile telephones in use in Spain are smartphones. Spain is the European country with the highest market penetration in this regard. 89% of smartphone owners use it to access the Internet on a daily basis (Google, 2012: 5).

Table 6. Technological equipment in Spanish homes

	Television	Computer	Laptop/Netbook/Tablet	Mobile phone (including smartphones)
Households %	99.4	47.8	54.6	95.9

Source: INE, 2012. Note: Tablets are included in the same category as portable computers because the INE regards them as portable computers without a physical keyboard.

Before turning to our analysis of the results of the survey carried out among Internet users, the methodology of the study is set out in greater detail, and the research questions addressed by this paper are articulated in clearer terms.

METHODOLOGY AND RESEARCH QUESTIONS

The main source of data for this empirical study is an original survey administered in May 2012, which was designed by a research team that included the authors of this paper. The survey was carried out online by a company that specializes in such research.

The target population for the survey was Spanish Internet users, in contrast to other studies conducted in relation to biased samples. The definition of Internet user matched that outlined by other organizations such as the *Asociación para la Investigación de Medios de Comunicación* (AIMC: the Communications Media Research Association, Spain), which is responsible for producing the *Estudio General de Medios* (EGM: Annual Media Report), one of the main reports on media audiences in Spain. Hence, the definition of Internet user is as follows: an individual between the ages of 14 and 64 who has accessed the Internet at least once in the previous month. This description is only slightly different to the other definitions cited above (INE, Eurostat and CIS).

The initial objective was to compile a sample of 1,200 observations, which involved making contact with 2,665 Internet users, yielding a response rate of 45.02%. Proportional quotas were established for the categories of sex, age and region. The final sample mirrors the structure of the theoretical sample. The proportional quotas were fixed on the basis of the composition of the Internet-user population aged over 14 as indicated by the data supplied in the most recent edition of the EGM. The sample comprises 55% men and 45% women. As regards age-groups, 25% of the sample is between 14 and 24 years old; 29% between 25 and 34; 24% between 45 and 54; and 7.5% between 55 and 64. The regional distribution is as follows: 12% from the northeast (Catalonia and the Balearic Islands); 15% from the east; 19% from Andalusia; 10.5% from the centre; 9% from the northwest; 9% from the north-central area; 5% from the Canary Islands; 8.5% from urban Barcelona; and 12% from Madrid.

Our main purpose in this article is to discover Internet user consumption habits in Spain in relation to different types of contents – fiction series, entertainment shows, films, news and sports —and screens— smart TV, mobile phones, tablets, computers and video consoles. To this end, the research questions addressed by this study are as follows: what percentage of Spanish Internet users watches television online; what screens are most commonly used for this purpose; what types of television contents are most frequently viewed via the Internet; whether there is a relationship between the media device used and the type of content viewed; and finally, the reasons that may have prompted the latter relationship. Another question also arises in this regard: whether different platforms are in direct competition with one another, or whether they are in fact complementary.

Our starting point is a double hypothesis to be confirmed. Firstly, there is a correlation between contents and screens, which means that the audience uses different devices when watching each type of content. In this regard, several factors are decisive: the screen size and its viewing conditions —for instance, some media devices are more appropriate when watching contents on the go—. And secondly, the use of different platforms is not exclusive; that is to say, screens are

complementary. They do not compete directly for audience time. According to this, using one type of screen does not exclude watching contents on another.

RESULTS: SCREENS AND CONTENTS

Prior to offering a detailed analysis of the survey results, it should be noted that conventional television consumption has not been negatively affected by easy access to viewing via other screens. According to the CIS (June 2012 edition), 46.4% of Internet users said that their Internet use had not disrupted the time they spend on other activities. Although 26.5% acknowledged that they watch less conventional television, this has not had a significant impact on the average figures for conventional TV consumption: rather than decrease, this has undergone a steady growth-rate in recent years, peaking at 246 minutes per day in 2012 (table 7).

Table 7. Evolution of conventional TV consumption in Spain

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Minutes	218	217	217	223	227	226	234	239	246

Source: Kantar Media. Average minutes per day.

Such information suggests that conventional television consumption is compatible with the use of other Internet-enabled devices. This view has been confirmed by a number of studies, including Televidente 2.0, in which 51% of those surveyed, who have mobile devices (computers, smartphones or tablets), said that they usually use them while watching television (The Cocktail Analysis, November 2012). Moreover, studies such as the AIMC (2012) have shown that online television viewing has not led to a reduction in the time spent watching conventional television. In fact, when the two modes are combined, the total amount of time spent on television consumption as a whole is higher.

