

Hidden Florence Analytics Reports 2017-18

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Hidden Florence Analytics Reports 2017-18.

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Summary

This report looks at the data available for the app Hidden Florence for the period between 8th January 2017 and 31st January 2018.

The report is divided into three main sections:

- ◇ *Section 1* is an historical overview of metrics related to the type of audience of the app from April 2015 to January 2018. Data here are gathered only from two platforms, iTunes and Google Play. Within Section 1, there is also a subsection (1.3) dedicated to the analysis of the sessions and their geography for data collected from iTunes Analytics.
- ◇ *Section 2* looks at the data available on the platform Google Analytics. It is organised as a comparative analysis between data extrapolated from the previous report (Report 2015-17) and the current data available for the period from 8th January 2017 – 31st January 2018. Here data are investigated accordingly to the category of type of audience of the app.
- ◇ *Section 3* looks at the data available for users' behaviours for the period that goes from 8th January 2017 to the 31st January 2018. Here, a recurrent distinction of the data is between users accessing the app in Florence and users engaging with it elsewhere.

Section 2 and 3 looks respectively at two main categories of data:

- a) the type of audience (new and returning users, devices, language, location of the users, geographical distribution, number of sessions, temporal use of the app), and
- b) users' behaviour (access to audio, access to external links, social media engagement, contents engagement).

All the data taken in consideration within this report refers to 'unique' data (e.g. events, users).

Key words

- A “*session*” is defined as the period between someone starting up the app, and the app being closed, so users who stop the experience part-way through, and continue afterwards may actually be included in several sessions. However, most of the data presented here is based on “Unique Users”

- “*Unique Users*” are defined as an individual device that we track with an ID number. A device will only be assigned a new number if they uninstall, and reinstall the app.

- “*Installs*” refers to each time the app was installed on a device.

- “*Event*” are user interactions with content that can be tracked independently from a web page or a screen load. Downloads, mobile ad clicks, gadgets, Flash elements, AJAX embedded elements, and video plays are all examples of actions you might want to track as Events.

- “*Unique events*” are incremented by unique actions. Any time a user interacts with an object tagged with a particular action name, the initial interaction is logged as one unique event for that action name. Any additional interaction with the same action trigger for that user's session will not contribute to the unique event calculation for that particular action. This is true even if the user leaves that object and begins to interact with another object tagged via the same action name.

- “*Session*” refers to each time the app was started

- “*POI*”, point of interest. For Central walk there are nine POIs, whilst for the S. Ambrogio walk there are six POIs (see respectively Map 1 and Map 2 and the list of POIs).

- “*Extra contents*” refers to the subsections “Discover more’ within the contents of each POI.

Brief Overview

Overview Statistics

<i>Total Unique Users</i>	2279 (+772 / + 46.4%)
<i>New Users</i>	2277(+1057 / + 87.9%)
<i>Total Sessions (times the app was started)</i>	4514 (+1620 / +56%)
<i>Average Session Length per User</i>	7 min and 5 Sec.

In comparison to results from Report 2015-2017, for the 2017-2018:

- There are more unique users
- There are more new users
- People engage more with the app
- Users spend more time in the app on average

Selected Figures by User Location

Figures here, and in following sections are based on event logs within the app - which may not always be firing as expected (and don't report when app is just opened briefly), which explains the gap between these numbers and the previous section.

	Florence Users	Elsewhere Users
<i>Total Users</i>	449 (+ 40%)	1128 (-18%)
<i>Total unique events</i>	2177	5001
<i>% users that started to download walks</i>	50%	47%
<i>% users that finished to download walks</i>	42%	38%
<i>% frequency started and finished download</i>	84%	82%

Selected Figure by Users' behaviour

	Florence	Elsewhere
<i>Total unique events</i>	2177	5001
<i>Central Walk - Most popular POI</i>	Ponte Vecchio	Ponte Vecchio
<i>Central Walk - Least popular POI</i>	Palazzo Strozzi	Via del Giglio
<i>S. Ambrogio Walk - Most popular POI</i>	Outside/ Inside S. Ambrogio Church	Outside/ Inside S. Ambrogio Church
<i>S. Ambrogio Walk - Least popular POI</i>	Canto alle Rondini	Via dei Macci
<i>Central Walk - Most popular extra content</i>	Bridging the Arno	Bridging the Arno
<i>Central Walk - Least popular extra content</i>	Sex and the City	Women in the streets
<i>S. Ambrogio Walk - Most popular extra content</i>	King for a day / Relics on parade	King for a day / Relics on parade
<i>S. Ambrogio Walk - Least popular extra content</i>	Street Ecologies (<i>missing track</i>)	Street Ecologies (<i>missing track</i>)
<i>Most popular walk</i>	Central	Central

SECTION 1. Historical Overview

This section depicts a historical overview for the app analytics from iTunes and Google Play platforms for the period from 4th April 2015 – 31st January 2018.

Since data on iTunes and Google Play platforms are available only for a determined length of time, it has been possible to retrieve data only back to April 2015.

In the first part, this section of the report looks at conjoint data both from the iTunes and Google Play platforms.

Moreover, since data like the total number of sessions is available only from the iTunes platform, the second part the analysis focuses on the data only available from iTunes.

Total Installs

	Period 1 04/2015- 12/2015	Period 2 01/2016- 06/2016	Period 3 07/2016- 12/2016	Period 4 01/2017- 06/2017	Period 5 07/2017-01/2018
iTunes	96	63	170	153	113
Google Play	281	519	333	811	953
Total	377	582 (+65%)	500 (-14%)	964 (+93%)	1066 (+11%)

Table 1 Total Installs (Sources: iTunes and Google Play platforms)
Percentage are calculated referring to the previous period.

Figure 1 Total Monthly Installs

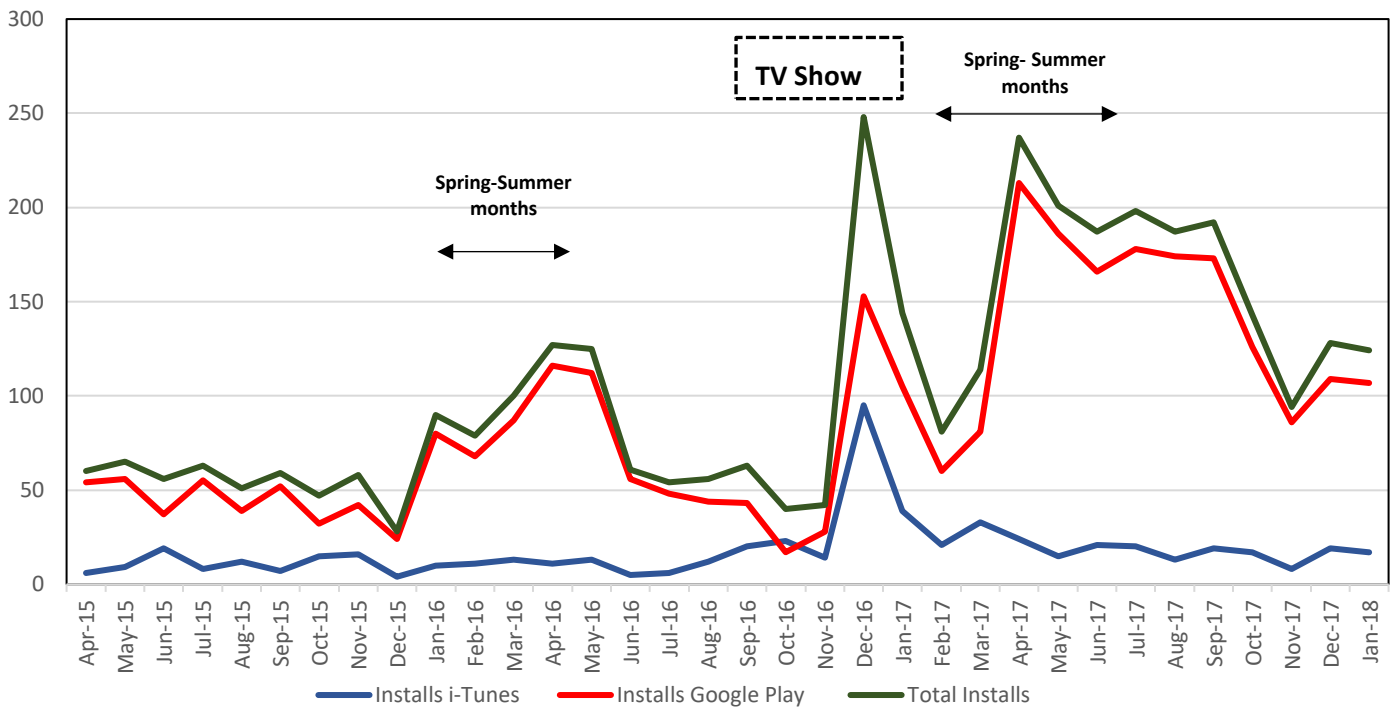


Table 1 shows the total number of installs from both iTunes and Google Play. The data has been grouped into five periods, each period roughly covering six months. The period with most total installs is Period 5 (07/2017-01/2018).

It is also possible to appreciate that there is a steady increase of installs from the platform Google Play (Android). The percentage of the installs' increase from Period 1 (04/2015-12/2015) to Period 5 (07/2017-01/2018) is 183%, which is a remarkable figure.

Figure 1 shows the monthly variations of the installs from Period 1 to Period 5 included. Here, we can appreciate that:

- a) there is a seasonal variation of the installs, with the spring-summer months seeing a general increase of the installs, and
- b) there is a peak of install for December 26th 2016 following the TV exposure of the app (Travel Man, Channel 4, aired December 25th 2016).

Geography of installs

Table 2 Geography of the Installs (Sources: iTunes and Google Play platforms)

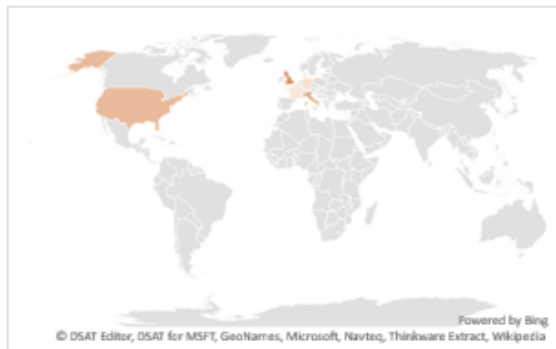
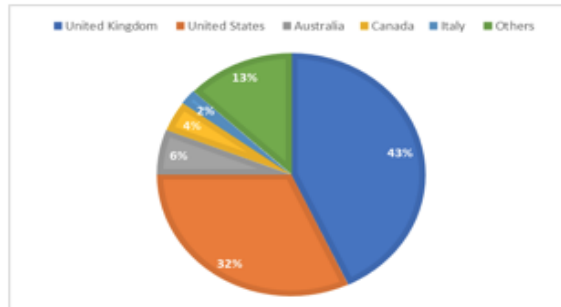
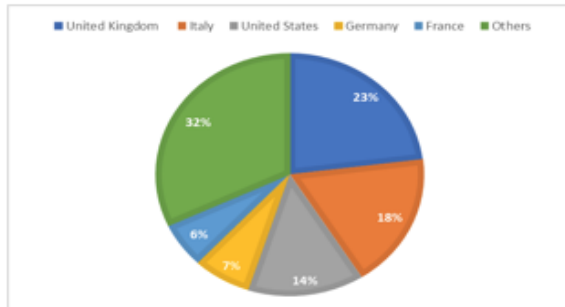
Google Play		
Main Countries*	Installs	% of Google Play installs
United Kingdom	698	23
Italy	524	18
United States	423	14
Germany	183	7
France	166	6
Others	1013	32

*= Top 5 countries with highest percentage percentage

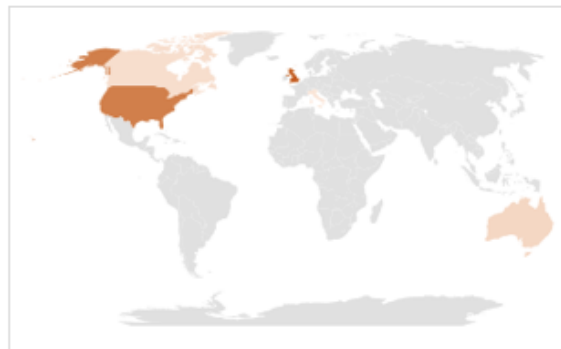
iTunes		
Main Countries*	Installs	% of iTunes installs
United Kingdom	255	43
Italy	191	32
United States	37	6
Germany	22	4
France	13	2
Others	77	13

*= Top 5 countries with highest

Figure 2 Geography of the Installs



Source: Google Play



Source: <https://analytics.itunes.apple.com>

Here we can appreciate that United Kingdom is constantly the country with most installs, either on iTunes and Google Play. In Google Play, the second country is Italy (18%). In iTunes instead the second country is the USA (32%). Generally, the iTunes platform appears to be more popular for English-speaking countries; in fact, UK, USA and Australia represent together the 81% of the total installs in iTunes.

Historical Overview for iTunes Analytics

Total Sessions

Table 3 Total Sessions (Source: <https://analytics.itunes.apple.com>)

	Total sessions	Previous period variation (%)
April 2015-December 2015	362	-
January 2016-June 2016	303	-16
July 2016-December 2016	649	+114
January 2017-June 2017	574	-12
July 2017- January 2018	548	- 4

Figure 3.1 Total session evolution, selected months

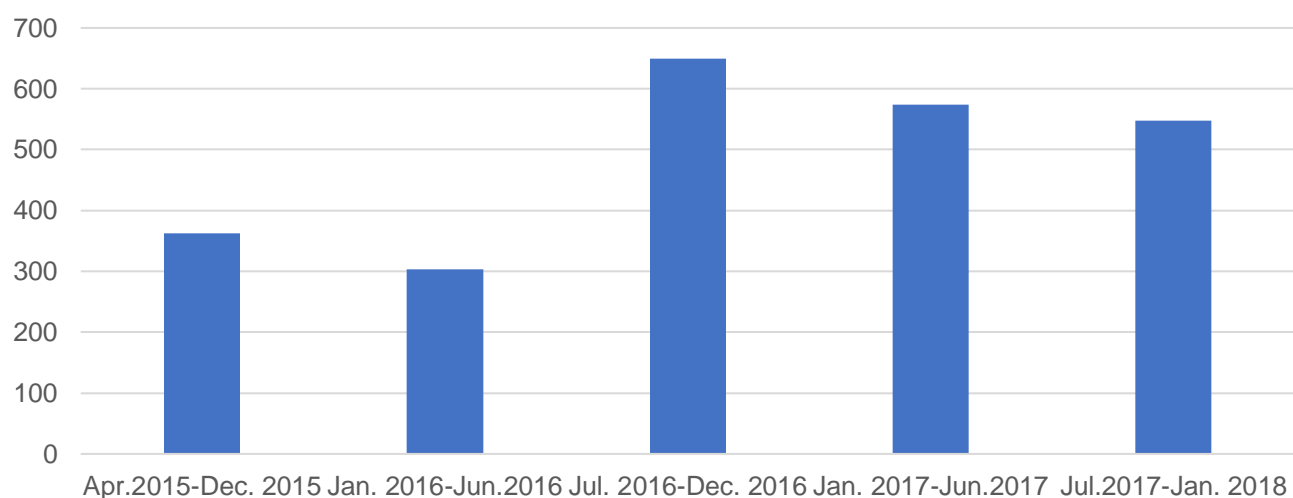


Figure 3.2 Total monthly session evolution and general trend line

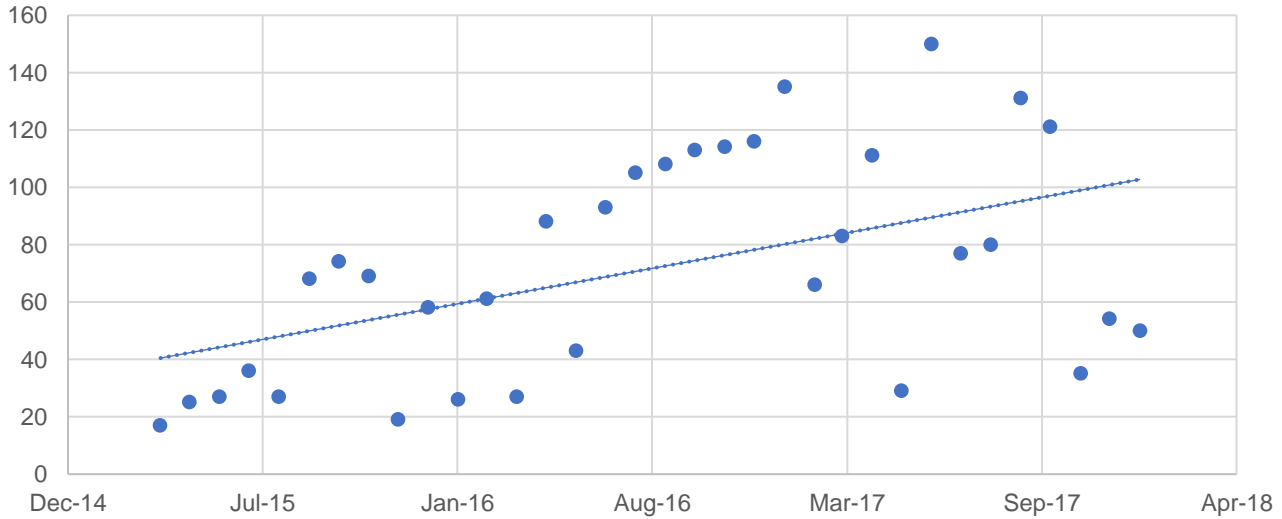


Table 3 and Figures 3.1. and 3.2 shows the data of total sessions available from the platform iTunes (4th April 2015 – 31st January 2018). In Table 3 and Figure 3.1 the data has been divided following the same grouping applied in Section 1.1 (Period 1-Period 5, included). Figure 3.2 instead uses a monthly organisation for the data.

Overall, it is possible to see during Period 3 (July- December 2016) there has been the biggest number of sessions (no. of sessions 649). Again, this peak corresponds to the TV exposure of the app in December 26th 2016, with a number of installs almost doubling the figures for the previous periods (Period 1 and 2). Nevertheless, as we can appreciate in Figure 3.2. the general trend of installs for the app is steadily increasing.

Geography of sessions

Table 4 Geographical distribution of the sessions (Source: <https://analytics.itunes.apple.com>)

Region	Country	Sessions	% of Sessions
Europe	United Kingdom	919	38
North America	United States	843	35
Oceania	Australia	172	7
North America	Canada	78	3
Asia	China	49	2
Europe	Italy	48	2
Europe	Austria	43	1.8
Europe	Netherlands	20	0.8
Europe	Germany	9	0.4
World	Others	241	10

Figure 4 Geographical distribution of the sessions

■ United Kingdom
 ■ United States
 ■ Australia
 ■ Canada
 ■ Others

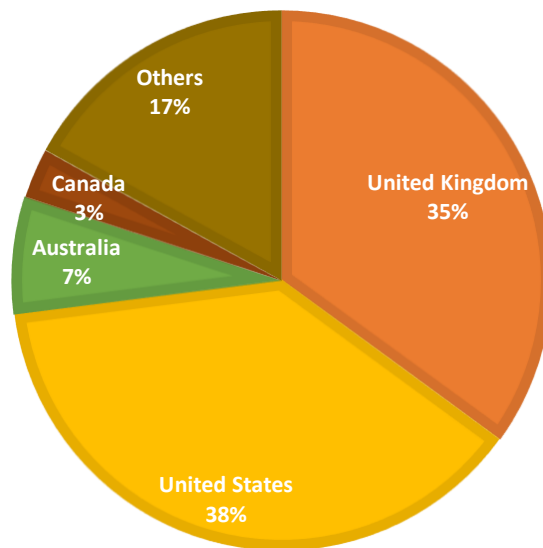


Table 4 and related chart representation (Figure 4) shows that countries where the app had the most numerous sessions are UK, USA and Australia, confirming the data previously gathered for Section 1.2 in which English-speaking countries have the major number of installs.

SECTION 2. GOOGLE ANALYTICS OVERVIEW

Type of audience

This section analyses data gathered solely from the platform Google Analytics for the period from January 8th 2017 to 31st January 2018.

In accordance with previous reports, the analysis of the data follows as main direction the distinction between:

- users who have used the app in Florence at one time (Florence users) and
- users who have never used the app in Florence (users elsewhere)

It has been decided to follow such distinction because in the previous reports were observed significant different behaviours for the two groups related to two different motivations for the using the app.

This section offers an overview of the data available for general information on the type of the audience of the app.

Data are collected

This section offers comparative overview of the data for the audience, between the 2017-18 period (Jan 8, 2017-Jan 31, 2018) and the 2015-2017 period (2015-17 Report). Here, we look at criteria such as unique users, new users, total session, and average session duration per users.

Data for the 2017-18 period have been gathered directly from the platform; data of the 2015-17 period have been gathered instead from the 2015-17 Report (*Hidden Florence Analytics Report*, 1st December 2015- 7th January 2017)

Comparative Overview between the 2017-18 period and the 2015-17 period.

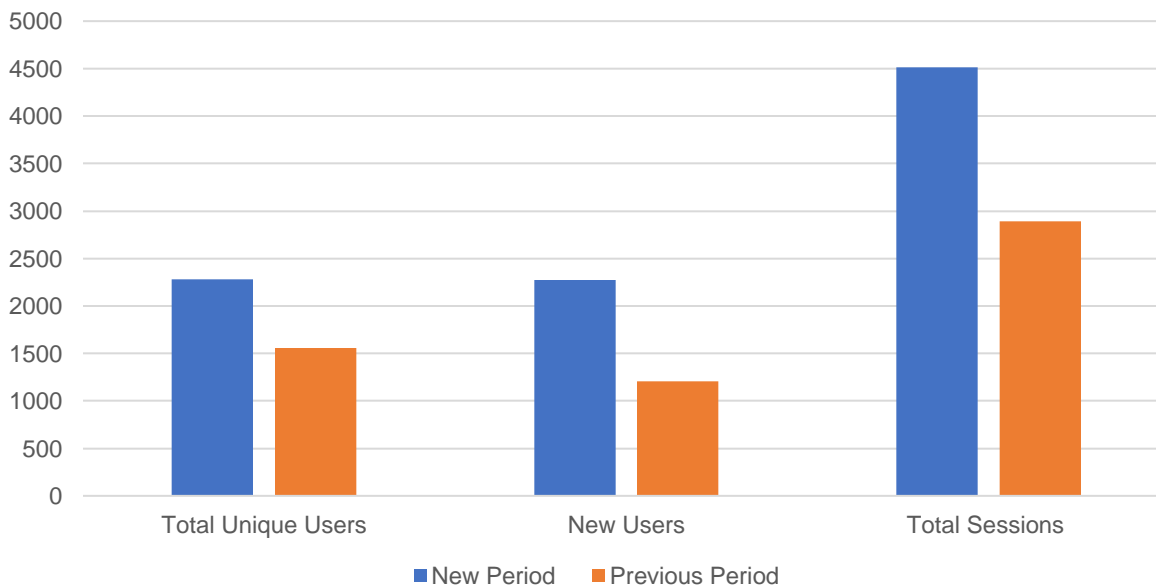
Sources for the data included in this sections are respectively:

- for the 2017-18 Report, see Google Analytics website (<https://analytics.google.com>)
- For the 205-17 Report, data have been taken from *Hidden Florence Analytics Report* (1st December 2015- 7th January 2017), p.4.)

