

Analyst Case Study

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General Assumptions

- Subscriptions happen on the same day as spending – no trial period
 - Just to make things simpler, for the purpose of the case
 - Ideally, downloads would be attributed to marketing channel, and user activity tracked and evaluated from there
- All monetary values are in same currency

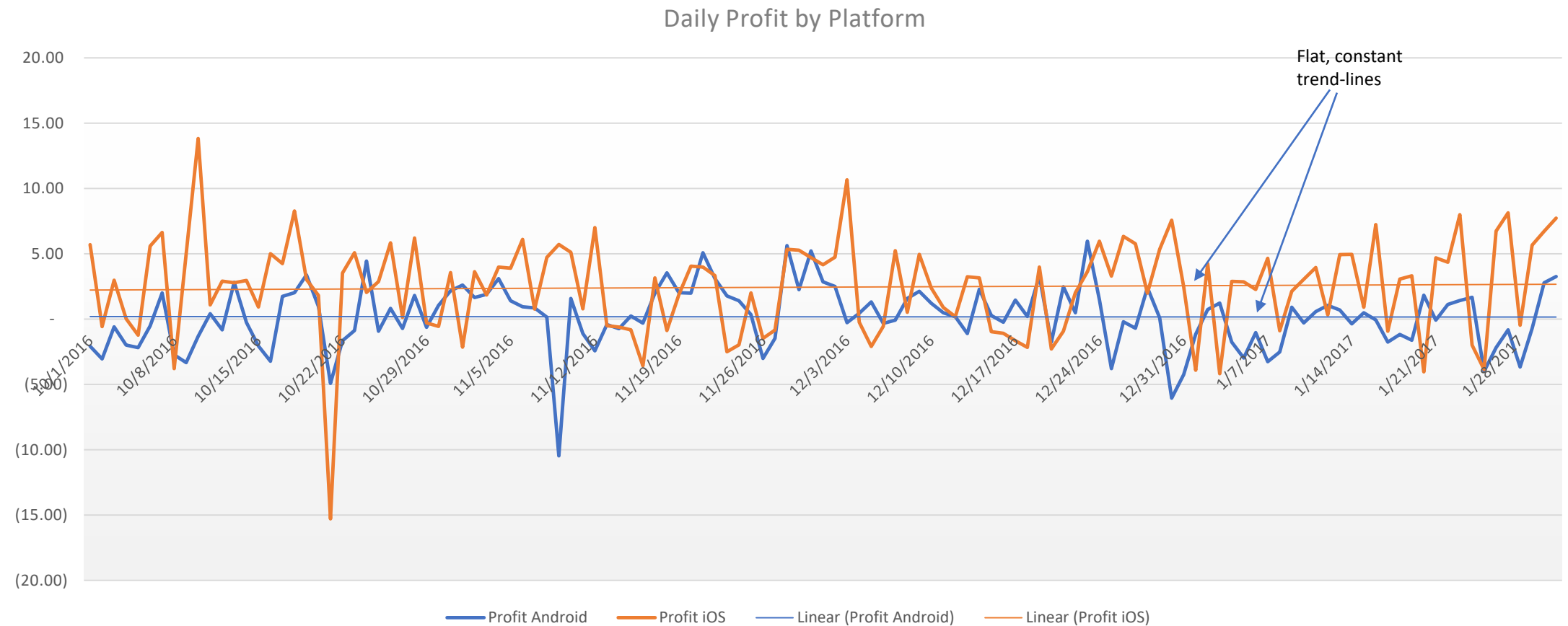
Question 1

I need to understand where to invest more money. I'm curious if you can help me make a decision based on your findings. Do you think it's ios or android?

Platform	Total Spending	Total Subscriptions	Total Revenue	Spending per Subscriber	Revenue per Subscriber	Profit per Subscriber
ios	862,532.09	76,655	952,509.86	11.25	12.43	1.17
unknown	561.86	-	-	-	-	-
web	-	184	4,904.85	-	26.66	26.66
android	390,595.84	33,645	389,706.25	11.61	11.58	(0.03)
blank	-	18	306.68	-	17.04	17.04

- iOS and Android only viable platforms, with meaningful number of subscriptions
- Chosen metric: average profit per subscriber
- **iOS clear winner**, with 1.17
- Android subscriptions come at slight loss

Profit per Subscriber, time series



Question 2

Aside from that I'm also curious if there's specific marketing channels we should be aiming for to get better results? I'm currently thinking that the channel with ID 4 looks promising. What are your thoughts?