In addition, another common viewing habit discloses the existence of the multitasking viewer (Tapscott, 2009; Arrojo, 2010) or *double dipper* (Gunter, 2010); that is, users who watch television and surf the internet, commenting on or sharing contents via social networking sites at the same time. It reveals a symbiotic relationship between TV and the internet through which the role of each medium is mutually reinforced, especially when young audiences are involved (Guerrero, Diego and Pardo, 2013: 352).

In relation to the issue of whether or not digital media are siphoning viewers away from television, Gunter (2010: XIII) holds that the Internet plays a twofold role: on the one hand, it competes with television in terms of available user time; on the other, however, it also functions as an alternative platform for the distribution of television contents. Gunter argues that the question of whether or not the Internet and television are in direct competition is preceded by other considerations: Do both media meet the same needs? And that being the case, how successfully do they do so? (Gunter, 2010: 67). Rather than coming to a firm conclusion in this regard, Gunter reflects on the issue, reasoning that the

Internet cannot be regarded merely as a competitor; rather, it enriches other media, offering a new platform by means of which the audience may be engaged (Gunter, 2010: 31-33).

In fact, a reading of the user ratings suggests that TV and the Internet are complementary as platforms. However, this comparison may be rendered obsolete when convergence between the two media is complete. Until that time comes, the notion of multiplatform television involves nothing other than the distribution of contents via a variety of devices. However, the simplicity of this statement occludes the complexity of what it implies for both the television industry and the audience. Rather than replacing the experience of watching television in one's living-room, the possibility of watching such contents on other devices enriches the experience (Adams, 2009: 3).

As things now stand, television as a medium cannot be seen as synonymous with the television set. Television contents are now viewed via a variety of screens. According to the CIS, only 14.4% of Internet users access the web to watch television. This data is very different to the figures afforded by INE. Table 8 shows that 50.6% of Internet users —that is, 35% of the total population aged between 16 and 74— watches television or listens to the radio via the Internet. Such viewing and listening habits are more common among the younger age-groups of users: 64% of Internet users between the ages of 16 and 24 watch television or listen to the radio online. The marked disparity between the date supplied by the CIS and the INE may be accounted —in part, at least— by the difference in the samples and media analysed: the former takes neither users under the age of 18 nor radio-listening into consideration. In Spain, too, the most common form of online television consumption is via streaming, rather than by download (AIMC, 2012: 2).

Table 8. Internet TV and Radio consumption

Ages	Watching TV/Listening to the radio
16-24	64.1
25-34	60.3
35-44	49.6
45-54	4.,4
55-64	31.7
65-74	28.0
Internet users (total)	50.6

Source: INE, 2012.

The results of our survey show that 42.3% of Internet users (508 out of 1,200 individuals) watch television online (table 9). This figure reflects more closely the data provided by the INE. Table 9 lists the devices used for such television viewing. The computer is, by far, the most frequently used device: 10.4% of Inter-

net users view television contents online via computer every day, 45.3% at least once a week, 41.1% at least once a month, and only 3.1% never or almost never use their computer to watch television.

The rate of use of other screens or platforms is considerably lower. The second most commonly used device is the Internet-enabled or smart TV, although only 9.3% of online television viewers said that they use it every day, and 67.9% of respondents said that they never or almost never use it. The percentages for those using a smart TV to watch television at least once a month or once a week are 11.6% and 11.2%, respectively.

The use of the other three types of screen is practically negligible. It is worth recalling in this regard that the population surveyed comprises only those who view television online, so the sample is very well-defined. 1.6% of such TV viewers use a mobile telephone to watch television contents online; 1.8% a tablet; and only 0.4% use a video console. Those who watch television at least once a week via these devices might also be described as frequent users: 7.9% in the case of the mobile telephone; 6.7%, the tablet; and 3%, the video console. However, the most striking figures in this regard are that 81.9% of online television viewers never use their mobile telephone to do so, 85% never use a tablet, and 90.6%, a video console.