Table 5 Comparative overview (2015-2018)

	2017-18 Period (Jan 8, 2017- Jan 31, 2018)	2015-17 Period (Dec 1, 2015- Jan 7, 2017)	Variation (%)
<i>Total Unique Users</i>	2279	1557	+46
<i>New Users</i>	2277	1203	+89
<i>Total Sessions</i>	4514	2894	+56
<i>Average session duration per users</i>	7 min and 5 Sec	n.d.	-

Figure 5 Variation between 2017-18 Period and 205-17 Period

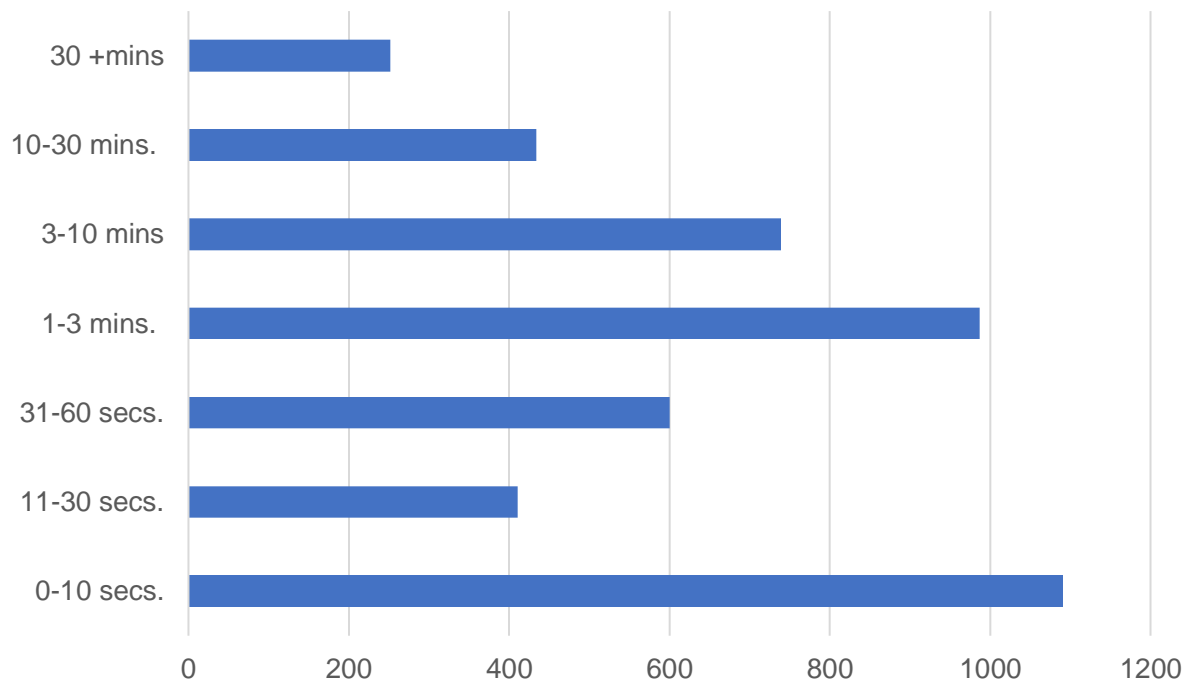


Average session length

Table 6 Average session length (Source: <https://analytics.google.com>)

Session length	Number of sessions	% of all sessions
0-10 secs.	1091	24.1
11-30 secs.	411	9.1
31-60 secs.	600	13.3
1-3 mins.	987	21.6
3-10 mins.	739	16.4
10-30 mins.	434	9.6
30+ mins.	252	5.6

Figure 6 Average session length



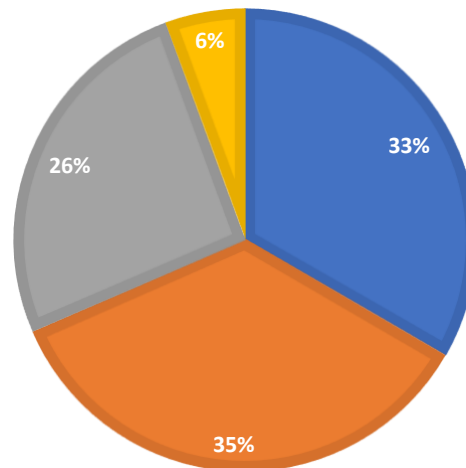
Session length

Table 7 Summary of session length (Source: <https://analytics.google.com>)

Session length	No. of sessions	% of all sessions
0-30 secs.	1502	33.3
30 secs-3 mins.	1587	35.2
3-30 mins	1173	25.9
30 + mins	252	5.6

Figure 7 Summary of session length

■ 0 -30 secs. ■ 30 secs.-3 mins. ■ 3 -30 mins. ■ 30 + mins.



Tables 6 and 7 and related figures (Figure 6 and 7) show that two third of the users access contents mostly for less than three minutes, which it is probably consistent with quickly browsing the app. Anyway, it is worthwhile to note that a third of the users actively engage with app contents up to thirty minutes (probably mostly listening to the tracks), with a very small portion using it more than half an hour (the hypothesis here is that these users not only listened to the tracks but also access external contents available on the website). Overall, the analysis of user's behaviour in relation to their temporal engagement with the app suggests that once user's attention is caught, people are willing to deeper navigate the app, accessing also extra contents.

Breakdown of the platforms

Table 8 Breakdown of platforms (Source: <https://analytics.google.com>)

	No. Unique Users	% of users triggering event 'appStarted'
iOS	665	29.8 %
Android	1569	70.2 %

Figure 8 Breakdown of platforms

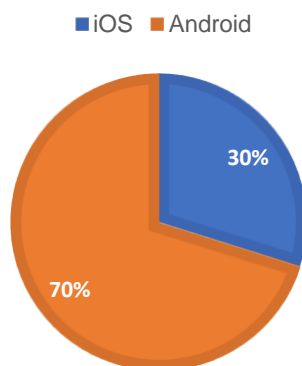


Table 8 and related Figure 8 shows that the majority of the app users are downloading and running the app using the Android platform.

Mobile device branding

Table 9 Top 5 more popular mobile device brands for Florence users

	Samsung	Apple	Google	Huawei	Motorola	Total
<i>Florence</i>	213 (44%)	176 (36%)	40 (8%)	31 (6%)	29 (6%)	498 (100%)

Table 10 Top 5 more popular mobile device brands for elsewhere users

	Samsung	Apple	Huawei	Google	SONY	Total
<i>Elsewhere</i>	832 (45%)	649 (35%)	162 (10%)	97 (5%)	91 (5%)	1831 (100%)

Figure 9 Breakdown of devices for Florence users and elsewhere users

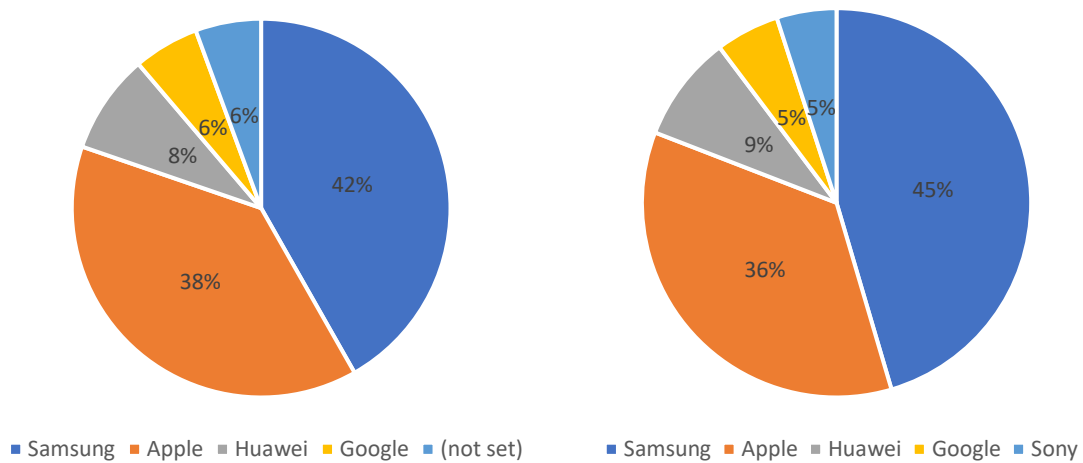


Table 9 and 10 and related Figure 9 shows that similar engagement between the two groups of users. The majority of the app users are downloading and running the app using a Samsung device, shortly followed by users with Apple products. This result confirms the data previously gathered for the most popular type of platform via which the app has been download and ran (see Table 8).

Users' behaviour

This section analyses data gathered solely from the platform Google Analytics for the period from (8th January 2017- 31st January 2018).

In accordance with previous reports, the analysis of the data follows as main direction the distinction between:

- users who have used the app in Florence at one time (Florence users) and
- users who have never used the app in Florence (users elsewhere)

It has been decided to follow such distinction because in the previous reports were observed significant different behaviours for the two groups related to two different motivations for the using the app.

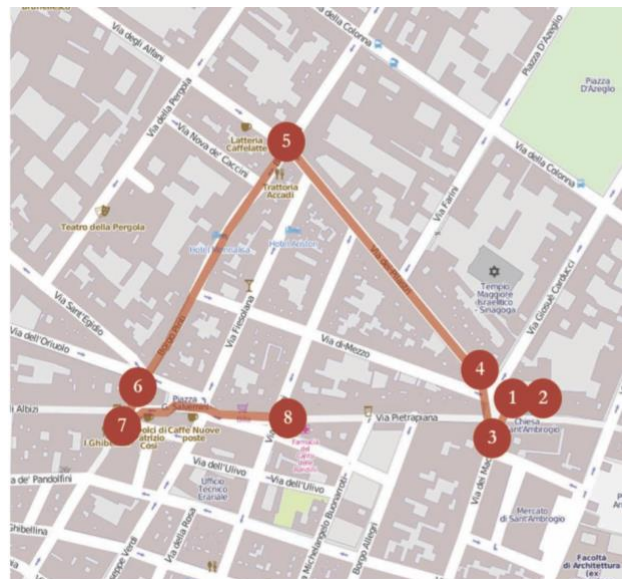
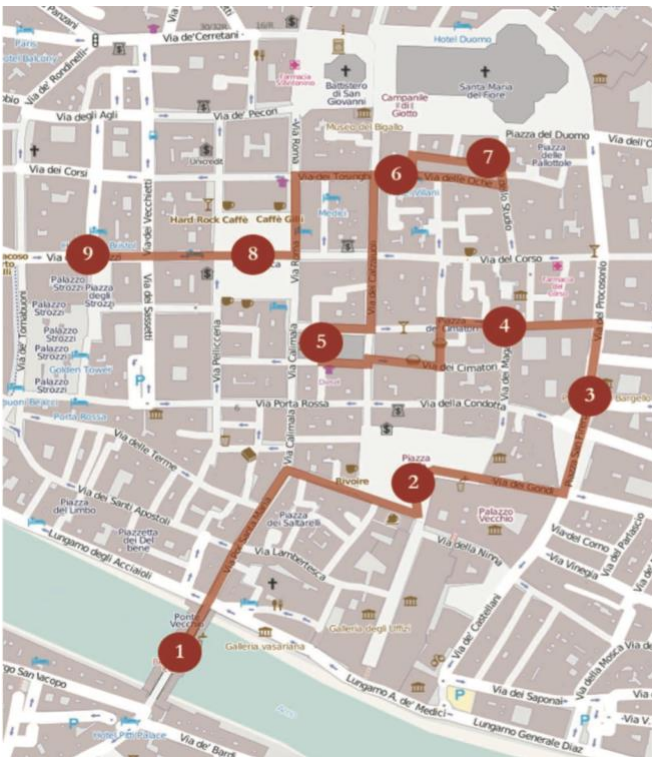
The aim of this section is to understand if people engage with the app more when experiencing it in situ or elsewhere. Therefore, this section of the report depicts the behaviours of these two groups as documented by these metrics:

- download of the app
- contents engagement
- use of the social media
- web access
- feedback

Selected Figure by User Engagement

	No. of Users	% of all Users	Unique Events	Unique events for users
Florence	681	29.88 %	2177	3.2
Elsewhere	1598	78.12 %	5001	3.1

Map POIs of the Central walk and S.Ambrogio



List of the POIs and related extra contents for Central and S. Ambrogio walks.

Central Walk			S. Ambrogio Walk		
	POIs	Extra Content		POIs	Extra content
1	Ponte Vecchio	Bridging the Arno	1	Outside S. Ambrogio - Inside S.Ambrogio	King for a day Relics Parade
2	Piazza della Signoria	Politics and the piazza	2	Via dei Macci	Worker's home
3	Canto del Bargello	Crime and punishment	3	Via dei Pilastri	Street Ecologies
4	San Martino	Performance and Patronage	4	Canto al Monteloro	Neighbourhood Madonna
5	Orsanmichele	Merchants and workers	5	Piazza San Piero Maggiore - Volta San Piero	A slice of piazza Tavern Tales
6	Vicolo del Giglio	Sex and the city	6	Canto alle Rondini	The Apothecary Shop
7	The Opera Workshop	Craft work			
8	Piazza della Repubblica	Women in the streets			
9	Palazzo Strozzi	Palaces and pavements			

Users' behaviour

DOWNLOAD

This section looks at Florence and elsewhere users' behaviour with regard to start and complete the download of the app, as well as app deletion and download error.

Table 11 Comparative table between users starting the app download and finishing the download in Florence.

	Download started	Download finished	App Delete	Download error	Total
Florence	226 (45%)	189 (38%)	56 (11%)	28 (6%)	499 (100%)
Elsewhere	525 (47%)	431 (38%)	123 (11%)	48 (4%)	127 (100%)

Figure 11 Comparative chart between users starting the app download and finishing the download in Florence.

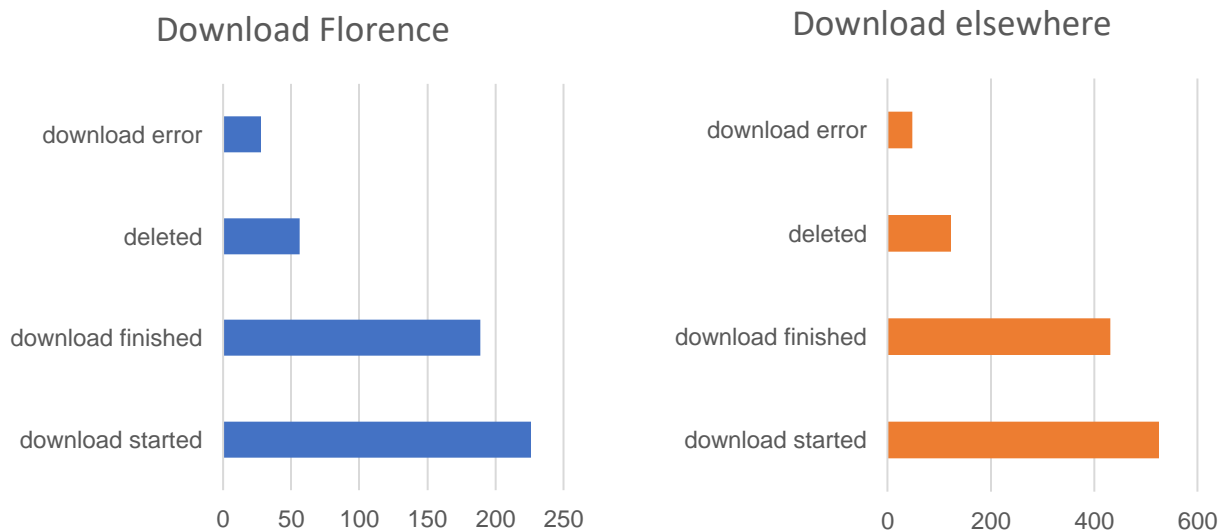
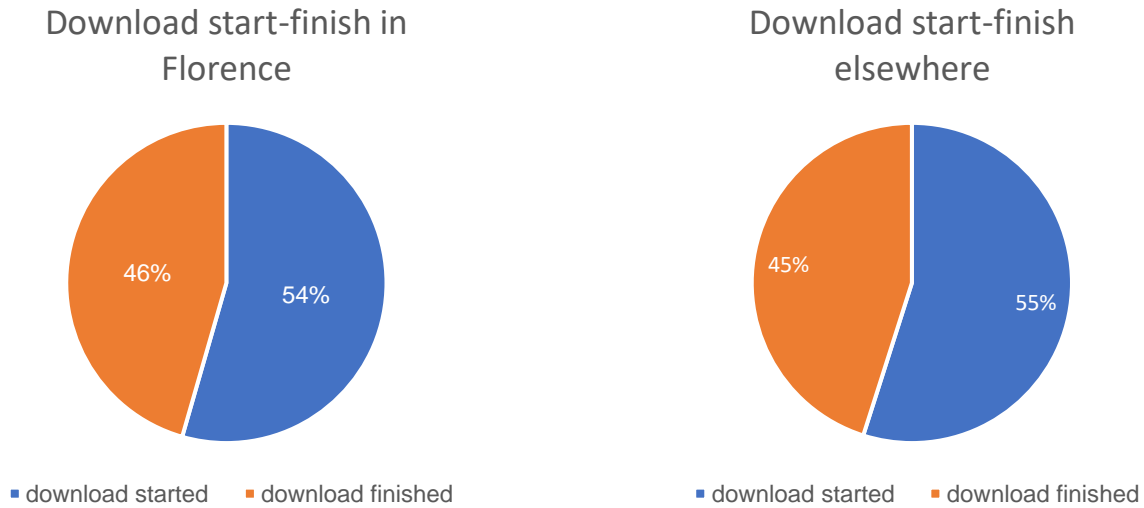


Figure 12 Comparative chart between users starting the app download and finishing the download in Florence.



It is possible to appreciate that both Florence users and elsewhere behave very similar with regard to start and finish the app download. Also, same behaviours are observed for app deletion and download error.

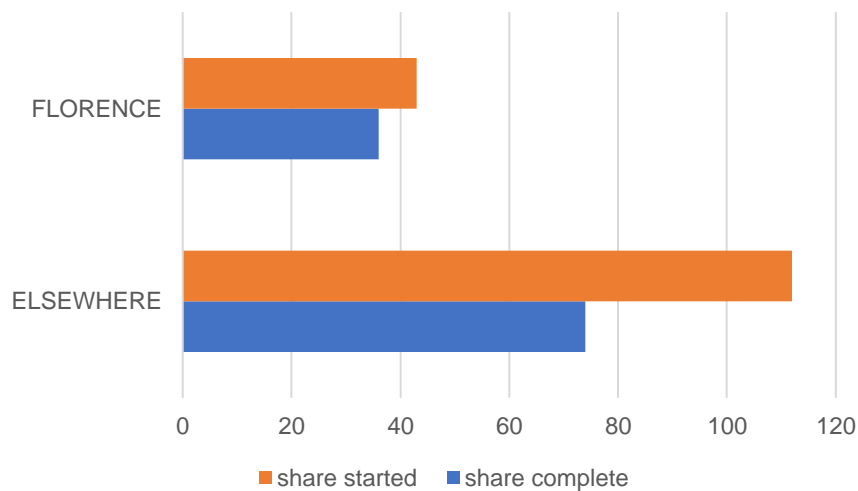
SOCIAL MEDIA

This sub-section looks at users’ behaviours about sharing the app contents via social media, using a comparative framework between users in Florence and elsewhere. Data have been gathered from users’ behaviours related to the events ‘share started’ and ‘share completed’.

Table 12 Sharing (Source: <https://analytics.google.com/analytics/web>)

	Florence	Elsewhere
Share started	43	112
Share completed	36	74

Figure 13



Source: see Table X.

As we can see in Figure 13, users' behaviour about sharing the app using social media changes pretty significantly depending on their location. While 84% of the users experiencing the app in Florence complete the process of sharing contents, only 66% of the users outside Florence get to the end of the sharing process.

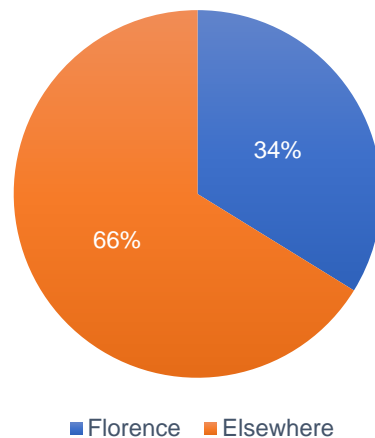
WEB ACCESS

This sub-section looks at users' behaviours about accessing link related to the app page they are visiting, using a comparative framework between users in Florence and elsewhere. Data have been gathered from users' behaviours related to the events 'open link'

Table 13 Web access Source: <https://analytics.google.com/analytics/web>

	Open link	Percentage
Elsewhere	133	34%
Florence	68	66%
Total	201	100%

Figure 14 (Source: see Table 13)



As we can see from Figure 14, users' behaviour about accessing the embedded link to the app page they are visiting changes pretty significantly depending on their location. Users in Florence seem less keen on accessing external web links, perhaps due to the fact that people are turning data off whilst doing the experience.

CONTENTS ENGAGEMENT

Florence

This section refers to users' engagement with main contents (POIs events) and 'Discover more' (Extra Contents events) contents for Central walk (Table 14 and Figure 15) and S. Ambrogio walk (Figure 14 and Table 16) whilst using app in Florence.