Channel	Is Paid?	Total Spending	Total Subscribers	Total Revenue	Cost per Subscriber	Revenue per Subscriber	Profit per Subscriber
0	FALSE	-	3	41.99	-	14.00	14.00
1	FALSE	-	35,338	487,998.24	-	13.81	13.81
2	TRUE	638,462.97	36,567	421,150.34	17.46	11.52	(5.94)
3	TRUE	94,534.38	2,666	28,558.86	35.46	10.71	(24.75)
4	TRUE	122,432.61	5,599	60,664.93	21.87	10.83	(11.03)
6	TRUE	111,767.21	3,281	57,791.19	34.06	17.61	(16.45)
7	TRUE	-	31	524.86	-	16.93	16.93
9	TRUE	24,784.52	1,017	8,896.08	24.37	8.75	(15.62)
10	TRUE	2,641.44	56	1,509.59	47.17	26.96	(20.21)
11	FALSE	-	293	4,705.66	-	16.06	16.06
12	FALSE	-	554	5,353.71	-	9.66	9.66
13	FALSE	-	751	7,328.40	-	9.76	9.76
14	TRUE	-	24	230.97	-	9.62	9.62
16	TRUE	500.00	1	-	500.00	-	(500.00)
18	TRUE	258,566.66	12,895	125,850.96	20.05	9.76	(10.29)
Blank		-	11,426	136,821.85	-	11.97	11.97

- There is revenue coming from blank marketing channel – I will assume this is pure organic downloads
- I will focus on channels 2, 3, 4, 6, 18, as they bring significant number of downloads, and are paid channels
- Metric of choice again profit per subscriber
- Channel 2 seems to be outperforming any other with -5.94
- Channel 4 comparable overall with channel 18

Distribution of Spending by Channel, Platform

Marketing Channel	iOS Spending	Android Spending	Other Spending
0	-	-	-
1	-	-	-
2	434,673.96	203,727.15	61.86
3	94,534.38	-	-
4	122,432.61	-	-
6	104,354.62	7,412.59	-
7	-	-	-
9	15,857.10	8,927.42	-
10	2,630.76	10.68	-
11	-	-	-
12	-	-	-
13	-	-	-
14	-	-	-
16	-	-	500.00
18	88,048.66	170,518.00	-

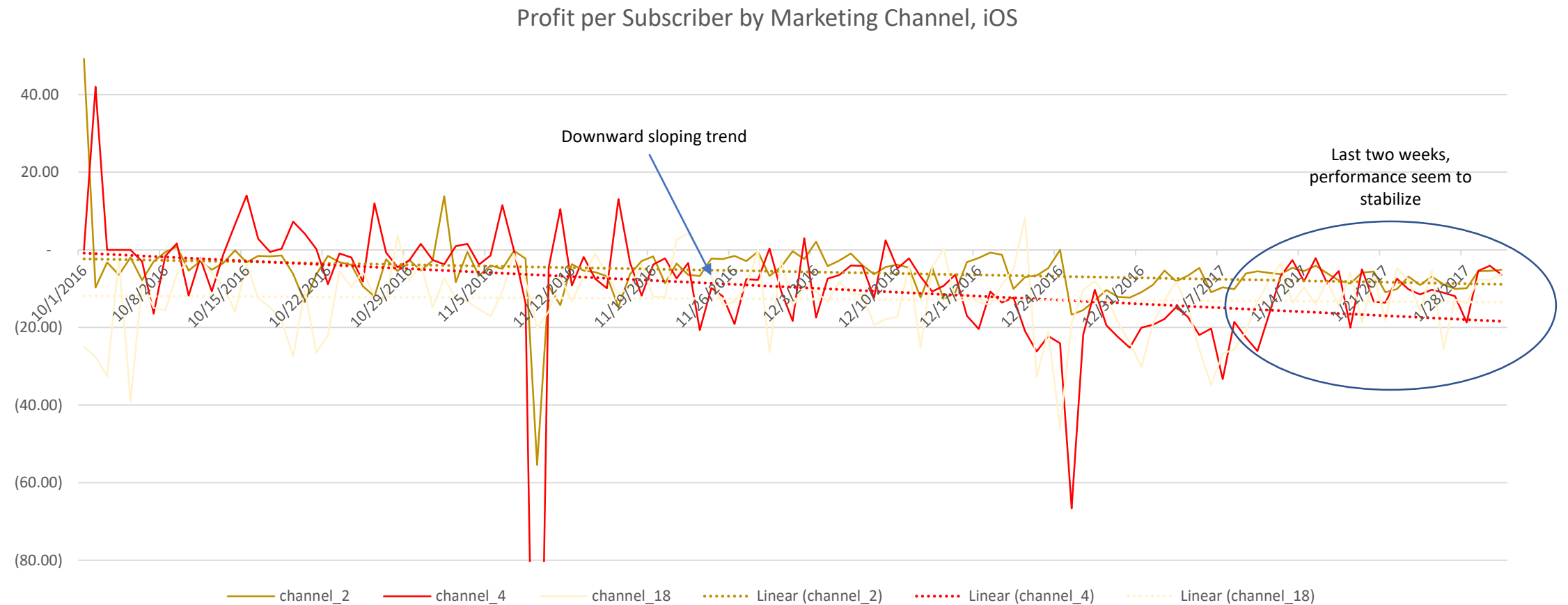
- Channel 4 is iOS exclusive channel
- Channels 2 and 18 are mixed, so their performance can be heavily skewed by Android subscribers
- Here we should calculate metric only for iOS subscribers