Table 9. Use of different screens to watch television on the Internet

	Never or almost never	Once a month	At least once a week	At least three times a week	Every day	Total	No.
Computer	3.1%	41.1%	33.9%	11.4%	10.4%	100%	508
Mobile	81.9%	8.7%	5.7%	2.2%	1.6%	100%	508
Tablet	85%	6.5%	4.5%	2.2%	1.8%	100%	508
Smart TV	67.9%	11.6%	7.7%	3.5%	9.3%	100%	508
Video console	90.6%	6.1%	2.2%	0.8%	0.4%	100%	508

Source: by the authors.

The next table details information relating to a key issue addressed in this paper and referred to in the title. The research questions covered here include the following: what types of television contents are most frequently viewed online; what screens are most commonly used for this purpose; and whether there is a relationship between the media device used and the type of content viewed.

The data presented in table 10 shows that foreign fiction series and films (in that order) are by far the most frequently viewed contents among users who watch television via the Internet (508): the results are 56.9% and 52%, respectively. As regards the screens used, and as noted above, the computer and smart TV are the most commonly used devices in online television viewing at 96.9% and 32.1%, respectively.

The percentages cited below were calculated in relation to the total number of online television viewers depending on the screen or platform used. The figures

show that there are clear differences as regards the types of contents viewed using different devices. The computer is used, above all, to watch foreign fiction series (54.1%) and films (47%) and, to a somewhat lesser extent, Spanish fiction (37%), sports (36.8%), entertainment (36.6%) and the news (31.7%). A similar pattern may be traced for the smart TV, which 63.4% of online viewers use to watch films; 52.1%, foreign fiction series; 42.9%, Spanish series; 41.1%, sports; 35.6%, entertainment programs; and 34.4%, the news.

The video console is predominantly used to watch films (52.1%) and, much less frequently, for entertainment programs (22.9%), news programs (16.7%) and sports (27.1%). In contrast, the mobile telephone is most commonly used to access the news (42.4%) and sports (40.2%), rather than fiction contents. Finally, the tablet is generally used for watching foreign fiction series (47.4%), news programs (44.7%) and entertainment shows (40.8%), and less frequently for sports (27.6%), although no major differences arise in this regard. As compared with the other screens, the tablet is used to view a higher proportion (11.8%) of 'other' audiovisual content-types not specified here.

Table 10. Contents viewed on different screens used to watch television on the Internet

	Spanish fiction series	Foreign fiction series	Entertainment	Films	News	Sports	Other	No.	%
Computer	37%	54.1%	36.6%	47%	31.7%	36.8%	3%	492	96.9%
Mobile	20.7%	23.9%	30.4%	23.9%	42.4%	40.2%	7.6%	92	18.1%
Tablet	36.8%	47.4%	40.8%	39.5%	44.7%	27.6%	11.8%	76	15%
Smart TV	42.9%	52.1%	35.6%	63.2%	34.4%	41.1%	3.1%	163	32.1%
Video console	29.2%	37.5%	22.9%	52.1%	16.7%	27.1%	4.2%	48	9.4%
Any platform	42.5%	56.9%	43.9%	52%	40.7%	41.9%	9.8%	508	100%

Source: by the authors.

Table 11 traces the relationship(s) between the use of different screen to watch television via the Internet. The information here takes into account only whether or not a given device is used. The frequency or intensity of use is addressed in table 12. The data presented in table 11 discloses a number of significant correlations. With the exception of the computer, in general terms, anyone who uses one screen to watch television online is more likely to use the other screens for the same purpose: this pattern is reflected in the findings for the mobile telephone, the tablet, the smart TV and the video console. The correlation is particularly strong in relation to the mobile telephone and the tablet, which suggests that a viewer who uses one of these devices is also likely to use the other. The data for the computer is different to that for the other devices. In fact, the correlation between the computer and both the mobile telephone and the tablet is negative —in other words, the latter devices are used instead of the computer for the purposes of online television viewing—.

Table 11. The relationship between the use of different screens used to watch television on the Internet (Pearson's correlation)

	Computer	Mobile	Tablet	Smart TV
Mobile	-0.091**			
Tablet	-0.082*	0.261***		
Smart TV	-0.021	0.137***	0.043	
Video console	0.020	0.093**	0.091**	0.138***

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. Source: by the authors.