Table 14 POIs and Extra contents of the Central Walk (Source: <https://analytics.google.com/analytics/web>)

Central Walk	POIs events			Extra Contents events	
1 Ponte Vecchio	204	23%	1 Bridging the Arno	123	22%
2 Piazza Signoria	146	17%	2 Politics and piazza	85	15%
3 Canto del Bargello	99	11%	3 Crime and punishment	65	12%
4 San Martino	79	9%	4 Performance and patronage	57	10%
5 Orsanmichele	86	10%	5 Merchants and workers	56	10%
6 Vicolo del Giglio	69	8%	6 Sex and the city	42	7%
7 The Opera Workshop	63	7%	7 Craft work	43	8%
8 Piazza della Repubblica	67	8%	8 Women in the streets	43	8%
9 Palazzo Strozzi	62	7%	9 Palaces and pavements	46	8%
<i>Total</i>	875	100%	<i>Total</i>	560	100%

Figure 15 POIs and Extra contents of the Central Walk

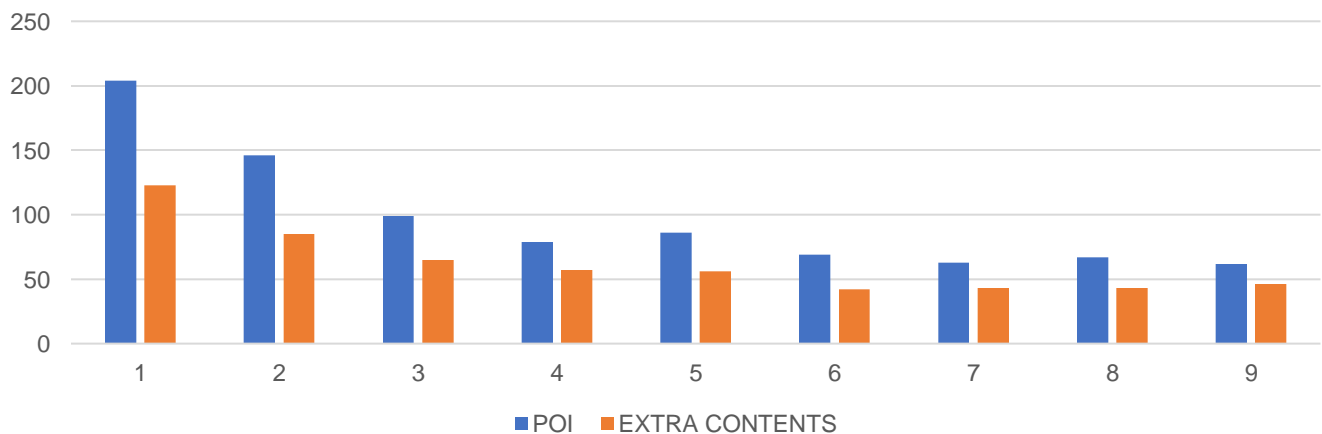
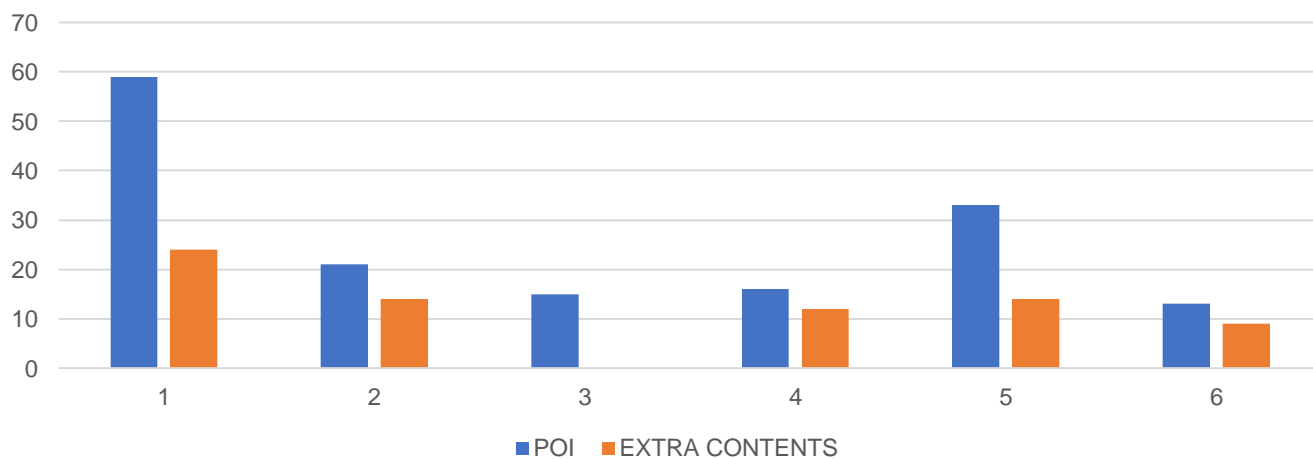


Table 14 POIs and Extra contents of the S.Ambrogio walk (Source: <https://analytics.google.com/analytics/web>)

S. Ambrogio Walk	POIs events			Extra Contents events	
1 Outside/ Inside S. Ambrogio Church	59	38%	1 King for a day / Relics on parade	24	33%
2 Via dei Macci	21	13%	2 The worker's home	14	19%
3 Via dei Pilastrini	15	9%	3 Street ecologies	0	0%
4 Canto al Monteloro	16	10%	4 Neighbourhood Madonna	12	16%
5 Piazza San Piero Maggiore / Volta di San Piero	33	22%	5 A slice of piazza / Tavern tales	14	20%
6 Canto alle Rondini	13	8%	6 The apothecary's shop	9	12%
Total	157	100%		73	100%

Figure 16 POIs and Extra contents of the S.Ambrogio walk



Looking at these results it is possible to appreciate that for both the walks, there is a tendency of gradually engage less with the progressing of the experience. Indeed, the first contents proposed, either related to POIs and 'Discover more', are the most experienced. The only exception is to be found in the POI 'Piazza San Piero Maggiore / Volta di San Piero' (see Figure 16) where there's an unexpected increase of users engaging with the contents.

Elsewhere

This section refers to users' engagement with main contents (POIs events) and 'Discover more' (Extra Contents events) contents for Central walk (Table 15 and Figure 17) and S. Ambrogio walk (Figure 16 and Table 18) whilst using app elsewhere (outside of Florence).

Table 15 POIs and Extra contents of the S.Ambrogio walk (Source: <https://analytics.google.com/analytics/web>)

Central Walk	POIs events			Extra Contents events	
1 Ponte Vecchio	463	24%	1 Bridging the Arno	286	23%
2 Piazza Signoria	366	20%	2 Politics and piazza	225	18%
3 Canto del Bargello	221	12%	3 Crime and punishment	159	12%
4 San Martino	170	9%	4 Performance and patronage	123	10%
5 Orsanmichele	198	10%	5 Merchants and workers	122	10%
6 Vicolo del Giglio	67	3%	6 Sex and the city	105	8%
7 The Opera Workshop	138	7%	7 Craft work	94	7%
8 Piazza della Repubblica	145	8%	8 Women in the streets	61	5%
9 Palazzo Strozzi	139	7%	9 Palaces and pavements	91	7%
Total	1907	100%	Total	1266	100%

Figure 17 POIs and Extra contents of the S.Ambrogio walk

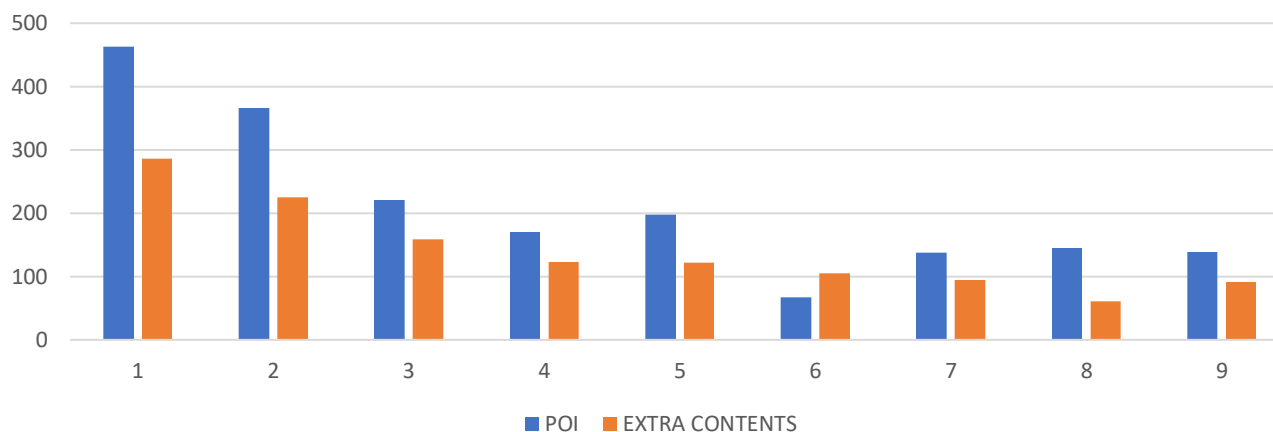
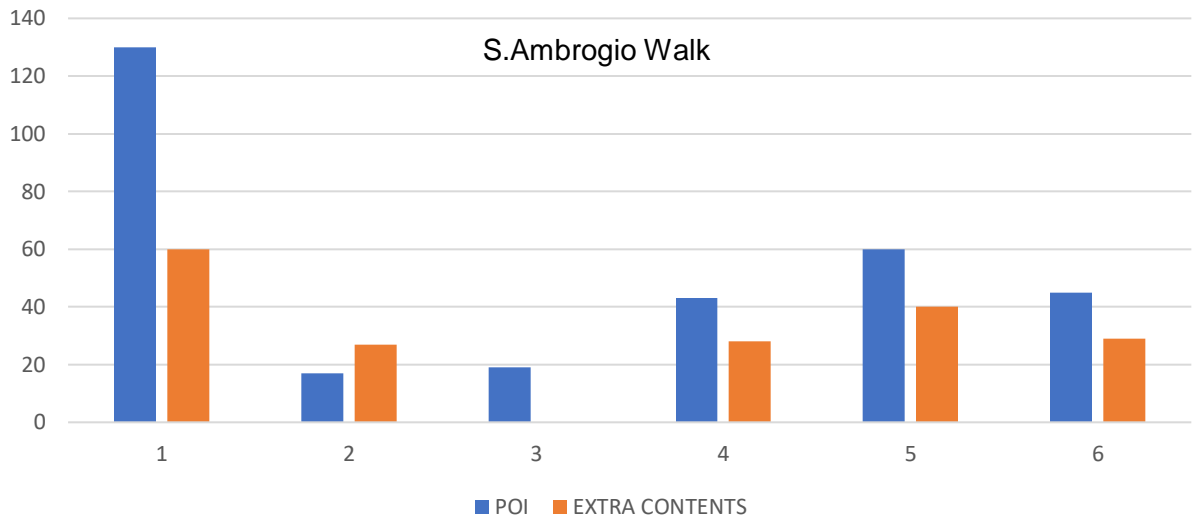


Table 16

S. Ambrogio Walk	POIs events			Extra Contents events	
1 Outside/ Inside S. Ambrogio Church	130	41%	1 King for a day / Relics on parade	60	33%
2 Via dei Macchi	17	5%	2 The worker's home	27	14%
3 Via dei Pilastri	19	6%	3 Street ecologies	0	0%
4 Canto al Monteloro	43	14%	4 Neighbourhood Madonna	28	15%
5 Piazza San Piero Maggiore / Volta di San Piero	60	19%	5 A slice of piazza / Tavern tales	40	22%
6 Canto alle Rondini	45	15%	6 The apothecary's shop	29	16%
Total	314	100%		184	100%

Figure 18



Looking at these results it is possible to appreciate that while for the Central walk there is a progressive loss of users, in the S. Ambrogio walk users' engagement, after a first drop, rapidly increase. Overall, from the analysis of these four charts, it is possible to appreciate that generally the users who are experiencing the app outside Florence (in an 'armchair' modality) are more willing to access contents classified under the category 'Discover More' than users in Florence. It is also possible to appreciate that users, either in Florence and outside, once they engage once with 'Discover More' contents they are more likely to access in the following POI.

FEEDBACK

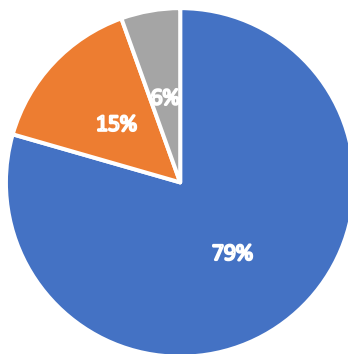
This subsection looks at the users' behaviour with regard to leaving a feedback for the app. In order to understand it, a comparative chart and related figures have been provided of the feedback results for users both in Florence and elsewhere.

Table 17 Feedback provided by users (Source: <https://analytics.google.com/analytics/web>)

	Positive Feedback		Negative Feedback		Neutral Feedback		Total	
Florence	57	79%	4	6%	11	15%	72	100%
Elsewhere	239	90%	6	8%	22	2%	267	100%

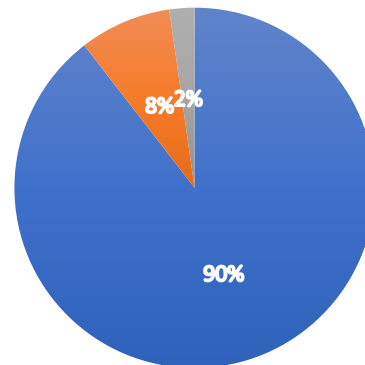
Figure 19 Comparative pie charts for feedback by users in Florence and elsewhere

Feedback users in Florence



■ Positive feedback ■ Neutral feedback
■ Negative feedback

Feedback users elsewhere



■ Positive Feedback ■ Neutral Feedback
■ Negative Feedback

Overall, users have generally left positive feedback. Nevertheless, it is worthwhile to observe that users elsewhere have left more negative feedback, and the reason for it might be found in the missed opportunity of the 'armchair modality' to engage with the users' expectations and/or technical issues with the app.

EXTERNAL WEB ACCESS

This subsection looks at the behaviours of users, both in Florence and elsewhere, with regard to the access of extra contents available via external web access. The analysis of the data then carries on looking at users' access to external webpage in relation to the different POIs of the Central walk and the S. Ambrogio walk from which they trigger the access to the external web links.

Table 18 External web access (Source: <https://analytics.google.com/analytics/web>)

Central Walk			S. Ambrogio Walk		
POIs	Florence	Elsewhere	POIs	Florence	Elsewhere
Bridging the Arno	23	43	King for a day	2	2
Politics and the piazza	11	25	Relics on parade	1	2
Crime and punishment	6	14	The worker's home	0	1
Performance and Patronage	6	7	Street ecologies	1	3
Merchants and workers	6	11	Neighbourhood Madonna	0	0
Sex and the City	2	4	A slice of piazza	0	2
Craft work	3	4	Tavern Tales	0	1
Women in the streets	4	8	The apothecary's shop	0	3
Palaces and pavements	2	4			

Figure 20 Comparative graphs between access to external web access for the two walks by users in Florence

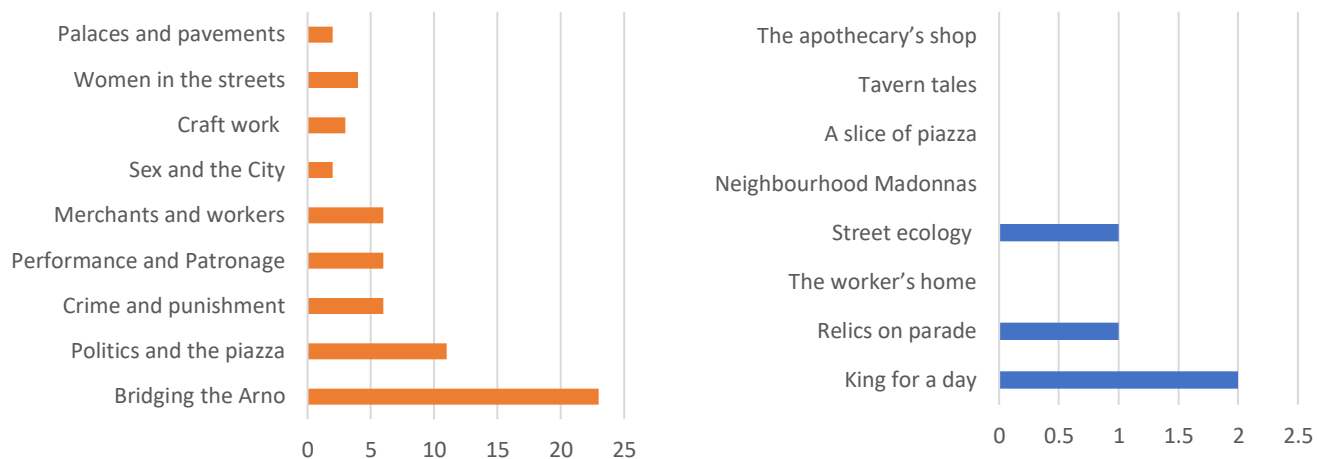
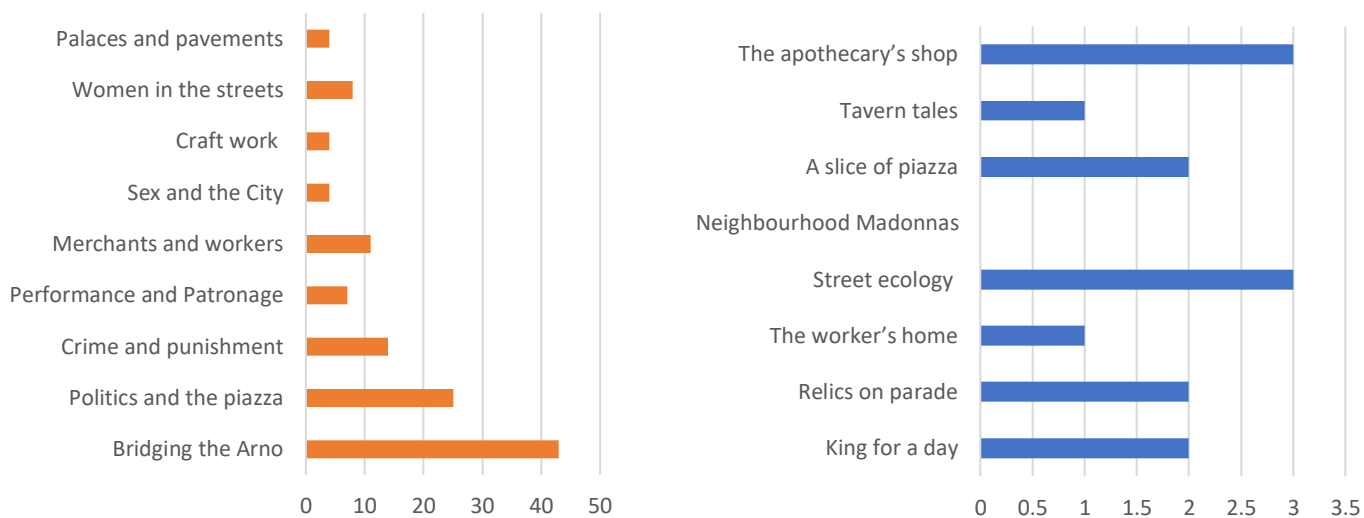


Figure 21 Comparative graphs between access to external web access for the two walks by users elsewhere



These four charts effectively render the behaviour of users either in Florence and elsewhere for accessing external web links. It is possible to observe that users of both groups have a very similar behaviour with regard to the Central walk, where a strong interest in the first two POIs is then followed by a decrease in engagement with web links. Whilst users in Florence seem to engage very little with external contents for the S. Ambrogio walk, users using the app elsewhere, and therefore in armchair modality, are overall more interested in those contents.

USERS REVIEWS

These are the reviews left by users available on Google Play and iTunes.

Google Play platform: Total 16 feedback, overall rating 4.9/5.

Tim 26/Aug/2017, *“Great app. So much fun and learned a lot. Highly recommended!”*

Scott Mosser 17/Jun/2017, *“Great little experience for seeing a few lesser known items hidden in plain view in Florence”*

Dinara Halikova 02/May/2017 *“Thank you, thank you, thank you so much for this app! It's perfect— well designed and interactive and it shows you Florence from a different perspective, not like the rest of the tourist guides! I've had a lot of fun with it today and did both of the walks. I wish there was more, because it was awesome!”*

Robert Crump 16/Feb/2017 *“Lovely app! Both the Italian and English speaker did a great job. Walking around in Firenze together with Giovanni gives you a feeling for what it must have been like to live here centuries ago as well as interesting information on buildings and history. Highly recommended!”*

iTunes platform:

Renaissance2@yale July 19, 2015 *“Intelligently done. A very informative app giving in-depth information on a limited number of sites. This is useful not just for the visitor to Florence but, even more so, for the student of the Renaissance, sitting in his or her armchair, who wants to learn more about the culture and day-to-day life in the greatest city of the Quattrocento. Entertaining, visually interesting and instructive, in equal measures. Well done!”*

SECTION 3. HIDDEN FLORENCE WEBSITE

Historical Overview

This section looks at analytics available for WordPress website for the app (hiddenflorence.org). Data covers the period from May 2013 (when the website was created) to March 15 2018 (date in which the report was compiled).

The chronology for the analytics has been split into ten periods, each including a six months timeframe, except for Period 1 (only 8 months, May-Dec 2013) and Period 10 (Jan-March 15th 2018). It is important to remember that Period 1 (May-Dec 2013) and Period 2 (Jan-Jun 2014) are the only two periods during which the website was live but the app was not released yet.

Selected Figures

Total number of views	38052
Total number of visitors	14426
Average Views per Visitor	3.5
Blog Posts	3
Follower Totals	11 (WordPress 6, Email 5)
Most Popular Day	Monday (35% views)
Most Popular Hour	9:00 PM (GMT +0) (21% views)

Type of Audience

Table 19 Historical overview of the website views (Source: WordPress analytics)

	Website Views	Percentage increase from previous period	Percentage increase from Period 1
Period 1 (May-Dec 2013) *	2365	-	-
Period 2 (Jan-Jun 2014)	2345	-1%	-1%
Period 3 (Jul-Dec 2014)	6247	+166%	+164%
Period 4 (Jan-Jun 2015)	4169	-33%	+76%
Period 5 (Jul-Dec 2015)	2697	-35%	+14%
Period 6 (Jan-Jun 2016)	4128	+53%	+75%
Period 7 (Jul-Dec 2016)	4499	+9%	+90%
Period 8 (Jan-Jun 2017)	4937	+10%	+109%
Period 9 (Jul - Dec 2017)	3629	-26%	+35%
Period 10 (Jan-Mar 2018) *	2084	-43%	-12%

*Data for the Period 1 and Period 10 is partial since it not includes a semester but respectively eight months and three months.