Profit per Subscriber, iOS only

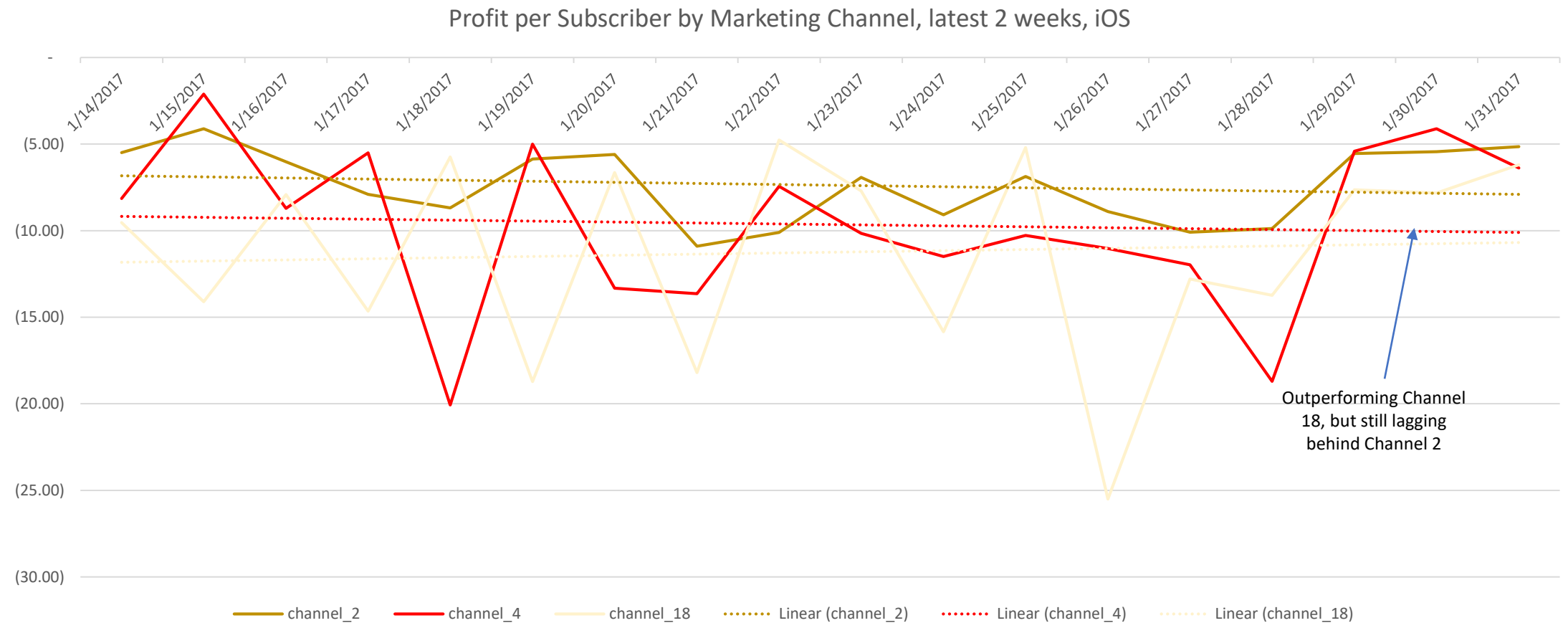
Marketing Channel	iOS Spending	iOS Revenue	iOS Subscribers	Profit per Subscriber
0	-	41.99	3	14.00
1	-	354,583.61	26,608	13.33
2	434,673.96	282,009.76	23,876	(6.39)
3	94,534.38	27,216.84	2,558	(26.32)
4	122,432.61	59,827.47	5,565	(11.25)
6	104,354.62	53,757.59	3,053	(16.57)
7	-	356.94	21	17.00
9	15,857.10	5,082.22	573	(18.80)
10	2,630.76	1,509.59	52	(21.56)
11	-	2,971.32	187	15.89
12	-	3,861.09	442	8.74
13	-	3,513.68	324	10.84
14	-	167.97	16	10.50
16	-	-	1	-
18	88,048.66	39,803.30	3,701	(13.04)