In addition to finding out whether or not the various screens are used, the frequency of such use is also significant. Table 12 presents the data concerning frequency of use for each of the different screens. The results for all the devices, except for the computer, parallel the findings detailed in chart 11. Indeed, the correlation figures are very similar, which means that greater frequency of use for any one of these screens (mobile telephone, tablet, smart TV or video console) correlates positively with greater frequency of use for all the other screens. In contrast, there is a marked change in the relationship between frequency of use for the computer and the other platforms. Unlike the conclusion drawn from table 11 above, no negative correlations emerge in this case, which suggests that the relationship here is one of complementarity rather than competition. Online television viewers who tend to use the computer more frequently are also more likely to use the tablet and smart TV more frequently. This conclusion confirms the complementarity hypothesis referred to earlier in this paper.

Table 12. The relationship between intensity of use for different screens used to watch television on the Internet (Spearman's correlation)

	Computer	Mobile	Tablet	Smart TV
Mobile	0.033			
Tablet	0.077*	0.257***		
Smart TV	0.094**	0.142***	0.055	
Video console	0.011	0.095**	0.097**	0.129***

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. Source: by the authors.

Finally, in light of the data relating to the device(s) used to watch television online, the frequency of use in each case, and the types of content accessed via the different screens, the reasons for doing so are explored. Tables 13 to 18 analyse whether or not there is a correlation between the reason given for watching television online and the type of media device used to do so. Based on the Chisquared scores for 'I wasn't able to watch them when they were broadcast' and 'I like to watch them again' (tables 13 and 14) it is clear that there is no link to a greater or lesser use of one screen rather than another.

Table 13. The relationship between the use of different screens to watch television contents via the Internet and the reasons (I wasn't able to watch them when they were broadcast)

I wasn't able to watch them when they were broadcast		No	Yes	Chi-2
Total		9.4%	90.6%	
Computer	No	18.8%	81.3%	1.670
	Yes	9.1%	90.9%	
Mobile	No	8.9%	91.1%	0.826
	Yes	12%	88%	
Tablet	No	10.2%	89.8%	1.830
	Yes	5.3%	94.7%	
Smart TV	No	10.7%	89.3%	2.046
	Yes	6.7%	93.3%	
Video console	No	10%	90%	1.729
	Yes	4.2%	95.8%	

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. Source: by the authors.

Table 14. The relationship between the use of different screens to watch television contents via the Internet and the reasons (I like to watch them again)

I like to watch them again		No	Yes	Chi-2
Total		61%	39%	
Computer	No	68.8%	31.3%	0.415
	Yes	60.8%	68.5%	
Mobile	No	62%	38%	0.957
	Yes	56.5%	43.5%	
Tablet	No	61.1%	38.9%	0.009
	Yes	60.5%	39.5%	
Smart TV	No	62.9%	37.1%	1.589
	Yes	57.1%	42.9%	
Video console	No	61.7%	38.3%	1.048
	Yes	54.2%	45.8%	

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. Source: by the authors.

This is not the case for the reason, 'I missed a part' (table 15) where viewers are more likely to use a smart TV to complete their viewing experience.

Table 15. The relationship between the use of different screens to watch television contents via the Internet and the reason "I missed a part"

I missed a part		No	Yes	Chi-2
Total		31.9%	68.1%	
Computer	No	43.8%	56.3%	1.070
	Yes	31.5%	68.5%	
Mobile	No	32.7%	67.3%	0.681
	Yes	28.3%	71.7%	
Tablet	No	32.9%	67.1%	1.278
	Yes	26.3%	73.7%	
Smart TV	No	36.8%	63.2%	11.992***
	Yes	21.5%	78.5%	
Video console	No	32.6%	67.4%	1.158
	Yes	25%	75%	

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. Source: by the authors.

When the reason is 'I like to watch them with little or no advertising' (table 16), the video console is the most commonly used device.

Table 16. The relationship between the use of different screens to watch television contents via the Internet and the reason "I like to watch them with little or no advertising"

I like to watch them with little or no advertising		No	Yes	Chi-2
Total		33.9%	66.1%	
Computer	No	25%	75%	0.579
	Yes	34.1%	65.9%	
Mobile	No	33.7%	66.3%	0.043
	Yes	34.8%	65.2%	
Tablet	No	34.3%	65.7%	0.207
	Yes	31.6%	68.4%	
Smart TV	No	33.3%	66.7%	0.132
	Yes	35%	65%	
Video console	No	35%	65%	2.834*
	Yes	22.9%	77.1%	

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$. Source: by the authors.

The video console, along with the tablet, is used most frequently when the reason given is 'I like to decide how to watch them' (table 17).