Figure 23 Historical overview of the website views

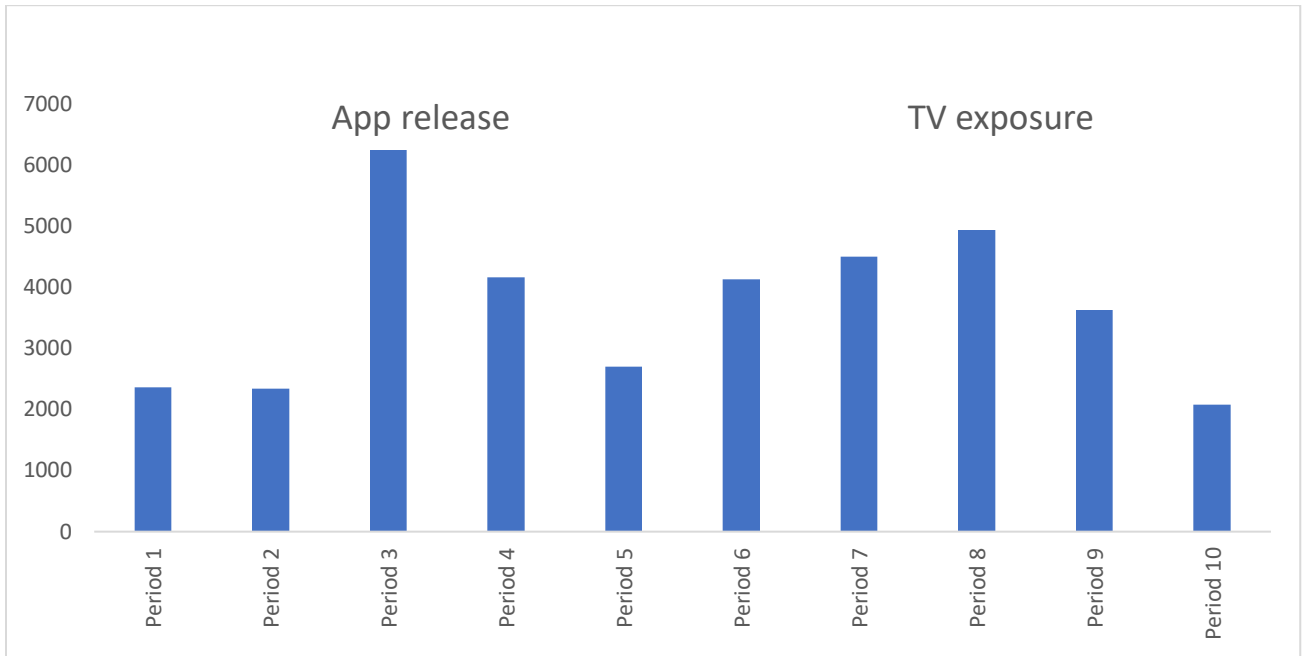
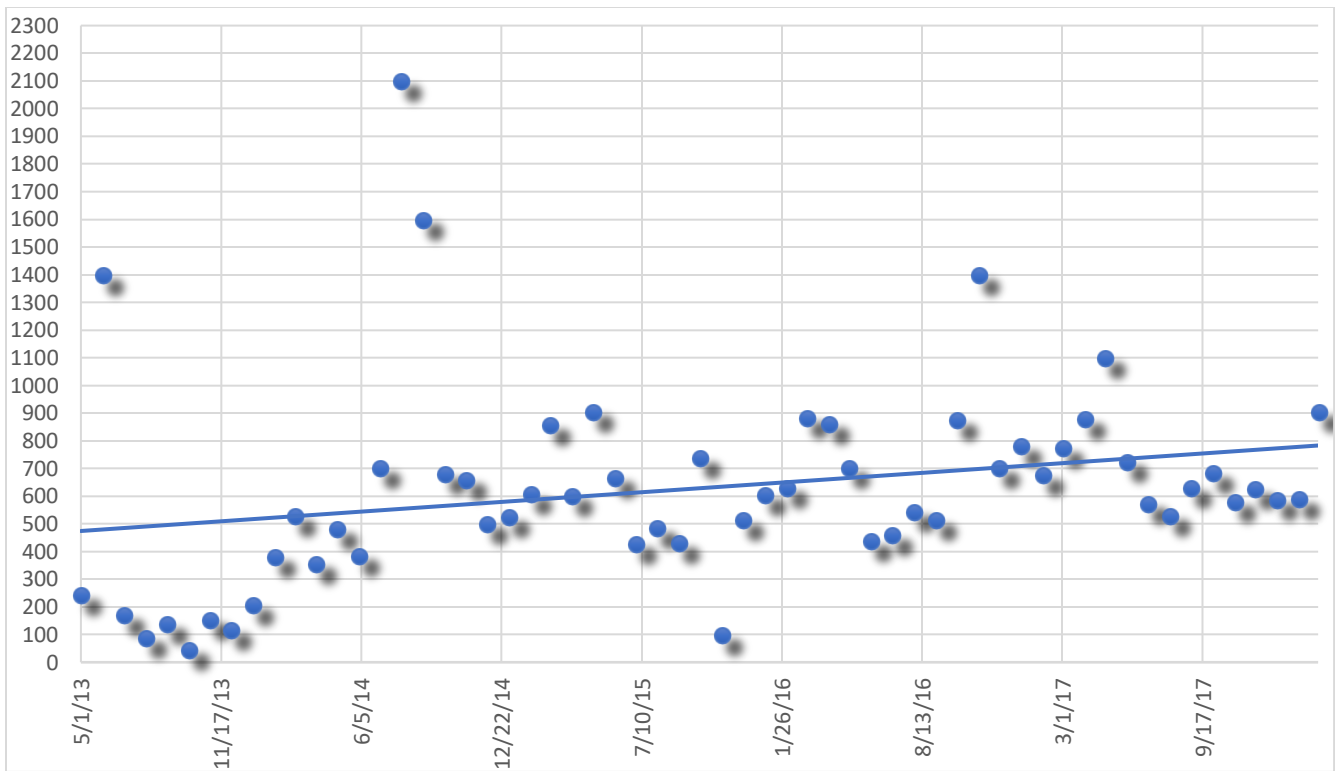


Figure 24 Total monthly growth of the website views and general trend line



Looking at Table 19 and Figures 23 and 24, it is possible to appreciate that:

- Period 1 and Period 2 are the periods with less website views which is consistent with the fact that the app was yet to be released
- From Period 2 there is a constant increase of website views, with two peaks during Period 3 (Jul-Dec 2014), which is consistent with the time the app was realised, and Period 8 (Jan-Jun 2017) which is probably related to the effect of the TV exposure of the app (Dec 25th 2016)
- Overall, from Period 1 to Period 9 there has been a total increase of website view of 78%, which is consistent with the trend witnessed for the app (see Figure 3.2)

TRAFFIC THROUGH THE WEBSITE

This subsection looks at the number of visitors of the website. Data here have been organized in ten time periods, covering from May 2013 to March 15th 2018.

Metrics taken in consideration in this subsections are:

- Website views
- Number of visitors
- Views per visitors for each period of time
- Variations of visitors per period

Note

Despite having been included to provide a complete historical overview of the visitors, figures from Period 1 and 10 are not particularly significant for the overall analysis since they take in consideration shorter timeslots than the standard calendar year of twelve months.

Table 20 Traffic through website (Source: WordPress analytics)

	Website views	Visitors	Variation of number of visitors (from previous period)	Views per visitor
Period 1 (May-Dec 2013) *	2394	333	-	9.6
Period 2 (Jan-Jun 2014)	2345	671	+1933%	3.6
Period 3 (Jul-Dec 2014)	6212	2451	+265%	2.4
Period 4 (Jan-Jun 2015)	4169	1991	-19%	2.1
Period 5 (Jul-Dec 2015)	3721	1385	-30%	2.6
Period 6 (Jan-Jun 2016)	4128	1815	+31%	2.3
Period 7 (Jul-Dec 2016)	4464	1669	-8%	2.6
Period 8 (Jan-Jun 2017)	4893	1995	+19%	2.5
Period 9 (Jul - Jan 2018)	3629	1482	-26%	2.4
Period 10 (Jan- Mar 2018) *	2097	684	-54%	3.3

*Data for the Period 1 and 10 is partial since it not includes a semester but respectively eight months and three months.

Figure 25 Historical overview of the visitors of the website

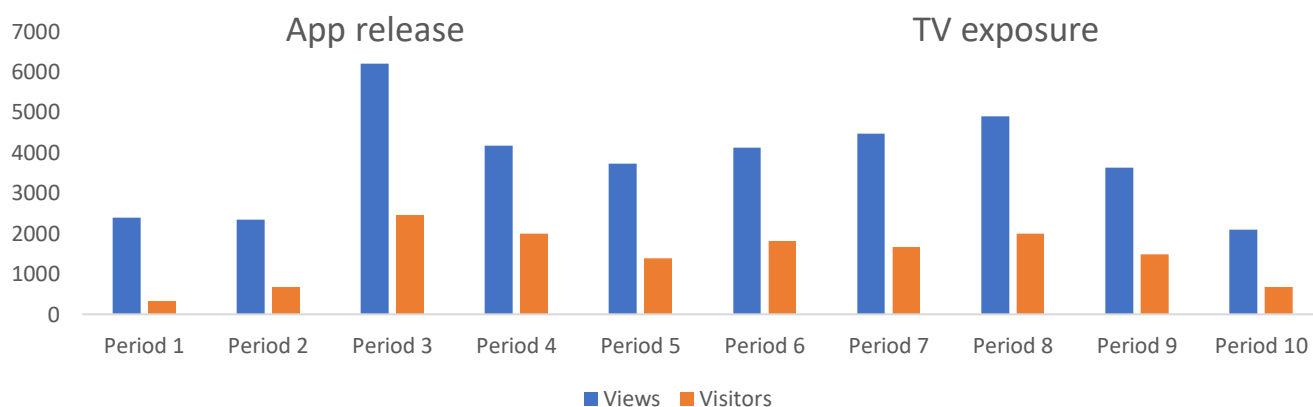
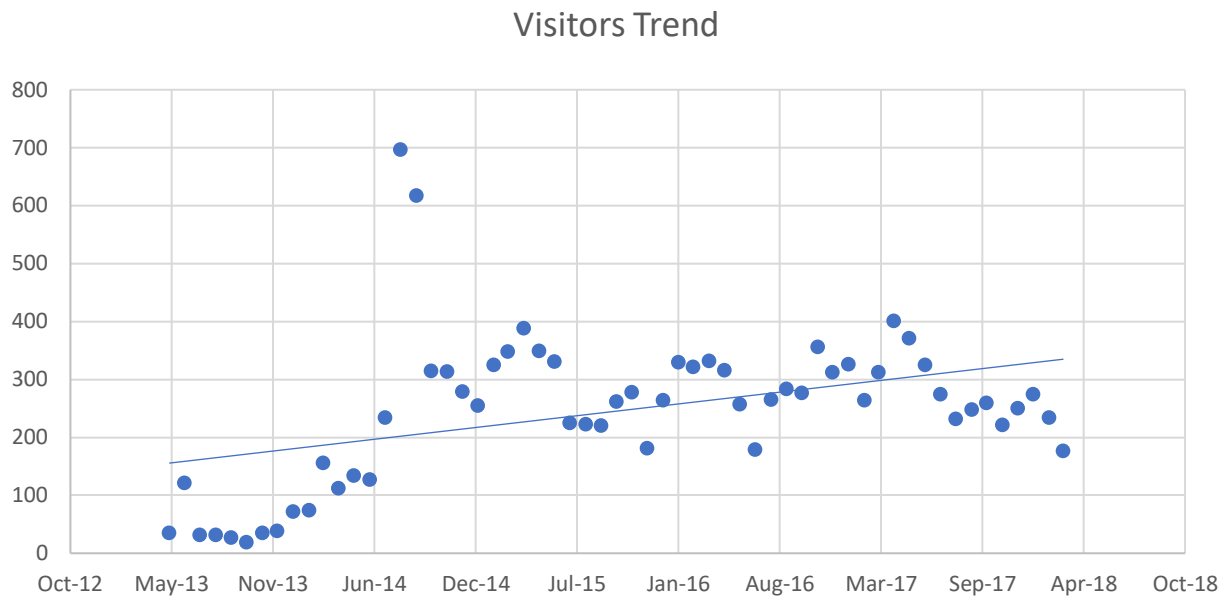


Figure 26 Total monthly growth of the website views and general trend line



From the analysis of data collected in Table X and represented in Figure x and x, it is possible to observe that:

- The number of visitors of the websites had a peak within the first six months after the release of the app (Period 3) and during Period 8, which is consistent to the TV exposure of the app.
- Despite the presence of incomplete data from two periods (Period 1 and 10), the overall trend for the number of visitors of the website is increasing steadily.

Visitors' behaviour

This section focuses on the analysis of visitors' behaviour on the website. Data are gathered from the website analytics for the period from May 1st 2013 to March 15th 2018 which have been divided following an annual grouping.

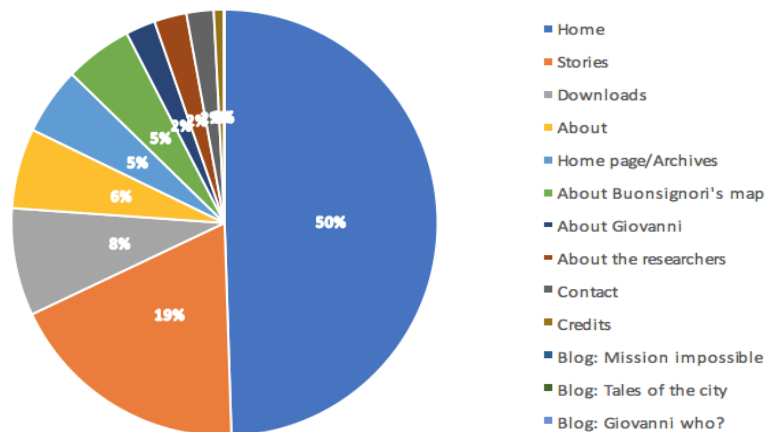
Data have been divided into three main groups:

- *Group 1* contains all the data corresponding the main pages of the website, such as homepage, contact page, credits, blog posts, et cetera.
- *Group 2* comprises all the website page related to the contents for the Central Walk. These website contents can also be accessed from the app when triggering the function 'External link' within the 'Discover more' page.
- *Group 3* comprises all the website page related to the contents for the S.Ambrogio walk. These website contents can also be accessed from the app when triggering the function 'External link' within the 'Discover more' page.

Selected Figures

	2013	2014	2015	2016	2017	2018	Total
Total Views of posts and pages	2404	8556	7890	8592	8522	588	36552

Figure 27 Distribution of users' access to the different contents of the website (2013-2018)



REFERRERS

This subsection looks at other blogs and web sites that link to the Hidden Florence website.

Table 21 Website referrers (2013-2108) (Source: WordPress analytics)

<i>Main Referrers (Top 15)</i>		2013*	2014	2015	2016	2017	2018*	Total views
Search Engine	<i>S</i>	278	1417	2211	2480	2498	399	9283
Android-app	<i>M</i>	-	-	-	13	32	-	45
Exeter university website	<i>A</i>	31	72	92	143	126	21	485
Twitter	<i>SM</i>	6	42	20	13	18	1	100
ahrc.ac.uk	<i>A</i>	-	45	6	2	2	-	55
Facebook	<i>SM</i>	-	31	43	21	19	3	117
academia.edu	<i>A</i>	-	11	-	-	-	-	11
itatti.harvard.edu	<i>A</i>	-	6	8	-	-	-	14
rsa.org (renaissance society of America)	<i>A</i>	-	-	12	4	-	6	22
anterotesis.com	<i>A</i>	-	5	10	18	15	-	48
decima-map.net	<i>A</i>	-	-	-	-	13	4	17
geohumanities.org	<i>A</i>	-	-	2	2	4	1	9
nova.ilsole24ore.com	<i>M</i>	-	22	14	11	8	1	56
calvium.com	<i>M</i>	-	4	1	2	-	-	7
travelman48hrs.com	<i>M</i>	-	-	-	-	3	12	15
Others		-	372	73	177	129	75	826

*Data for the 2013 and 2018 is partial since it not includes a semester but respectively eight months and three months.

Category legend: S= Search engine; M= Marketing; A= Academia; SM= Social Media

Figure 28 Distribution of users' referrers by category (2013-2018)

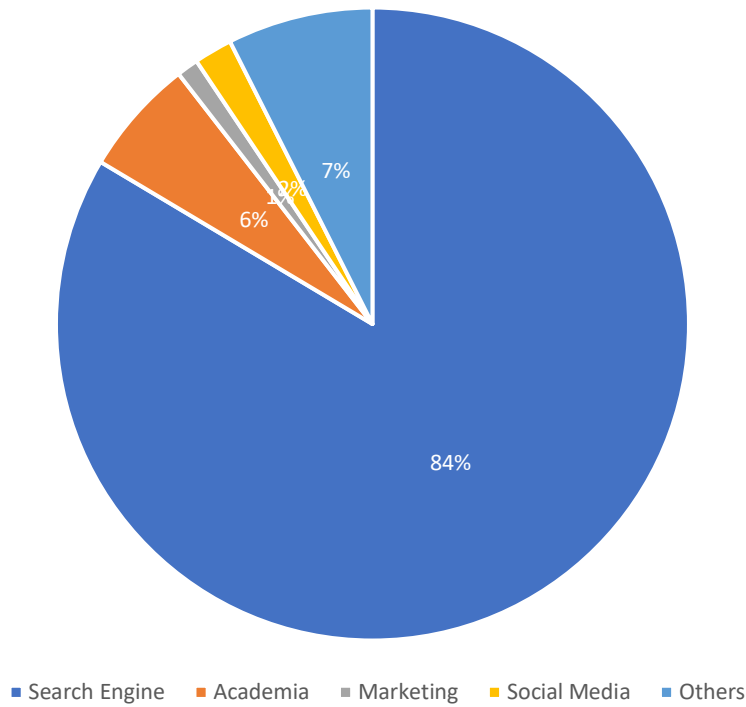


Table 21 and related Figure 28 shows that the main referrer for the app are general search engines, followed by link from other different websites (Category 'Others'). It is worthwhile to note that users are directed to the website in a major number when browsing websites related to the academic sector rather than via social media and third parties' websites, like Calvium and the 'Travel Man' show website.

LINKS

This subsection looks at links that visitors have been accessing after been directed there from the Hidden Florence website.

Table 22 Website links (2013-2018) (Source: WordPress analytics)

Main Links (Top 12)		Total clicks	Percentage
WordPress.com Media	<i>SM</i>	2129	40%
itunes.apple.com	<i>M</i>	939	18%
play.google.com	<i>M</i>	417	8%
tavernsproject.com	<i>A</i>	312	6%
youtube.com	<i>M</i>	231	4%
Twitter	<i>SM</i>	97	2%
humanities.exeter.ac.uk	<i>A</i>	96	2%
calvium.com	<i>M</i>	88	2%
www.stg.brown.edu	<i>A</i>	81	2%
brunelleschi.imss.fi.it	<i>M</i>	74	1%
earlymoderncommunities.org	<i>A</i>	53	1%
sbas.fi.it/english/musei/sanmarco	<i>M</i>	41	1%
en.comune.fi.it	<i>M</i>	39	1%
www.bath.ac.uk	<i>A</i>	30	1%
Other links	-	636	12%

Category legend: *M*= Marketing; *A*= Academia; *SM*= Social Media

Figure 29 Distribution of users' referrers by category (2013-2018)

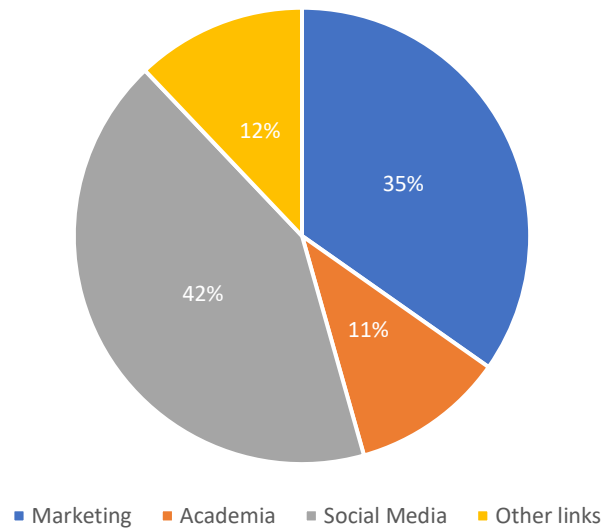


Table 22 and related Figure 29 shows that the majority of website users are redirected to social media websites (Category 'Social Media'), followed by links to marketing websites (Category 'Marketing'). It is worthwhile to note a good amount of users are then directed to websites related to the academic sector.

GEOGRAPHICAL DISTRIBUTION OF THE USERS

This subsection looks at the geographical distribution of the users of the Hidden Florence website.

Table 22 Geographical distribution of the website users (2013-2018) (Source: WordPress analytics)

Main Countries*	Number of visitors	Percentage of Total visitors
United Kingdom	10789	28%
United States	9695	26%
Italy	7207	19%
Canada	2558	7%
Australia	1204	3%

* Top 5 most popular countries

Figure 29 Geographical distribution of the website users (2013-2018)

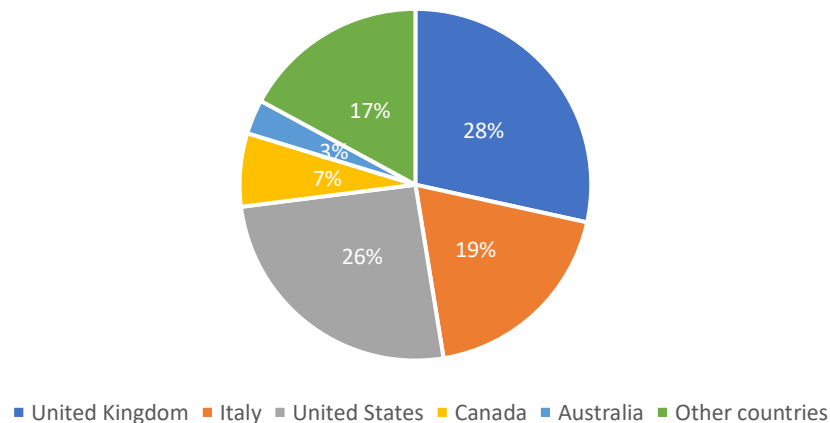


Table 22 and related Figure 29 shows that the top five most popular countries for the website visitors are UK, USA, Italy, Canada, and Australia. This result confirms data previously observed for the geographical distribution of the users of the app (see Table 2, p.8).

USERS' ENGAGEMENT

This subsection looks at the data available for users' engagement with the website contents belonging to Group 1, 2, and 3. The analysis has been organized by year for the period from May 2013 to May 15th 2018.

Table 23 Users' engagement with website contents with previous year variations (Source: WordPress analytics)

	2013*	2014	2015	2016	2017	2018*	Total views
Group 1	1588	6656 (+319)	5477 (-17%)	5544 (+1%)	5890 (+6%)	1512 (-74%)	26667
Group 2	591	1443 (+142%)	1800 (+25%)	2239 (+24%)	2118 (-5%)	426 (-80%)	8617
Group 3	225	457	6135	809	514	147	8287

*Data for the Period 1 and 10 is partial since it not includes a semester but respectively eight months and three months.