- When viewing iOS only, channel 2 still remains superior, with -6.39
- Channels 3 and 6 lagging behind, and will be dropped from further analysis

Profit per Subscriber per Day, iOS only



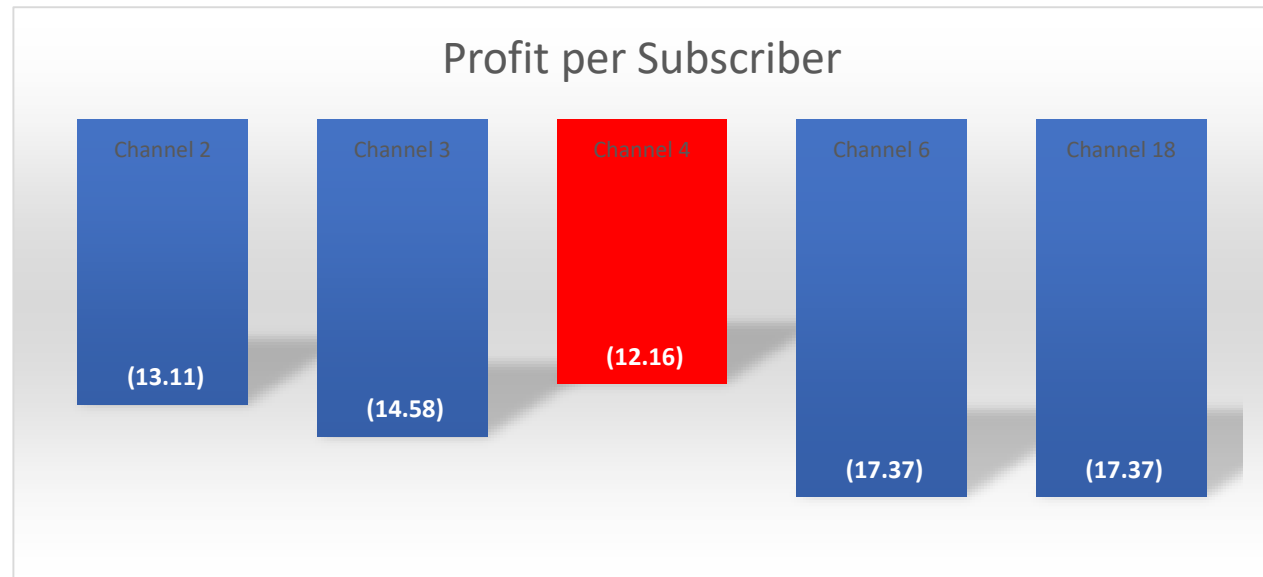
Profit per Subscriber, last 2 weeks



Isolating campaign in US

- Besides being iOS only, channel 4 campaign was really running only in US
- When we take and compare only channel's performance only in US, only on iOS we get different picture

Channel	Total Spending	Total Subscribers	Total Revenue	Profit per Subscriber
2	104,285.74	4,115	50,358.09	(13.11)
3	49,794.43	1,983	20,882.32	(14.58)
4	122,432.61	5,372	57,098.05	(12.16)
6	52,133.31	1,448	26,986.71	(17.37)
18	37,421.43	1,410	12,924.80	(17.37)



Question 3

Looking further into the data at hand it looks like UK (United Kingdom) would be a good investment. Do you agree?