Table 17. The relationship between the use of different screens to watch television contents via the Internet and the reason "I like to decide how to watch them"

I like to decide how to watch them		No	Yes	Chi-2
Total		37.6%	62.4%	
Computer	No	43.8%	56.3%	0.266
	Yes	37.4%	62.6%	
Mobile	No	38.5%	61.5%	0.729
	Yes	33.7%	66.3%	
Tablet	No	39.1%	60.9%	2.851*
	Yes	28.9%	71.1%	

Smart TV	No	37.7%	62.3%	0.003
	Yes	37.4%	62.6%	
Video console	No	38.9%	61.1%	3.586**
	Yes	25%	75%	

*** p < 0.01, ** p < 0.05, * p < 0.10. Source: by the authors.

Finally, when the reason is 'Because they are not broadcast on television' (table 18), Internet users tend to access the audiovisual contents via mobile telephone and video console.

Table 18. The relationship between the use of different screens to watch television contents via the Internet and the reason "Because they are not broadcast on television"

Because they are not broadcast on television				
		No	Yes	Chi-2
Total		37.2%	62.8%	
Computer	No	43.8%	56.3%	0.303
	Yes	37%	63%	
Mobile	No	43.8%	56.3%	2.968*
	Yes	37%	63%	
Tablet	No	36.6%	63.4%	0.492
	Yes	40.8%	59.2%	
Smart TV	No	39.1%	60.9%	1.707
	Yes	33.1%	66.9%	
Video console	No	39.1%	60.9%	7.727***

*** p < 0.01, ** p < 0.05, * p < 0.10. Source: by the authors.

CONCLUSIONS

Technological developments and the spread of the Internet have changed the audiovisual consumption habits of Spanish audiences over the last ten years. Of the main European markets, it is striking that Spain is the country where the number of Internet users has grown most dramatically: the number of Internet users in Spain doubled in the last decade. According to Eurostat, the proportion of the Spanish population who were Internet users in 2012 was 65%.

In this context, the viewing figures show that conventional television continues to dominate the sector. On average, Spanish viewers spend four hours per day watching television. Nevertheless, this fact has not had a bearing on the

consumption of online television contents. Our results show that almost half of the Internet user population watches television on the Internet. Among such Internet viewers, the computer is the most commonly used device (96.9%). A substantially lower proportion of Internet TV viewers (32.1%) use a smart TV set. In spite of its increasing penetration in Spanish homes, it is not yet the main screen for connected television. Smart TV devices are still being used in the same way as conventional television sets. Regarding smaller screens, the proportions of people using mobile telephones and tablets to watch TV on the internet are low: 18.1% of Internet TV viewers use mobile phones for that purpose, whereas the percentage for tablets is 15%. Finally, video consoles are used by only 9.4% of Internet users to watch TV online, and thus are the least common platform.

In relation to the viewing of different TV genres on the Internet, our results point to significant variety and diversity among users. The most viewed genres among TV Internet users are foreign fiction series and films, followed by entertainment programs, Spanish fiction series, sports and news programs.

The results also show that users choose different program genres depending on the screen, which confirms our initial hypothesis. As regards computers, smart TVs and consoles, the programs viewed most often mirror those mentioned above in relation to the Internet in general: foreign fiction series and films. In the case of tablets, all the genres considered here are viewed to a similar extent. Mobile telephones are the devices that evince a different pattern: those that use them to view television contents via the Internet are more likely to watch news programs and sports.

Moreover, the results of this study also confirm our second hypothesis, that the various screens are complementary. The data relating to the viewing habits of seasoned online TV consumers are especially significant in this regard. With the exception of computers, viewers using another platform to watch television via the Internet are more likely to use the other devices for the same purpose. In any case, the greater the frequency of viewing via any of the platforms —including the computer, albeit to a slightly lesser extent— is also linked to a higher frequency of use for all the other screens.

Finally, the results also show that there is a correlation between the reason for viewing television online and the platform used to do so (excluding the reasons that given contents could not be watched at the time of broadcast or viewers are interested in watching the contents again). When users were unable to watch the complete contents, they use a smart TV to finish their online viewing. However, so as to avoid having to see commercials, they use the video console, a screen that they also use —along with the tablet— when they want to decide for themselves how to watch audiovisual contents. Users interested in watching programs that are not broadcast on conventional television tend to access them via the video console and mobile telephone.

Further research should continue to assess changing viewing habits with regard to connected TV and its impact on the audiovisual industry and the creative production process of contents.

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