Figure 30 Annual users' engagement with website contents (2013-2018)

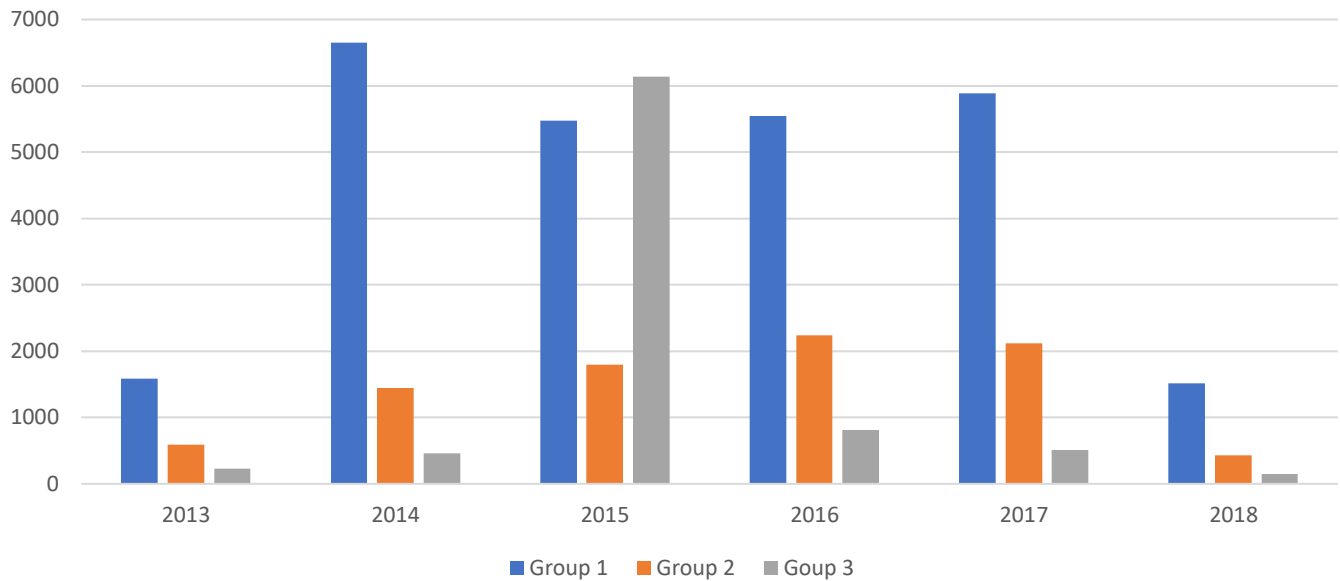
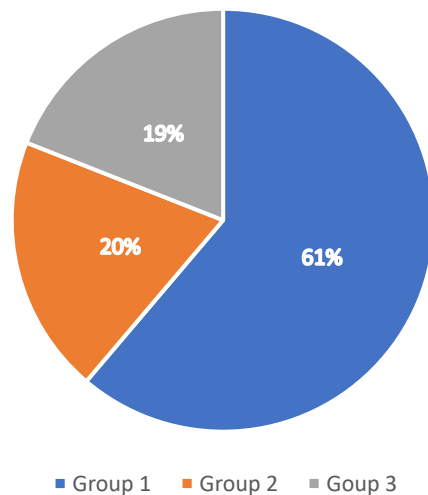


Figure 31 Users' engagement with website contents (2013-2018)



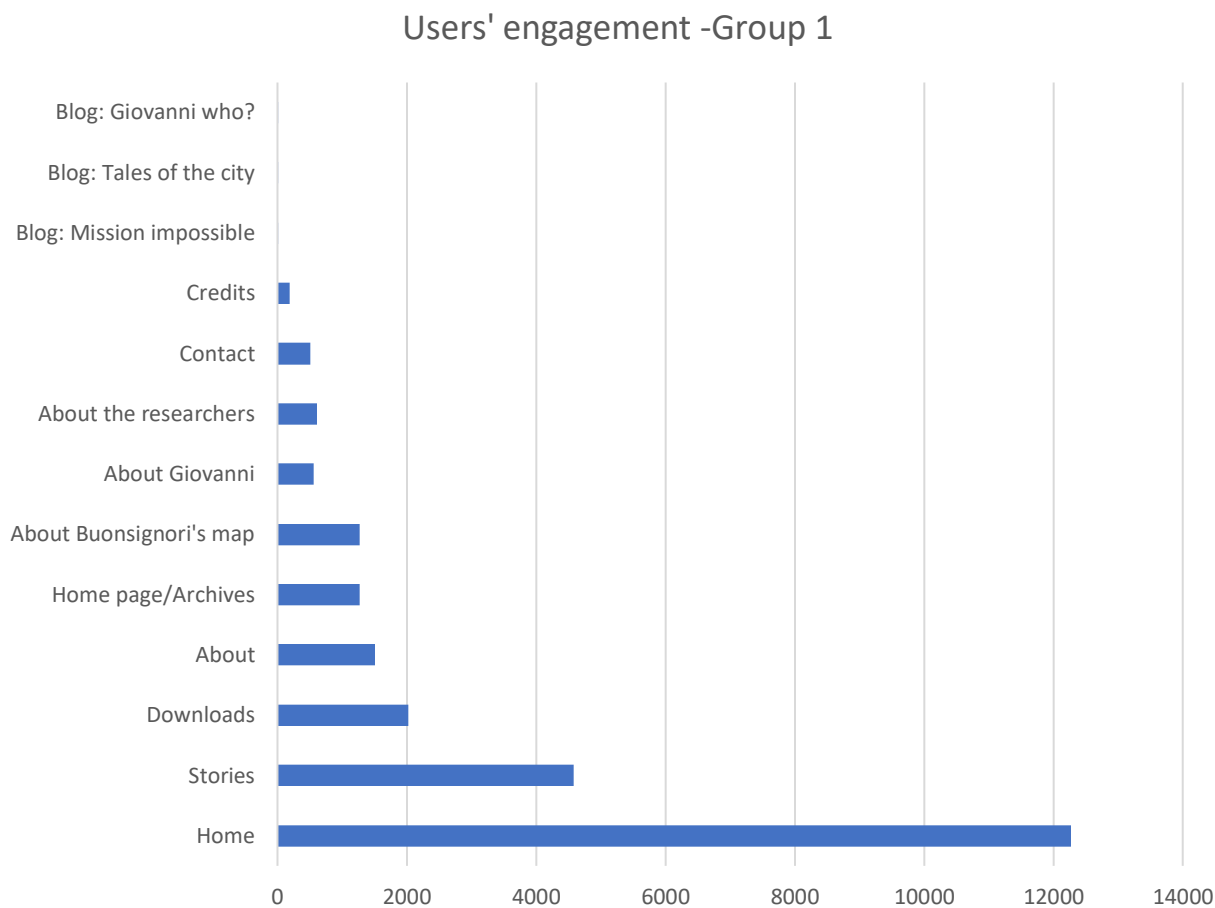
The analysis of Table 23 and Figures 30 and 31 shows that generally website users engage more with the contents from Group 1 where they can find information about the app and its creator. It is worthwhile to note that while contents related to the Central walk (Group 2) increase steadily, contents of S.Ambrogio walk instead had a sudden surge during the 2015 and then it started to slowly drop.

Table 24 Users' engagement with website contents of Group 1 (Source: WordPress analytics)

<i>Group 1</i>	2013*	2014	2015	2016	2017	2018*	Total
Home	524	3526	2811	2641	2572	202	12276
Stories	408	1071	888	1064	1094	59	4584
Downloads	147	599	385	495	374	22	2022
About	144	319	292	274	440	36	1505
Home page/Archive	114	395	310	256	181	10	1266
About Buonsignori	72	251	265	277	377	30	1272
About Giovanni	51	113	122	101	164	6	559
About the researchers	50	126	138	130	152	14	610
Contact	40	114	77	123	145	13	512
Credits	34	39	50	22	46	0	191
Blog: Mission impossible	2	1	1	1	0	0	5
Blog: Tales of the city	2	1	2	1	0	0	4
Blog: Giovanni who?	0	0	0	1	1	0	2

*Data for the 2013 and 2018 is partial since it not includes a semester but respectively eight months and three months.

Figure 32 Users' engagement with website contents of Group 1



From the analysis of Table 23 and Figure 32 it is possible to appreciate that the most visited contents of the Group 1 are the home page, the 'Stories' page, the download section and the page about the project. It is interesting to observe that, besides the general browsing of the website, many visitors seem to be particularly interested into discover more about the Buonsignori's map used for the app.

Table 24 Users' engagement with website contents of Group 2 (Source: WordPress analytics)

<i>Group 2</i>	2013*	2014	2015	2016	2017	2018*	Total
Bridging the Arno	99	300	219	286	320	11	1235
Politics and the piazza	52	88	97	144	166	4	551
Crime and Punishment	140	406	755	737	753	71	2862
Merchants and workers	85	157	135	180	171	8	736
Performance and patronage	51	68	77	105	100	4	405
Sex and the city	61	213	303	386	281	12	1256
Craft work	29	51	60	95	78	3	316
Women in the streets	48	98	81	120	106	3	456
Palaces and pavements	26	62	73	105	86	5	357

* Data for the 2013 and 2018 is partial since it not includes a semester but respectively eight months and three months.

Figure 33 Users' engagement with website contents of Group 2

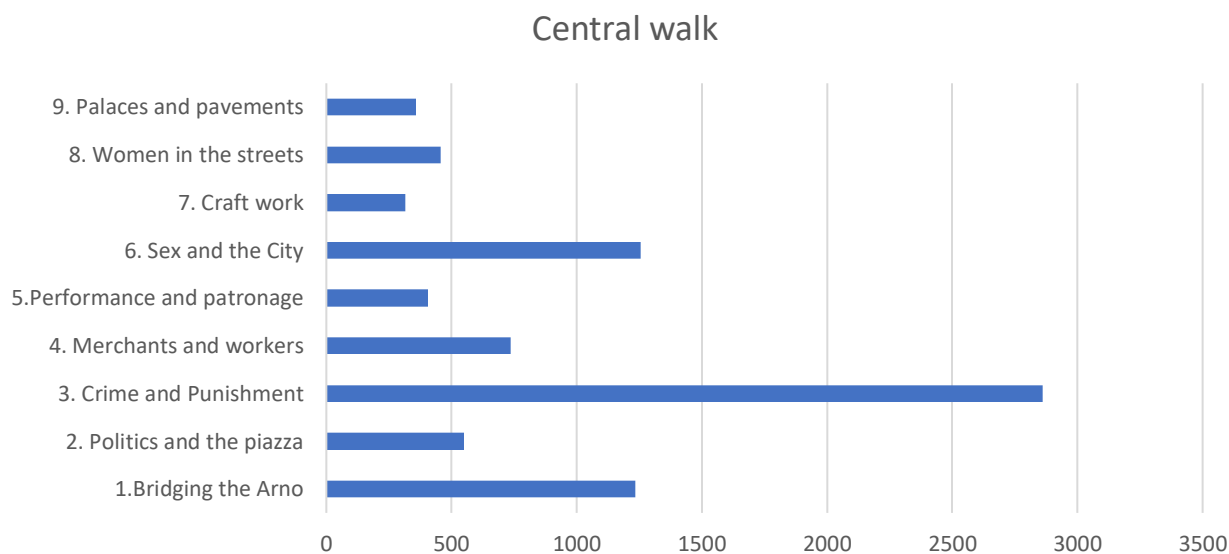
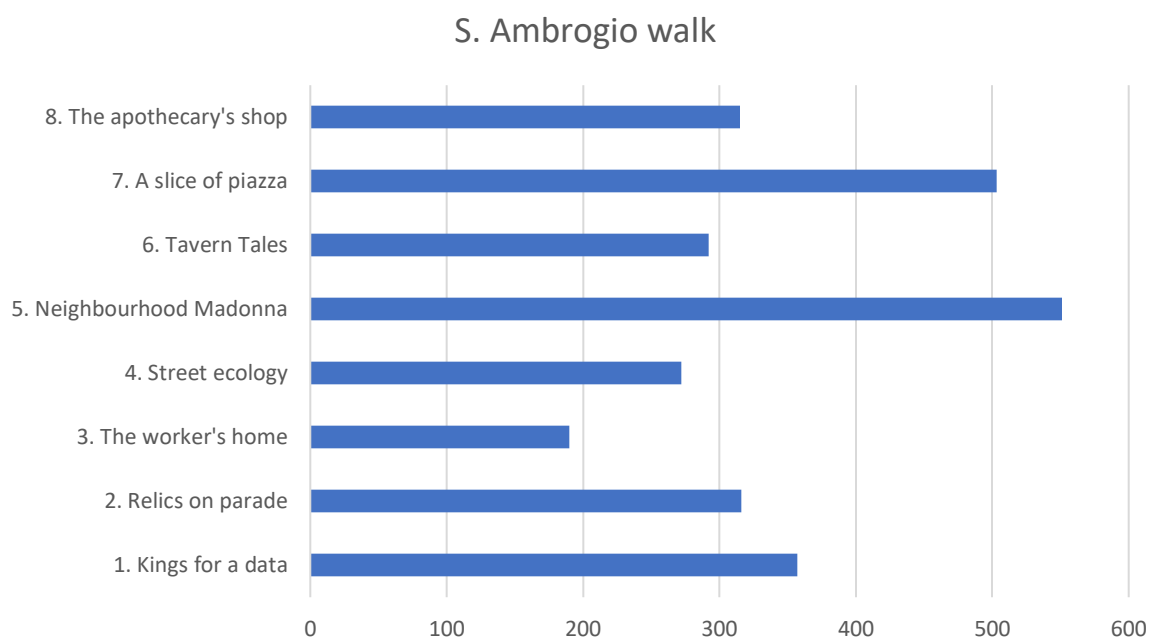


Table 25 Users' engagement with website contents of Group 3 (Source: WordPress analytics)

<i>Group 3</i>	2013*	2014	2015	2016	2017	2018*	Total
King for a day	53	67	62	103	66	6	357
Relics on parade	32	56	74	101	50	3	316
The worker's home	15	35	43	65	30	2	190
Street ecology	20	34	74	104	38	2	272
Neighbourhood Madonna	31	62	104	186	157	11	551
Tavern tales	32	53	54	95	56	2	292
A slice of piazza	21	91	126	138	117	10	503
The apothecary's shop	21	59	76	98	57	4	315

*Data for the Period 1 and 10 is partial since it not includes a semester but respectively eight months and three months.

Figure 34 Users' engagement with website contents of Group 3



The analysis of the data provided by table 24 and 25 and related figures 33 and 34 shows that website visitors are generally interested into the extra contents for the two walks offered by the app. Generally, the first contents within each group are the ones more accessed. The first eye-catching data is the remarkable volume of website users visiting the page ‘Crime and punishment’ (Group 2). Moreover, it is possible to appreciate that website visitors seem to find more appealing contents with reference to physical place in Florence (i.e. ‘Neighbourhood Madonna’) and those with engaging title (i.e. ‘Sex and the city’ and ‘A slice of piazza’)

SEARCH TERMS

This subsection looks at data for search terms used by users to find the website.

Table 26 Most popular search terms for the website (2013-2018) (Source: WordPress analytics)

Hidden Florence	Hidden Florence app	www.hiddenflorence.org	Crime and Punishment in Renaissance Florence	Buonsignori Florence map	Redirect from app ‘Stories’ pages
184	14	8	57	5	50

Figure 35 Word cloud for most popular search terms



Looking at Table 24 it is clear that the most popular search term is 'Hidden Florence'. Whilst many website visitors are redirected here from the app, it is noteworthy to notice that many users are found the website searching for key words like 'crime', 'punishment', and 'Renaissance'. This is also confirmed by the high number of users accessing the website page 'Crime and Punishment' of the Group 2 (see Table 24 and Figure 32). From the analysis of Figure 29 showing the key words that have been more frequently used to search for the website, it is possible to observe that words such as 'renaissance', 'crime', and 'florence' are the most popular search term for the website.

SECTION 4. HIDDEN FLORENCE YOUTUBE CHANNEL

Historical Overview

This section looks at the analytics available for the Hidden Florence YouTube channel for the period from March 5th 2013 (date of creation) to March 18th 2018. The videos currently available on YouTube channel are three (Hidden Florence Documentary of the App Project, Hidden Florence Promotional Film, and Hidden Florence 30 seconds Edit).

The first part of the section looks at the type of audience of the YouTube channel through the analysis of metrics such as total watch minutes, audience retention, playback locations, traffic source, devices. The second part focus instead on users' behaviour (number of subscribers, likes/dislikes/, comments, sharing).

As reported on the YouTube analytics website, some data presents temporal gaps, so the timeframe taken in consideration for each metric might vary.

Selected Figures

<i>Total watch time</i>	<i>Average view duration</i>	<i>Total views</i>	<i>Videos in playlists</i>	<i>Subscribers</i>	<i>Likes</i>	<i>Comments</i>	<i>Shares</i>
6288 minutes	2:09 minutes	2916	9	6	18	2	19

Type of Audience

Selected Figures (Source: YouTube analytics)

	Video length (minutes)	Watch time (minutes)	Views	Average view duration (minutes)	Average percentage viewed
Hidden Florence Documentary of the App Project	5.27	4761	1901	2.5	47.55
Hidden Florence Promotional film	3.12	1462	845	1.7	55.51
Hidden Florence 30 Second Edit	0.52	66	170	0.4	75.03

TOTAL WATCH MINUTES (March 5th 2013- March 18th 2018)

Figure 36 Total monthly growth of YouTube videos watch time (minutes) (Source: YouTube analytics)

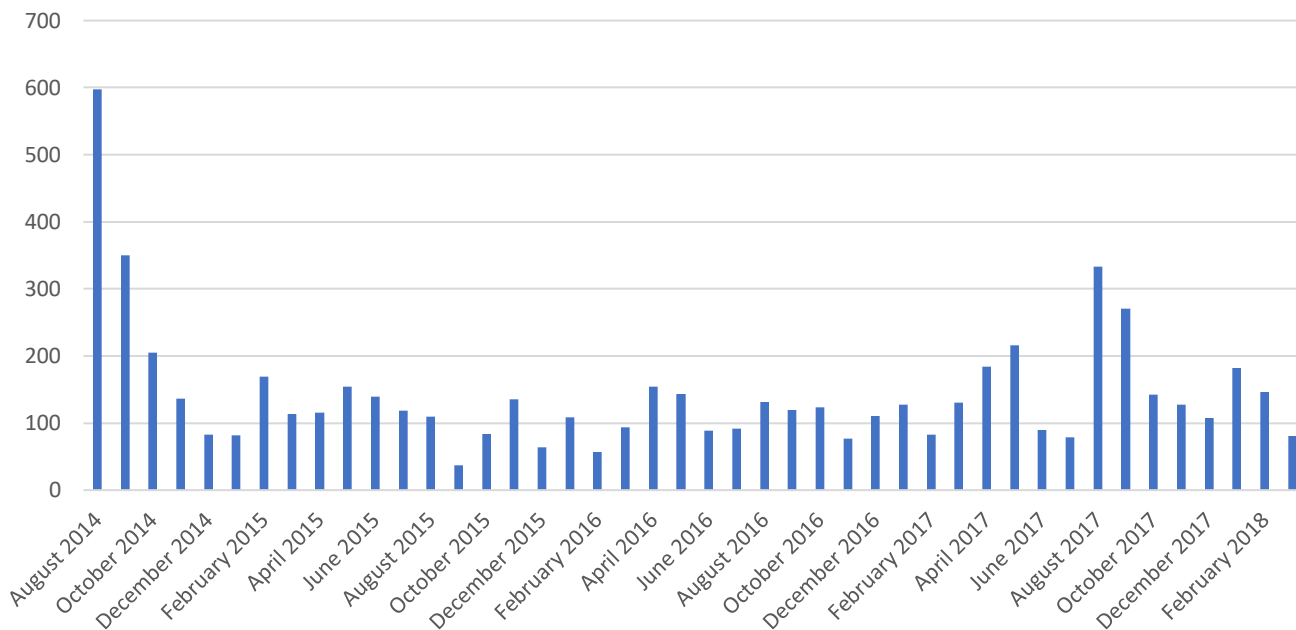
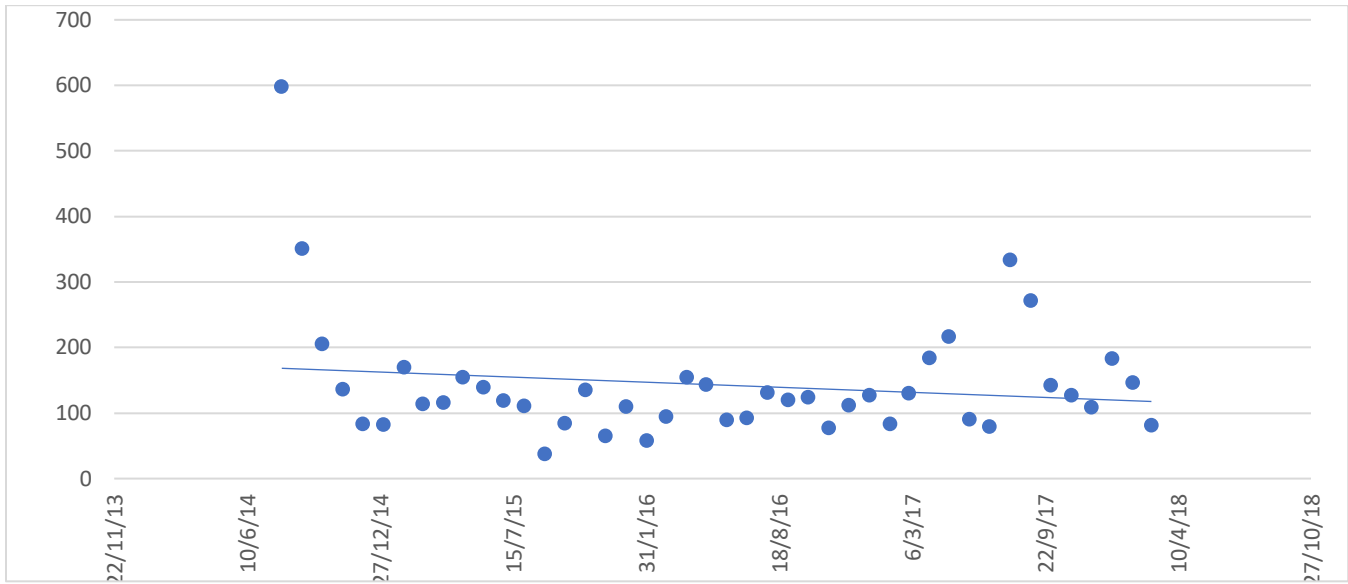


Figure 37 Total monthly growth of the YouTube videos watch views and general trend line



TOTAL VIEWS (March 5th 2013- March 18th 2018)

Figure 38 Total monthly growth of YouTube videos views (Source: YouTube analytics)