Country	Total Spending	Total Subscribers	Total Revenue	Profit per Subscriber
US	555,926.04	43,965	545,540.67	(0.24)
CA	117,898.81	8,548	102,881.40	(1.76)
ES	60,487.75	5,770	56,683.65	(0.66)
GB	38,620.10	5,418	48,695.75	1.86
MX	44,408.28	5,131	45,117.76	0.14
AU	60,105.35	5,065	70,181.21	1.99
FR	43,175.97	4,874	63,039.66	4.08
CH	58,369.37	4,237	73,090.17	3.47
DE	27,894.07	3,285	31,515.76	1.10
AR	21,296.31	2,693	40,262.13	7.04
CL	19,529.41	2,117	32,504.93	6.13
CO	14,471.44	1,374	20,658.86	4.50
AE	13,847.62	1,274	18,009.69	3.27
PE	8,776.82	1,185	11,844.62	2.59

- Selected are the countries with most subscribers
- Highlighted are the countries that are comparable to UK in size and GDP
- France seems to be well ahead of both UK and Germany
- This is data overall, so splitting by platform might provide additional insights

Country Performance, by Platform

Android

Country	Total Spending	Total Subscribers	Total Revenue	Profit per Subscriber
US	177,969.85	13,437	161,581.05	(1.22)
AU	35,104.68	2,648	38,900.82	1.43
CA	32,143.45	2,582	29,215.73	(1.13)
MX	11,409.94	2,099	10,943.25	(0.22)
ES	15,357.80	1,881	14,369.75	(0.53)
GB	18,113.69	1,799	15,620.64	(1.39)
CH	17,588.80	1,461	26,573.99	6.15
AR	11,746.73	1,164	17,528.64	4.97
DE	6,971.65	1,155	9,359.91	2.07
FR	10,128.04	738	9,272.44	(1.16)
PE	2,354.52	368	2,408.27	0.15
AE	3,751.47	363	3,831.95	0.22
NZ	2,509.43	304	3,210.88	2.31
PR	3,389.30	245	3,017.26	(1.52)

iOS

Put focus on iOS, because it has more subscribers, and higher revenue generated

Country	Total Spending	Total Subscribers	Total Revenue	Profit per Subscriber
US	377,394.33	30,443	381,157.81	0.12
CA	85,755.36	5,956	73,527.41	(2.05)
FR	33,047.93	4,134	53,725.91	5.00
ES	45,129.95	3,881	41,987.73	(0.81)
GB	20,506.41	3,614	32,874.91	3.42
MX	32,998.34	3,027	33,979.49	0.32
CH	40,780.57	2,776	46,516.18	2.07
AU	25,000.67	2,414	31,241.82	2.59
DE	20,922.42	2,104	21,810.71	0.42
CL	15,093.52	2,026	29,005.81	6.87
AR	9,549.58	1,528	22,733.49	8.63
CO	10,234.63	1,279	16,829.96	5.16
AE	10,096.15	909	14,061.71	4.36
PE	6,422.30	813	9,393.17	3.65

France vs UK, iOS only

Marketing Channel	UK Subscribers	UK Profit per Subscriber	FR Subscribers	FR Profit per Subscriber
1	1,857	9.34	2,212	13.46
2	618	(5.25)	1,127	(7.92)
3	82	(14.33)	-	-
4	7	-	2	64.07
6	8	(34.33)	159	(34.03)
7	1	-	3	14.00
9	56	(22.53)	-	-
10	-	-	1	20.99
11	9	14.78	5	12.60
12	35	6.60	8	5.25
13	14	10.71	5	8.40
14	3	-	-	-
18	353	(11.29)	103	(13.40)
Blank	571	7.78	508	12.38

- Even though France is overall more profitable, turns out that extra revenue is coming from organic and non-paid users
- When it comes to paid, channels 2 and 18 are dominating, and in both cases it is cheaper to acquire UK customers
- It is difficult to say how much the paid promotion influences organic downloads (store top lists placement, general awareness)

Conclusions

- Unsurprisingly, iOS outperforms Android in revenue and profit
- Marketing channel 4 seems to be the most efficient way of acquiring subscribers in US, on iOS
- Having in mind the cultural similarities between UK and US, and performance in US, testing marketing channel 4 in UK definitely seems justified. However, in parallel to this, I would recommend running the same test in France, since the overall impact might turn out more profitable