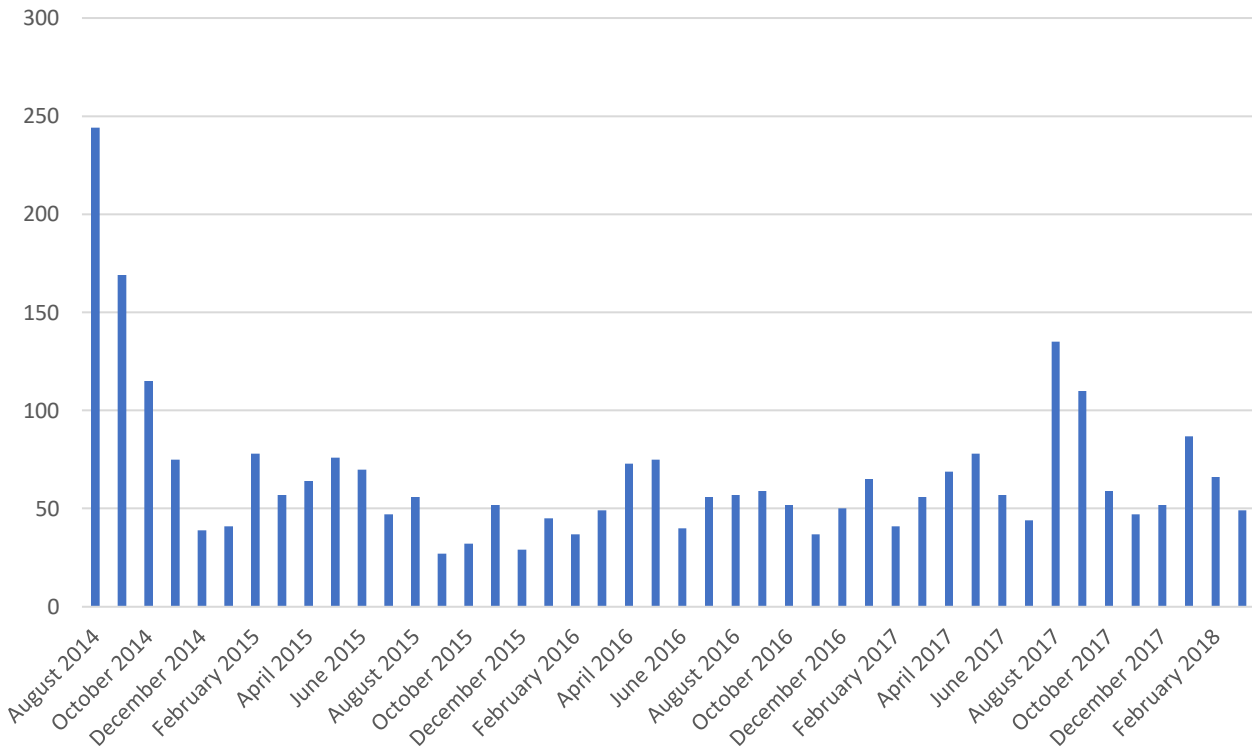
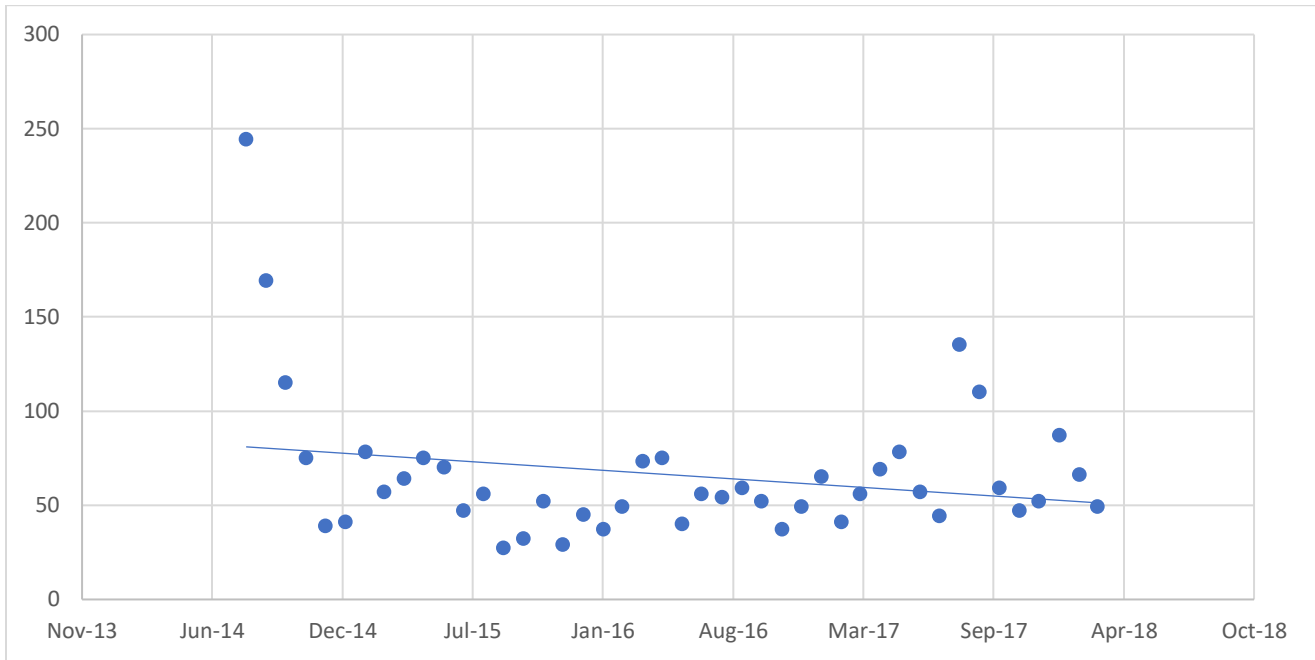


Figure 39 Total monthly growth of the YouTube videos views and general trend line



TOTAL PERCENTAGE OF VIDEOS VIEWS (March 5th 2013- March 18th 2018)

Figure 40 Total monthly growth of percentage of Youtube videos views (Source: YouTube analytics)

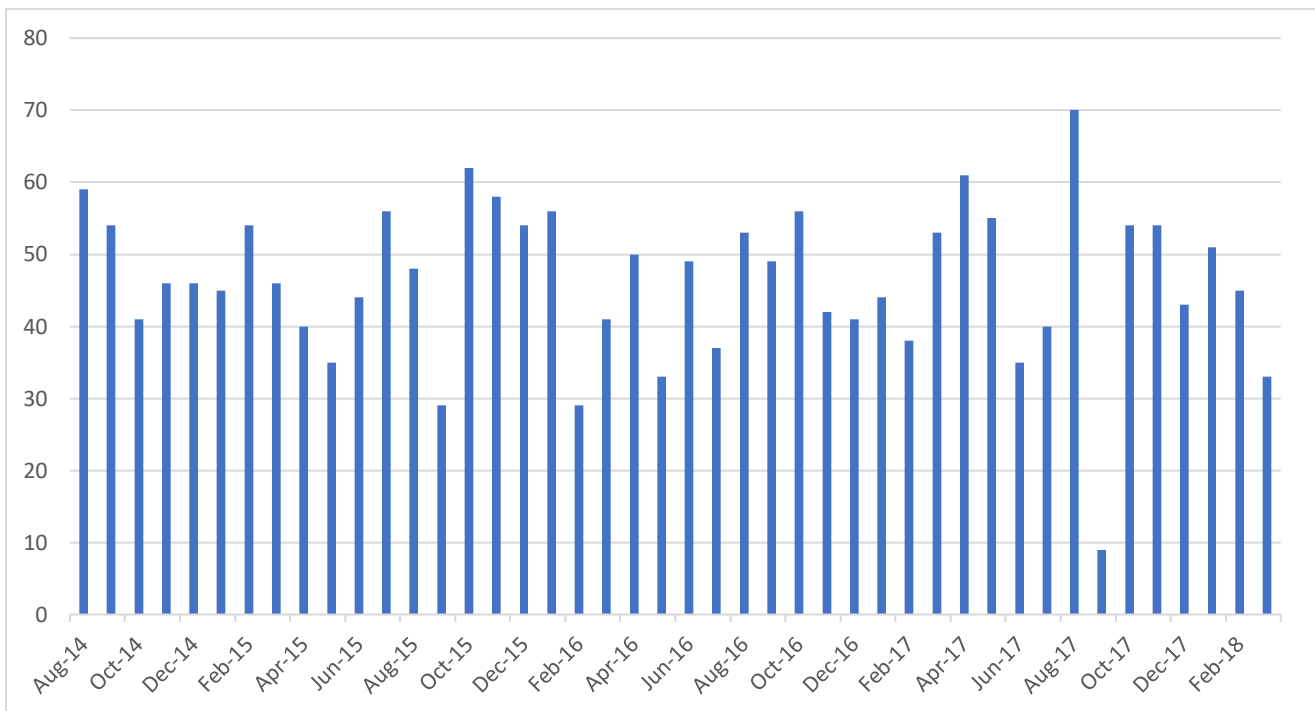
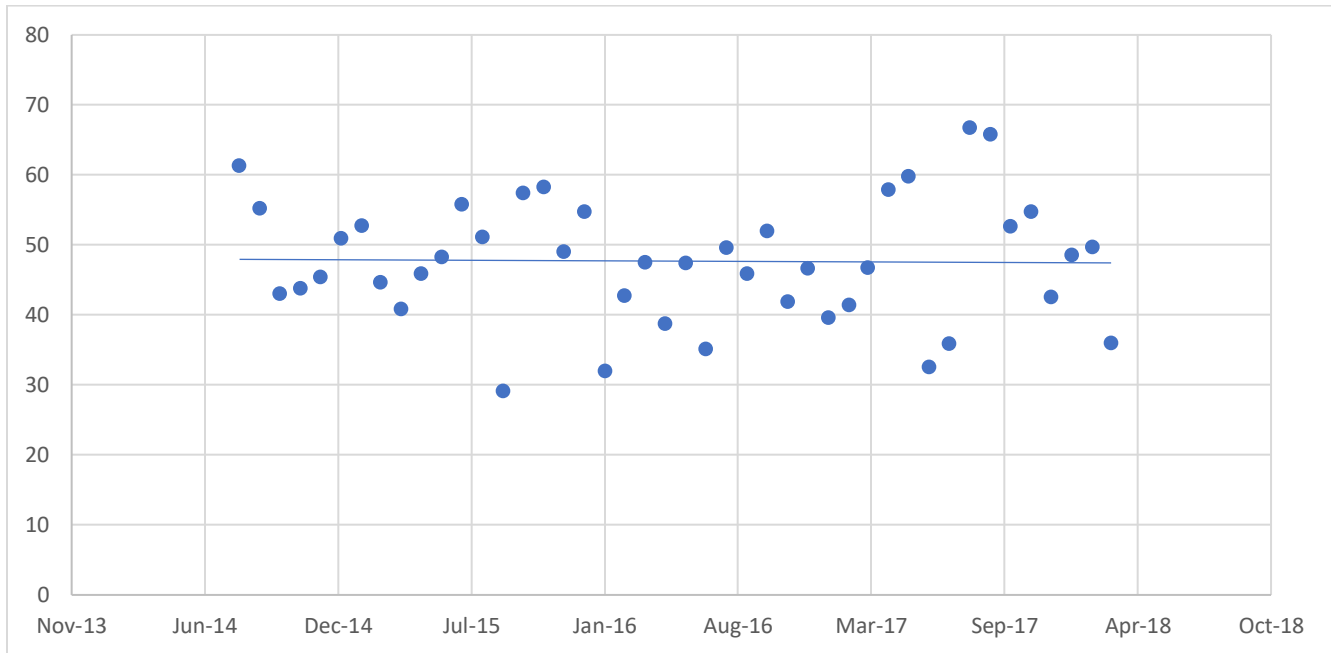


Figure 41 Total monthly growth of the percentage of YouTube videos views and general trend line



Overall, the table of 'Selected Figures' and Figures 36-41 shows that the general trend for watching time, total views and percentage of videos watched during views are slightly decreasing, except the percentage of YouTube videos views which appears to be stable (Figure 40 and 41). It is worthwhile to observe that the decreasing trend is actually in contrast with data gathered from app which shows a general increase of total users of the mobile application.

LANGUAGE (March 5th 2013- March 18th 2018)

This subsection looks at the language in which the YouTube channel visitors access the videos.

Selected Figures (Source: YouTube analytics)

	Watch Time (minutes)	Views	Average view duration (minutes)	Average percentage viewed
Original Language	3431	1563	2.2	49%
Unknown	2857	1353	2.1	51%

Figure 42 Total watch time (minutes) in original language and not

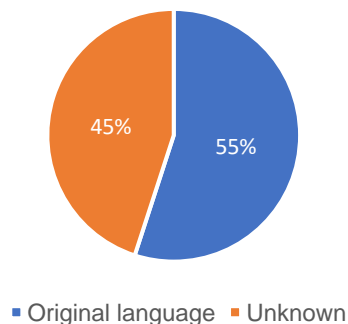


Figure 43 Total views in original language and not

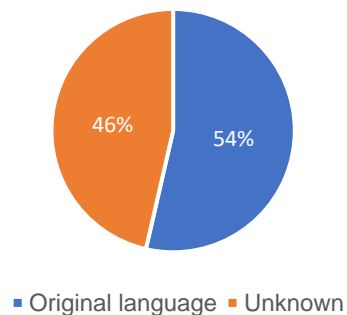


Figure 44 Average view duration in original language and not

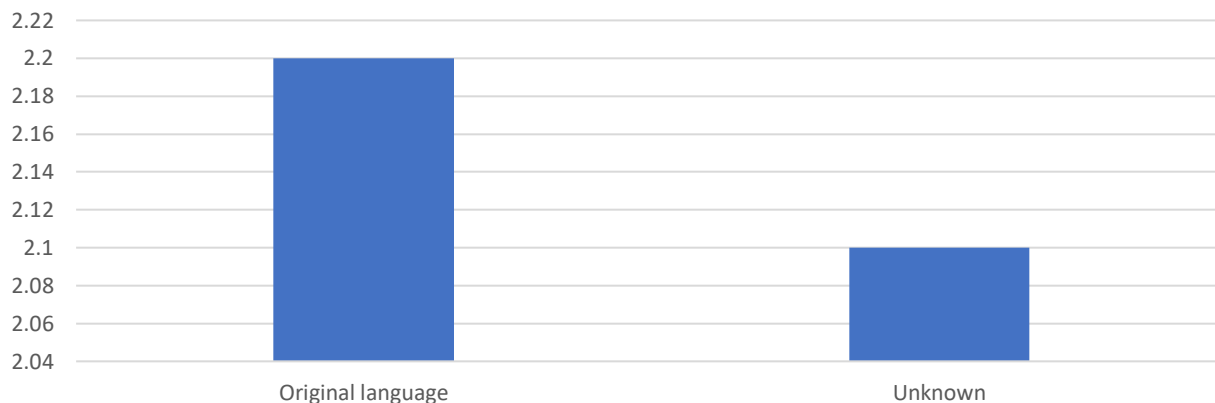
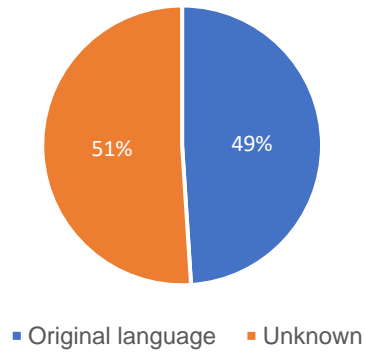


Figure 45 Average percentage view in original language and not



GEOGRAPHICAL DISTRIBUTION YOUTUBE CHANNEL USERS (March 5th 2013- March 18th 2018)

This subsection looks at the language in which the YouTube channel visitors access the videos.

Table 27 Geographical distribution of the YouTube channel users (Source: YouTube analytics)

Main Countries*	Watch time (minutes) and percentage	Views and percentage
United Kingdom	1923 (31%)	860 (30%)
United States	1057 (17%)	441 (15%)
Italy	997 (16%)	433 (15%)
Canada	307 (5%)	136 (5%)
Australia	279 (4%)	119 (5%)

* Top 5 most popular countries

Figure 46 Geographical distribution of YouTube channel

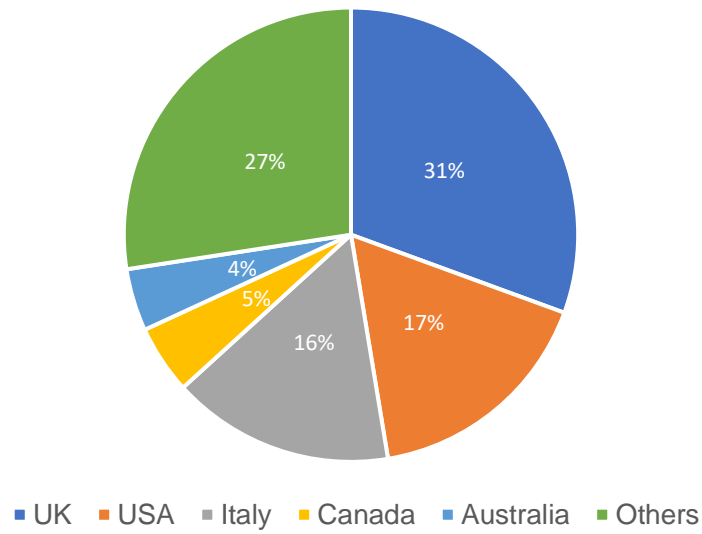
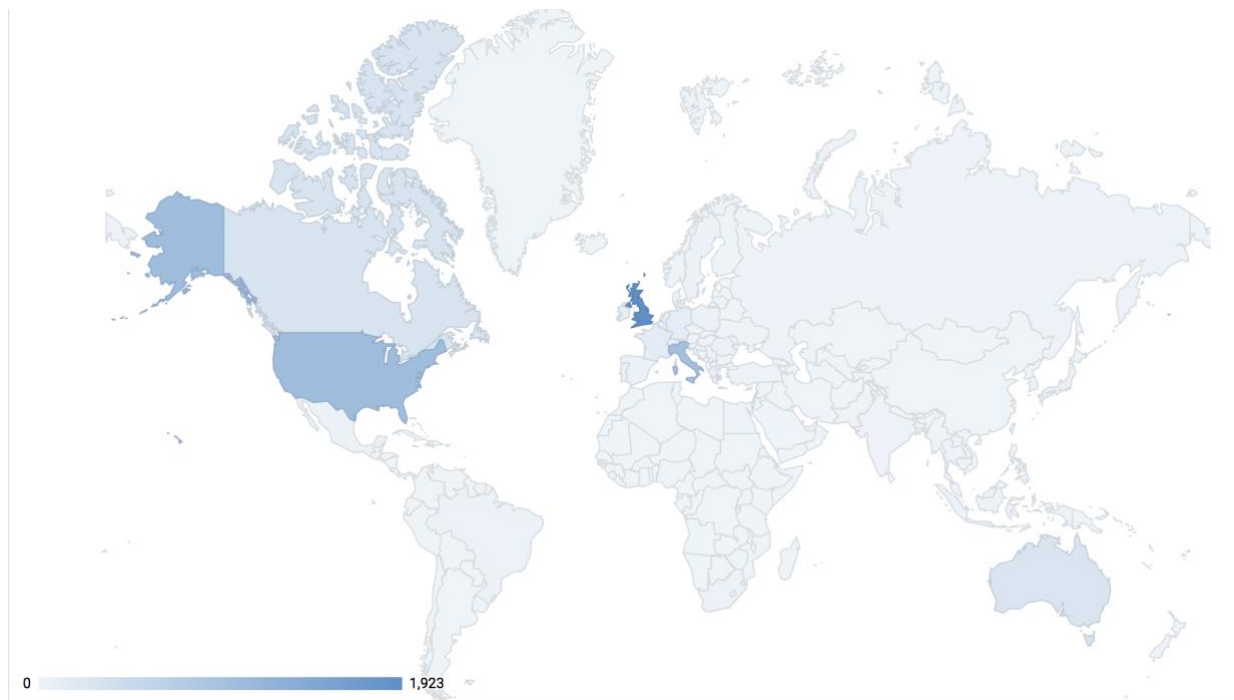


Figure 47 Geographical distribution of YouTube channel (Source: YouTube analytics)



TRAFFIC SOURCE (March 5th 2013- March 18th 2018)

This subsection looks the traffic source for users of the YouTube channel.

Table 28 Traffic sources (Source: YouTube analytics)

	Watch time (minutes)	Views	Average view duration	Average percentage viewed
External	2896	1237	2.3	53.4%
YouTube search	1243	692	1.8	38.39%
Direct or unknown	704	256	2.8	61.71%
Unknown embedded player	590	234	2.5	68.31%
Suggested videos	298	184	1.6	34.13%
Other YouTube features	227	141	1.6	44.96%
External app	154	53	2.9	63.77%
Channel page	93	86	1.1	31.41%
Browse features	79	32	2.5	53.56%
Playlists	8	3	2.8	52.4%
End screens	2	1	2.5	47.1%

Figure 48 Total watch time (minutes) for traffic sources

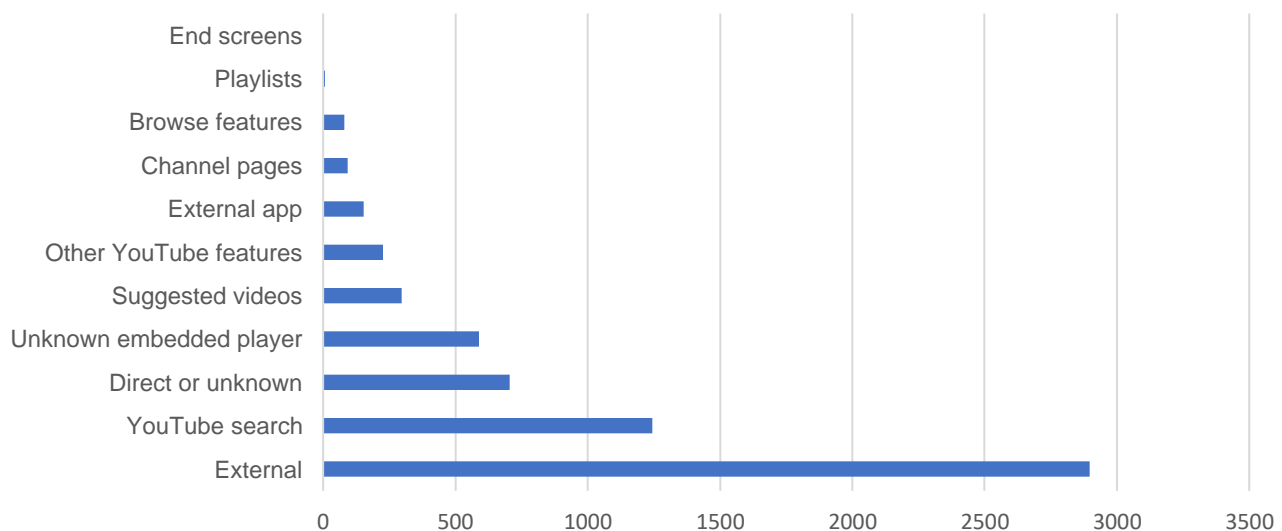


Figure 49 Total views for traffic sources

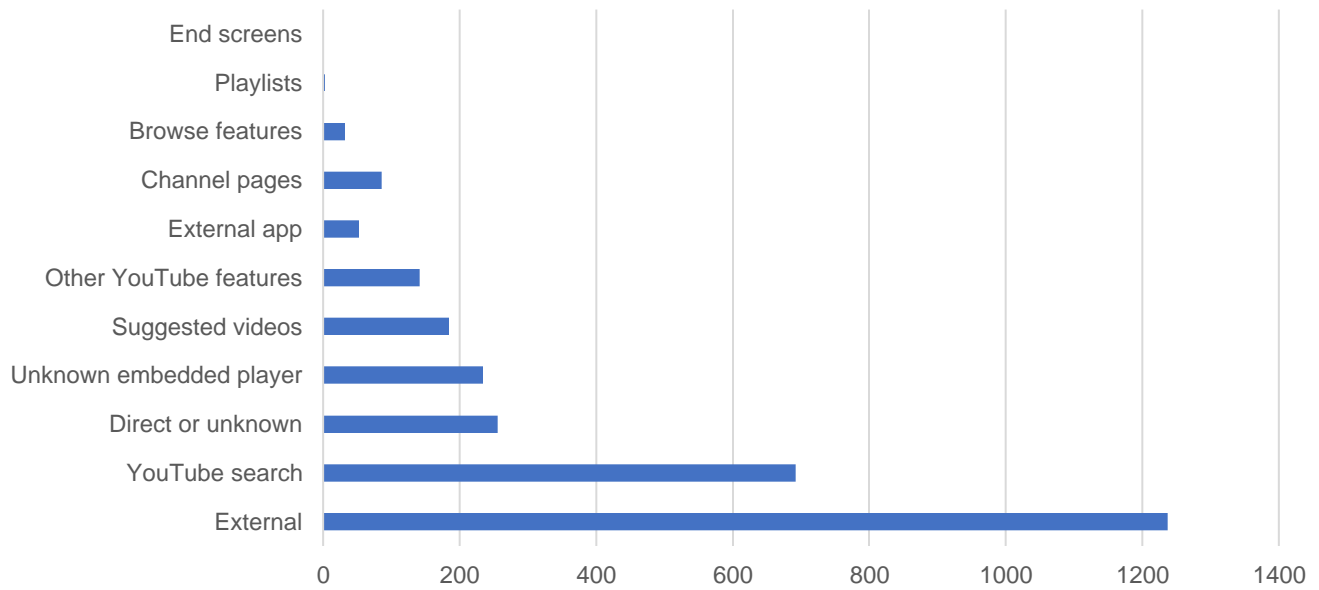


Figure 50 Average view duration (minutes) for traffic sources

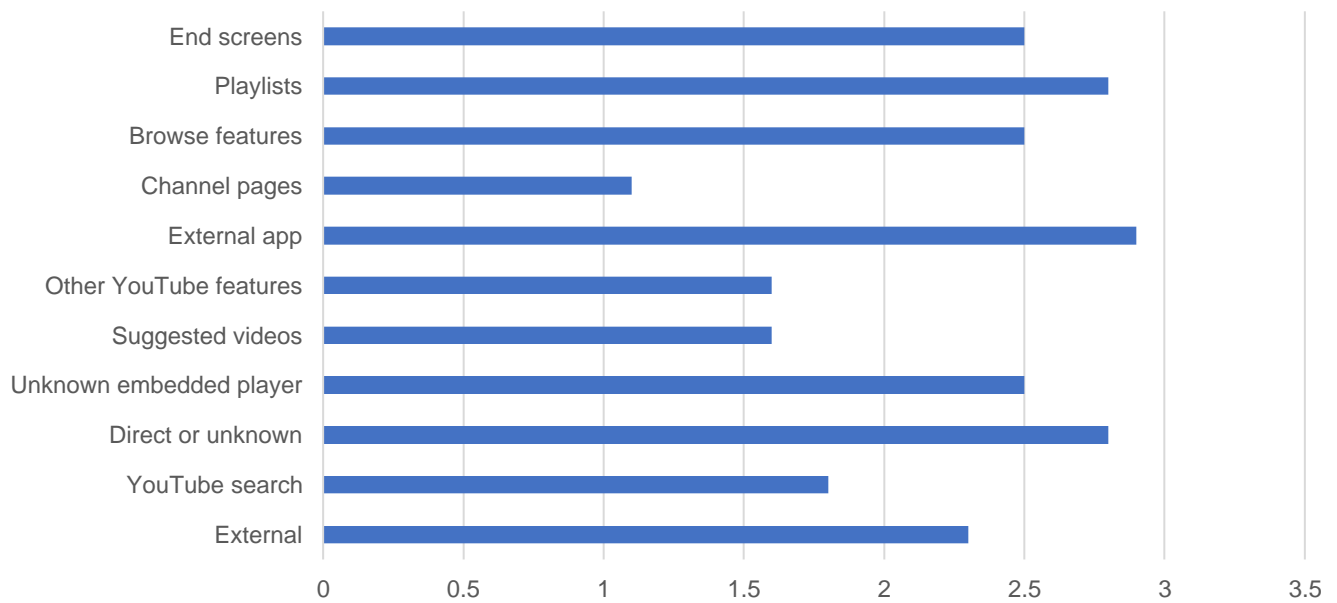
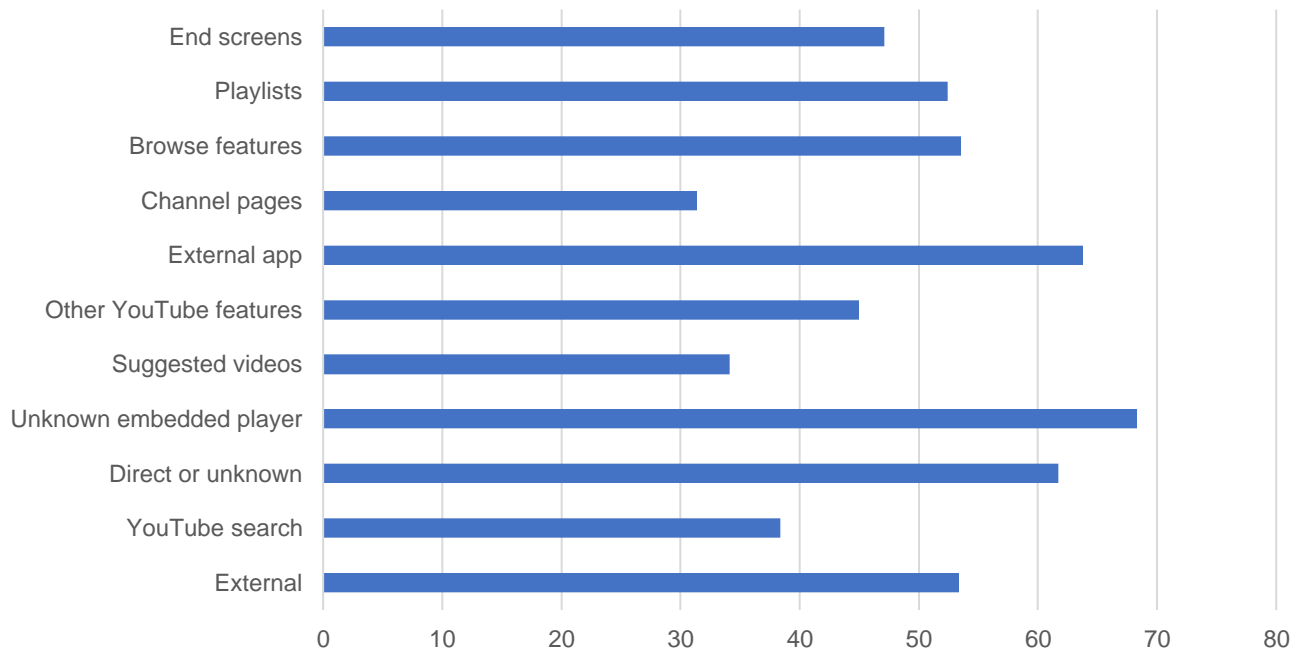


Figure 51 Average percentage viewed of traffic sources



Figures 48 and 49 show that the most popular traffic source from which users are directed to the YouTube channel is the 'External'. From the analysis of figures 50 and 51 is possible to observe instead that users redirected to the YouTube channel from the app ('External app) or from a direct search of the videos ('Direct or unknown') are more likely to engage for longer timeframe and in a more complete way with the contents.

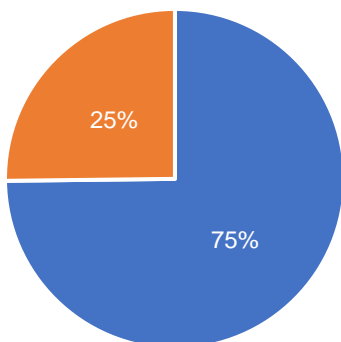
PLAYBACK LOCATIONS (March 5th 2013- March 18th 2018)

This subsection looks at playback location for the videos on the YouTube channel to understand which are the page or site on which the video was viewed.

Table 29 Playback locations (Source: YouTube analytics)

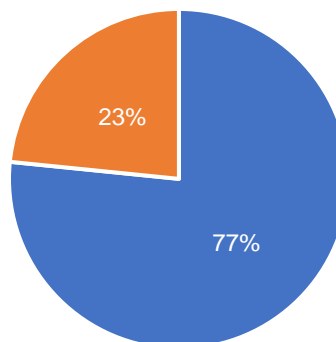
	Watch time (minutes)	Views	Average view duration (minutes)	Average percentage viewed
YouTube watch page	4709	2236	2.1	46%
Embedded in external websites and app	1585	683	2.3	65%

Figure 52 Total watch time on YouTube watch page and in external websites/apps



- YouTube watch-page
- Embedded in external websites and apps

Figure 53 Total views on YouTube watch page and in external websites/apps



- YouTube watch-page
- Embedded in external websites and apps

Figure 54 Average view duration on YouTube watch page and in external websites/apps

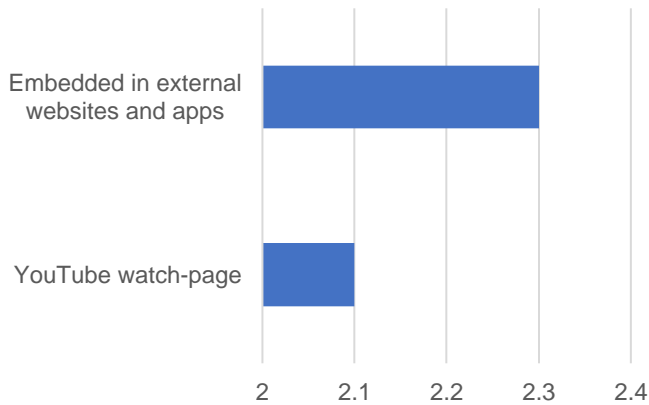
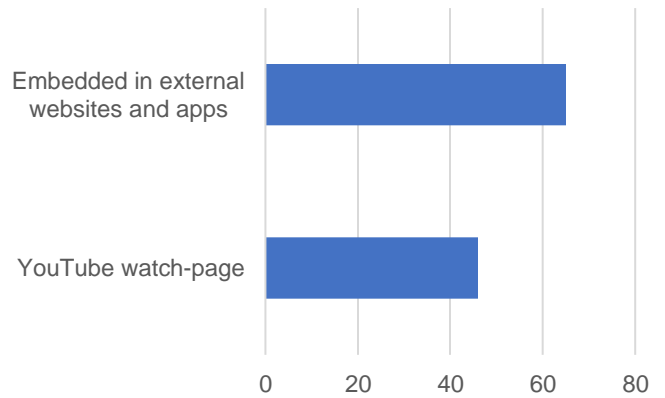


Figure 55 Average percentage viewed on YouTube watch page and in external websites/apps



From the analysis of figures 52 and 53 it is possible to observe that the majority of the viewers have watched the videos on the YouTube watch page. Nevertheless, figures 54 and 55 shows that viewers who have watched the videos on embedded in external websites and apps tend to generally engage more with the videos contents. Indeed, they have spent almost the double of the time to watch the videos and they have also watch a single video for a longer time compared to viewers on YouTube channel.

Users' behaviour

GENERAL AUDIENCE RETENTION (March 5th 2013- March 18th 2018)

This subsection looks at general audience retention, or how long the viewers are watching the video.

Selected Figures (Source: YouTube analytics)

	Watch Time (minutes)	Average time (minutes)	Average percentage viewed	Views	Likes	Shares
2014	1372	2.1	53.19%	642	5	5
2015	1319	2.1	48.85%	629	5	4
2016	1299	2.1	44.48%	630	0	2
2017	1889	2.3	51.91%	813	5	4
2018	415	2	45.63%	205	3	4
<i>Total</i>	<i>6294</i>	<i>2.1</i>	<i>49%</i>	<i>2919</i>	<i>18</i>	<i>19</i>

Figure 56 Total watch time (minutes)

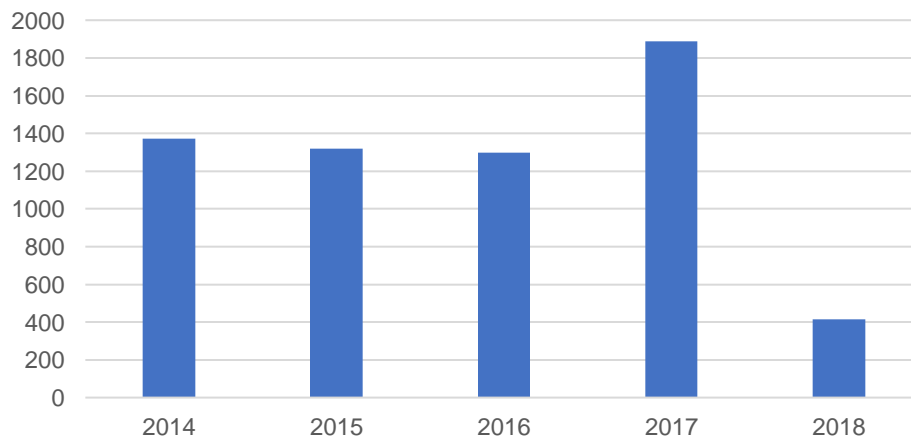


Figure 57 Average time (minutes)

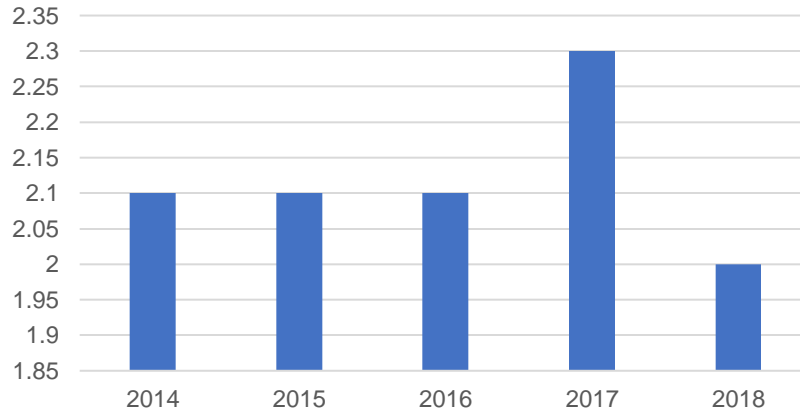


Figure 58 Average percentage viewed

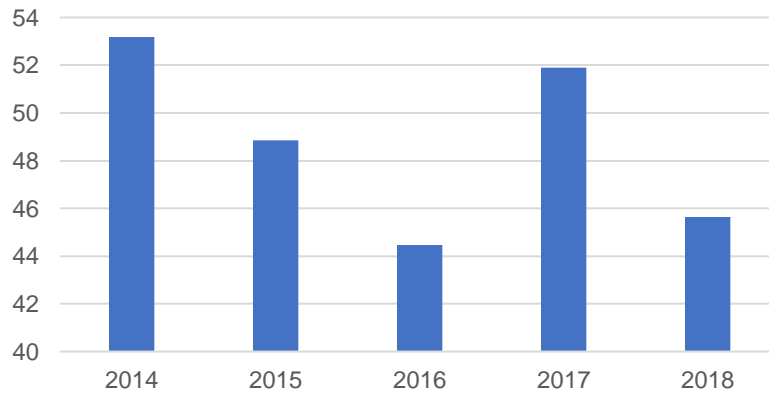


Figure 59 Total number of views

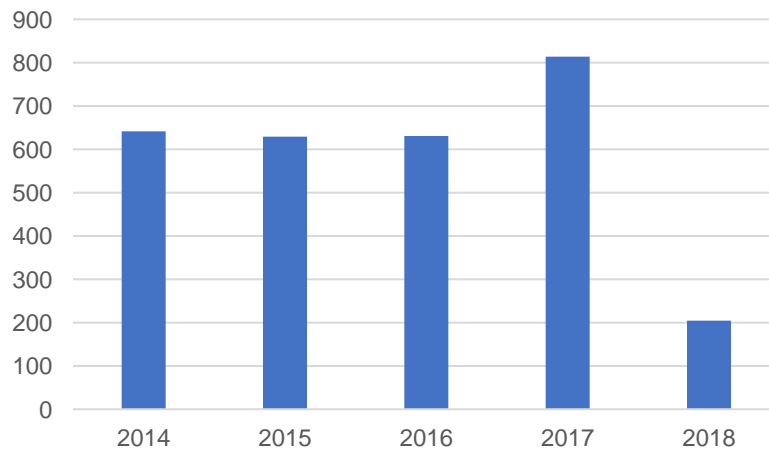


Figure 60 Total number of Likes

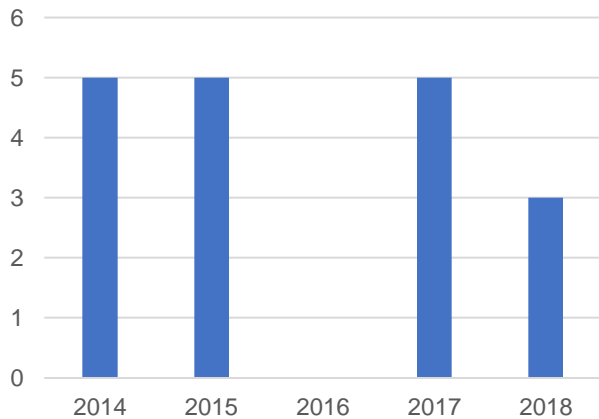
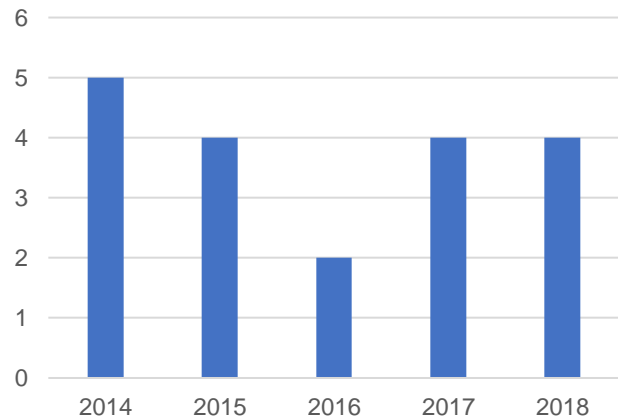


Figure 61 Total number of shares



Overall, from the analysis of figures 56 to 61 it is possible to observe that generally year 2017 represents the period in which the YouTube videos have more and longer views, more likes and more shares.

AUDIENCE RETENTION BY VIDEOS (March 5th 2013- March 18th 2018)

This subsection looks at audience retention, or how long the viewers are watching the video, for each single videos.

Selected Figures (Source: YouTube analytics)

	Video length	Watch time (minutes)	Average view duration (minutes)	Average percentage viewed	Likes	Shares
<i>Hidden Florence Documentary of the App Project</i>	5:27 minutes	4767	2.5	47.53%	16	15
<i>Hidden Florence Promotional film</i>	3:12 minutes	1462	1.7	55.45%	1	4
<i>Hidden Florence 30 Second Edit</i>	0:52 minutes	66	0.4	75.16%	1	0

Figures 62 Total watch time (minutes) for each videos

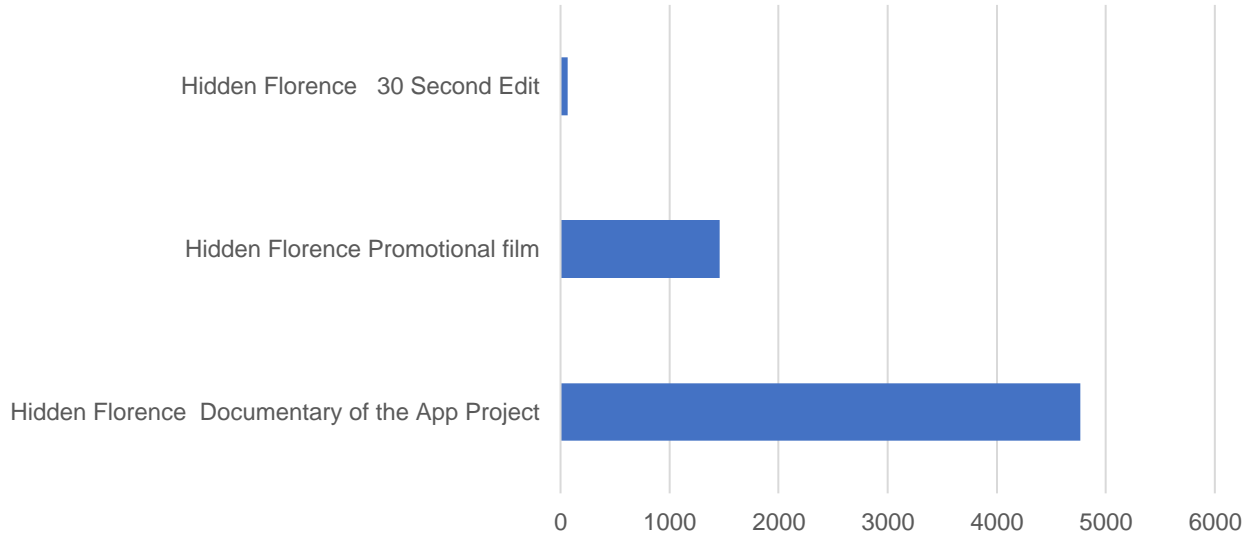


Figure 63 Average view duration (minutes) for each videos

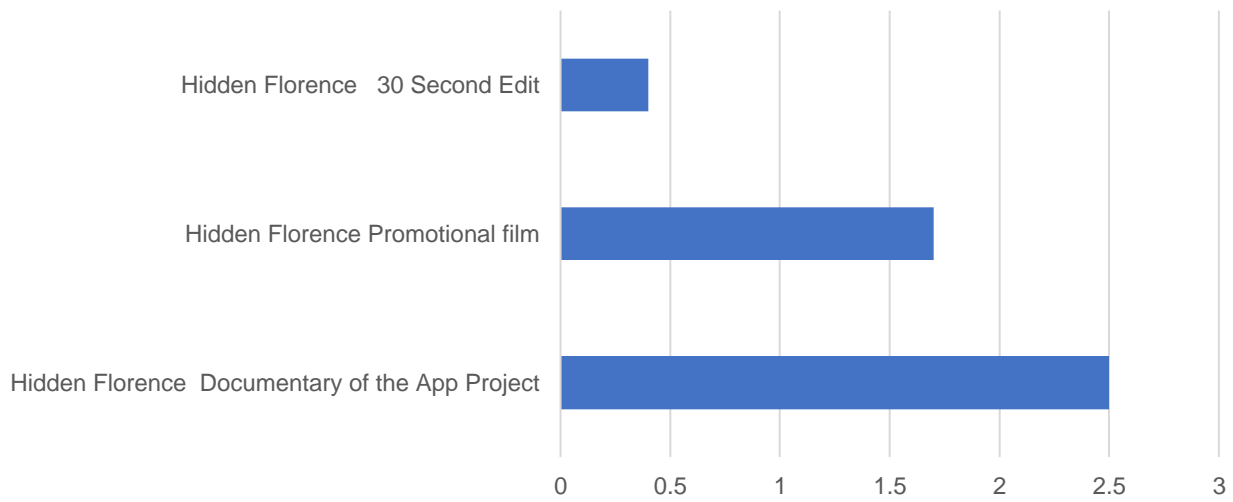


Figure 65 Average percentage viewed for each videos

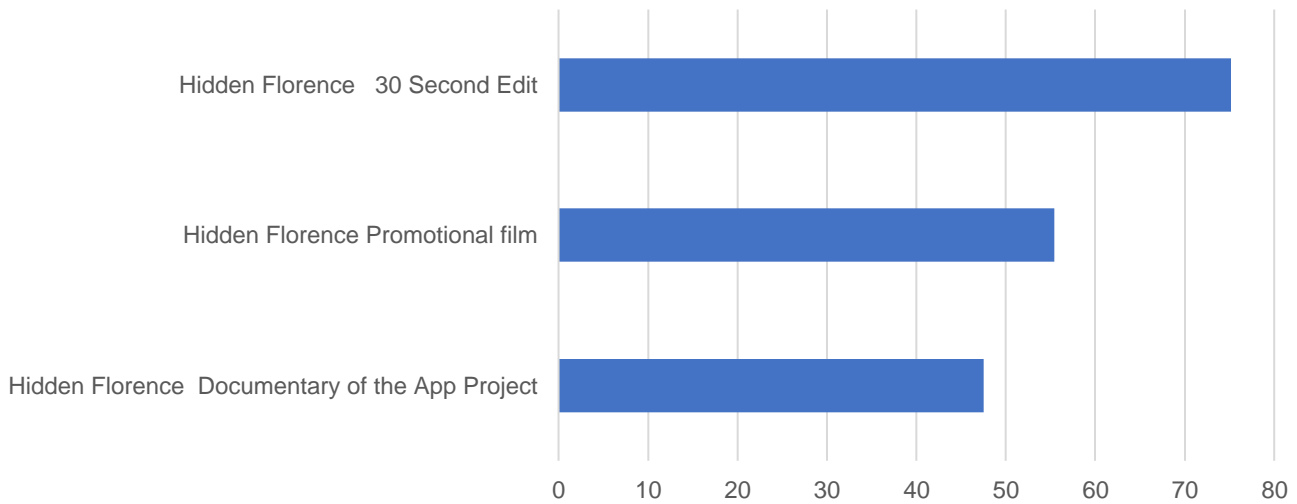


Figure 65 Total 'Likes' for each videos

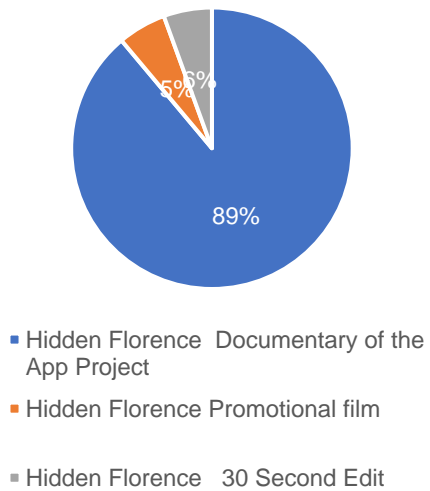
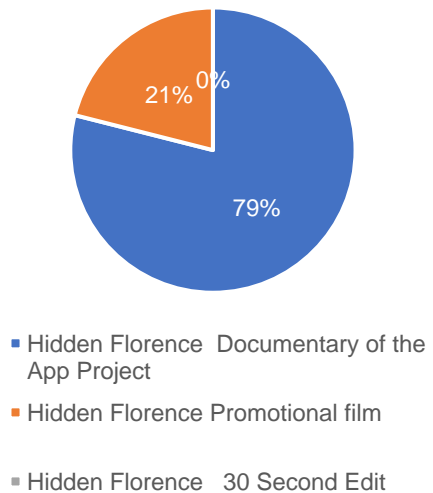


Figure 66 Total 'Shares' for each videos



From the analysis of Figure 62, 63, 65 and 66 it is possible to appreciate that the more watched video is 'Hidden Florence Documentary of the App Project', which is also the video receiving more 'Likes' and 'Shares'. It is worthwhile to note that looking at Figure 65 the 'Hidden Florence Documentary of the App Project' appears to be the videos that, in percentage, viewers watch less until the very end, whilst the 'Hidden Florence 30 Second Edit' is the video with most viewers completing the view. This is consistent with the very short duration of the latest video (52 seconds).

SUBSCRIPTION (March 5th 2013- March 18th 2018)

This subsection looks at the type of subscribers for the YouTube channel.

Selected Figures (Source: YouTube analytics)

	Watch Time	Views	Average view duration	Average percentage viewed	Likes
Subscribers	4 minutes	4	0.9 minutes	69%	1 (5%)
Not Subscribers	6285 minutes	2912	2.2 minutes	31%	17 (95%)

Figure 67 Total watch time for subscribers and not



Figure 68 Total views for subscribers and not

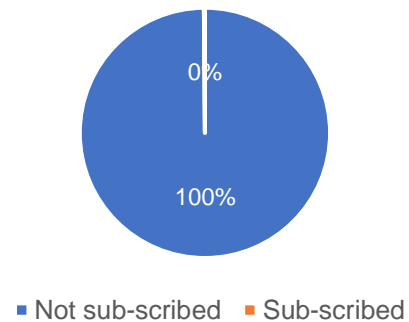


Figure 69 Average view duration (minutes) for subscribers and not

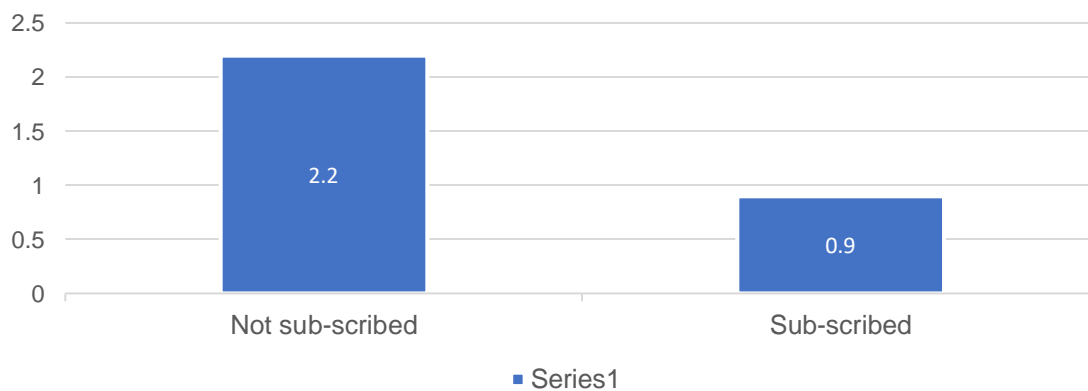


Figure 70 Average percentage view for subscribers and not subscribers

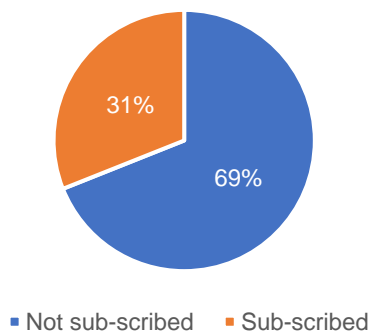
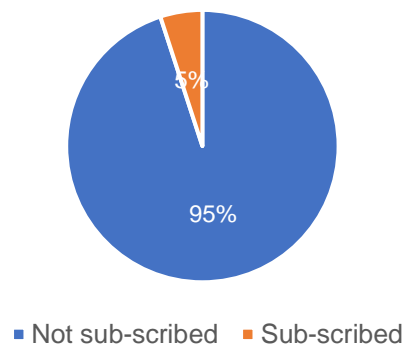


Figure 71 Percentage of 'Likes' for subscribers and not subscribers



Overall, from the analysis of figures 69 to 71 it is possible to observe that generally viewers who have not subscribed to the YouTube channel are more likely to watch videos more and for longer, as well as 'like' them more.

RATINGS (March 5th 2013- March 18th 2018)

This subsection looks at viewers' behaviours regard rating the videos ('Likes' and 'Dislikes').

NB: Data for "Dislikes" and "Likes" is not correctly tracked between 20 August 2013 and 23 August 2013 and between 13 January 2015 and 15 January 2015.

NB1: Data for "Subscription status" is not available before 10 December 2013.

Table 30 Ratings of the videos (Source: YouTube analytics)

	<i>Hidden Florence Documentary of the App Project</i>	<i>Hidden Florence Promotional film</i>	<i>Hidden Florence 30 Second Edit</i>
Like	16	1	1
Dislike	0	0	0

Figure 72 Ratings of the videos

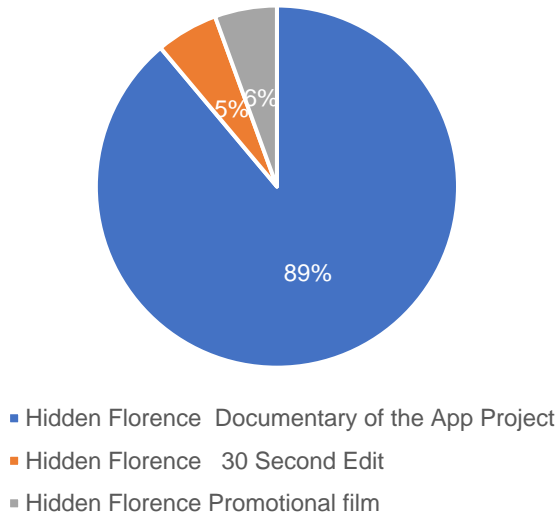


Table 31 Geography of the ratings of the videos (Source: YouTube analytics)

	United Kingdom	United States	Austria	Canada	Spain	Italy	Hong Kong	Taiwan
Like	6	6	1	1	1	1	1	1
Dislikes	0	0	0	0	0	0	0	0

Figure 73 Geography of the ratings of the videos

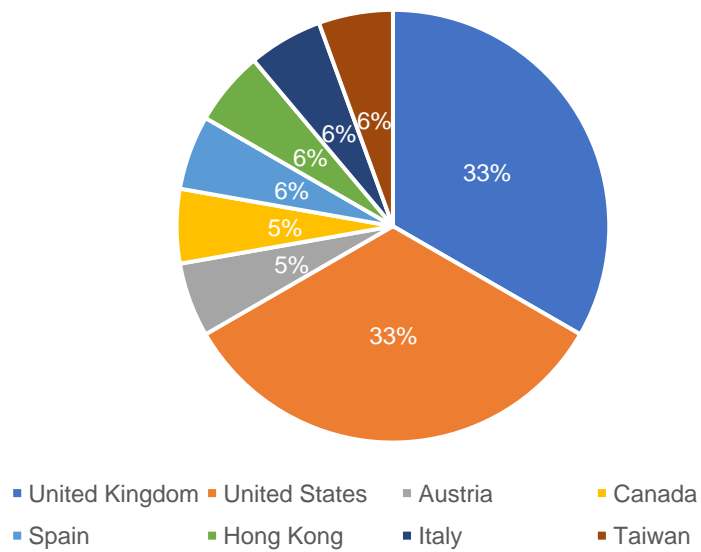


Table 32 Yearly ratings of the videos (Source: YouTube analytics)

	2014	2015	2016	2017	2018
Like	5	5	5	0	3
Dislike	0	0	0	0	0

Figure 74 Yearly ratings of the videos

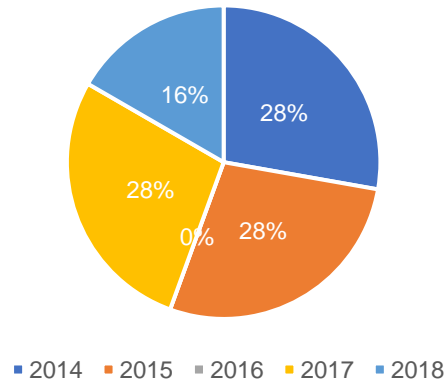


Table 33 Ratings of the videos by subscription (Source: YouTube analytics)

	Not subscribed	Subscribed
Like	17	1
Dislike	0	0

Figure 75 Ratings of the videos by subscription

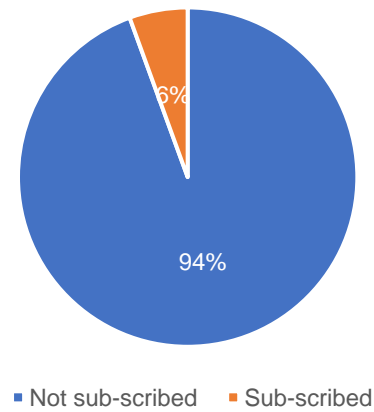
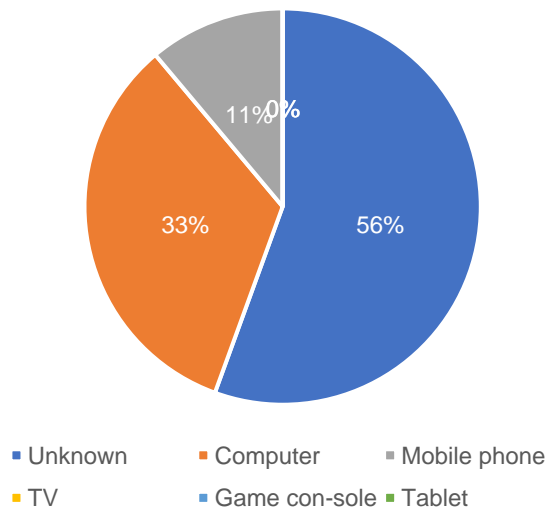


Table 34 Ratings of the videos by devices (Source: YouTube analytics)

	Unknown	Computer	Mobile phone	TV	Game console	Tablet
Like	10	6	2	0	0	0
Dislike	0	0	0	0	0	0

Figure 76 Ratings of the videos by devices



Overall, from the analysis of the tables 30 to 34 and the figures 72 to 76, it is possible to appreciate that generally the ratings for the videos are only positive. Moreover, it is possible to observe that the video which received the most rating is the 'Hidden Florence Documentary of the App Project'. The majority of the ratings were given by English-speaking countries which is consistent with the videos language. Ratings appears to be steady over the years, with an exception for the 2017 which there are no ratings for.

SHARING (March 5th 2013- March 18th 2018)

This subsection looks at viewers' behaviours regard sharing the videos.

NB: Before 14 November 2013, sharing data did not include shares from logged out users.

Data for "Shares" is not correctly tracked between 13 January 2015 and 15 January 2015.

Selected Figures (Source: YouTube analytics)

Shares							
Videos	Documentary of the App Project			Promotional film		30 Second Edit	
	15			4		0	
Sharing services	Facebook	Copy to Clipboard	WhatsApp	Other	tumblr.	Email	Hangouts
	7	5	2	2	1	1	1
Geography (Top countries)	United Kingdom	Unites States	Italy	Belgium	Canada	Switzerland	
	5	5	3	1	1	1	
Years	2014		2015	2016	2017		2018
	5		4	2	4		4
Subscription	Subscribers			Not Subscribers			
	1			18			
Device type	Unknown	Computer	Mobile phone	Tablet	TV	Game console	
	11	4	3	1	0	0	

Figure 77 Sharing of the videos

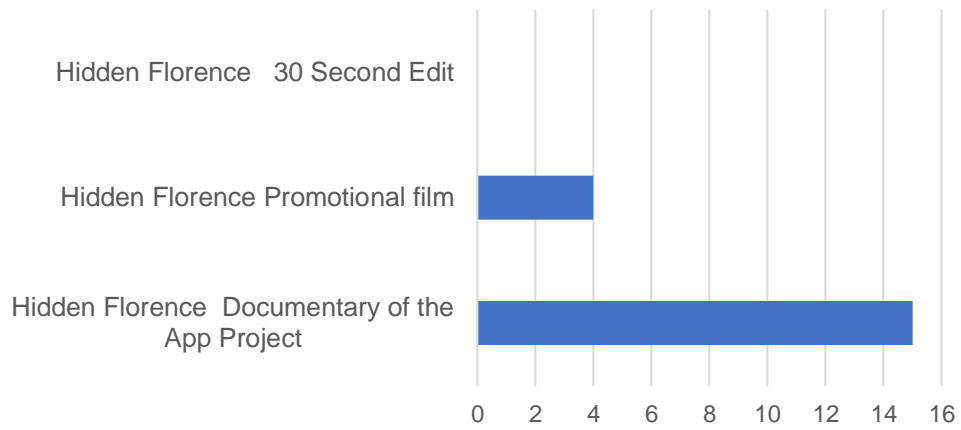


Figure 78 Sharing services

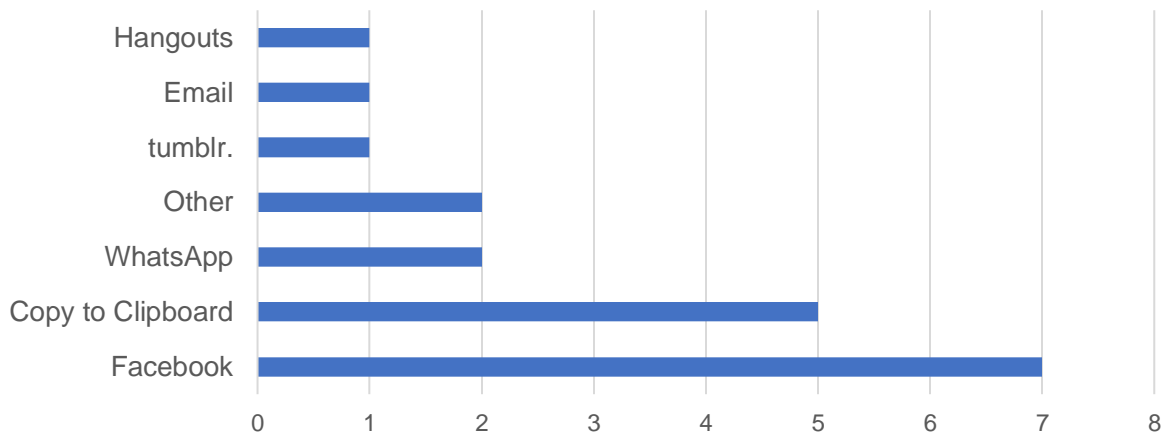


Figure 79 Geography of sharing

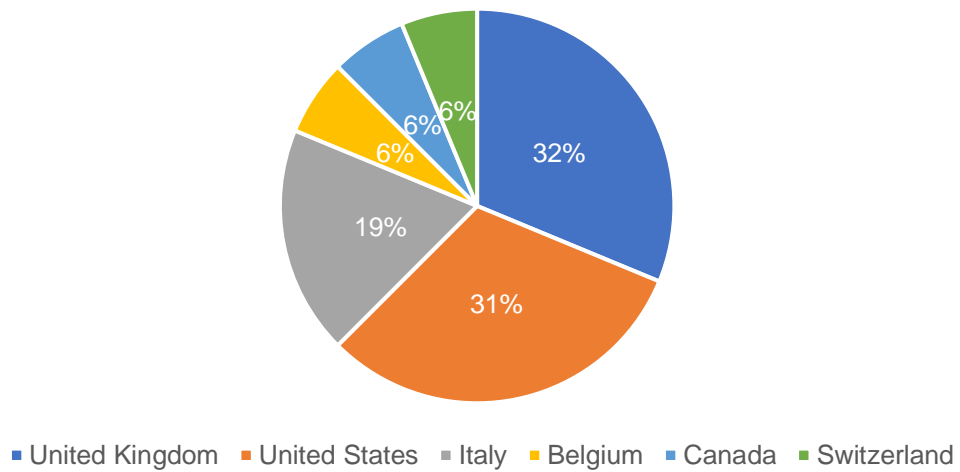


Figure 80 Sharing by years

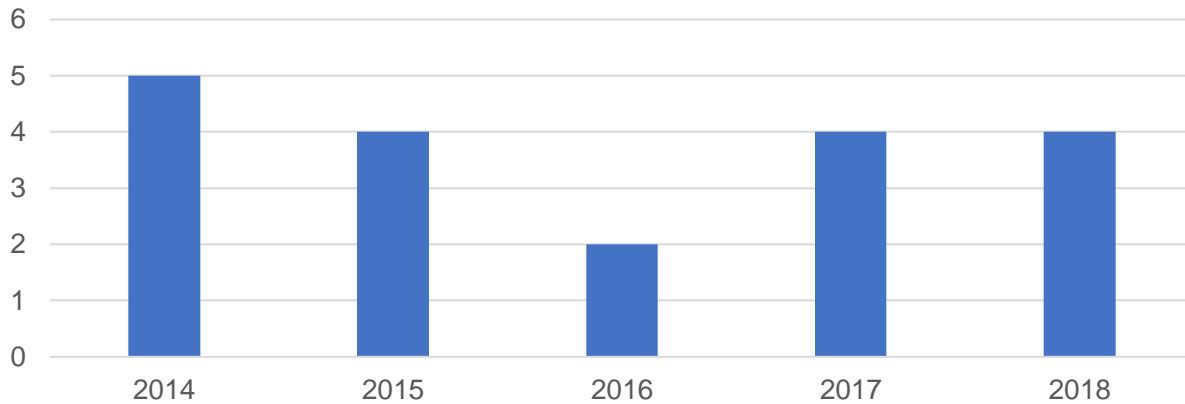
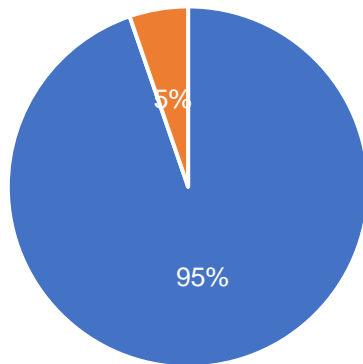
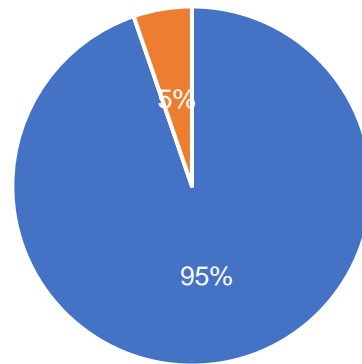


Figure 81 Sharing by subscription



■ Not sub-scribed ■ Sub-scribed

Figure 82 Sharing by device type



■ Not sub-scribed ■ Sub-scribed

Overall, from the analysis of figures 77 to 82, it is possible to appreciate that the most popular video shared is the Documentary of the App Project, mostly using Facebook. It is interesting to observe that despite a slight decrease during 2016, generally the sharing of the videos appears to be steady over the years.