

The Timing of Tax Benefits Outreach

Date implemented: September-October 2022

Date written: January 2023

Abstract: This study uses random assignment to assess which days of the week are most effective to perform tax benefits outreach. In September 2022, we messaged 10,737 clients who had started but not finished using GetYourRefund in 2022, encouraging them to file using GetCTC; half received the message on a Friday, and half the following Monday. In October 2022, we repeated the experiment among 94,088 clients who had used GetCTC in 2021, with 20% each receiving an outreach message each day of the work week. We find very weak evidence that Monday outreach messages may outperform Friday outreach messages, but the results are far from conclusive.

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Other experimental results and research from GetCTC 2022 are available [here](#).

1. Research Questions

This study was designed to measure the relative impact of tax benefits outreach performed at different times during the week.

Observational evidence in 2021 showed that returns were more likely to be started on Mondays and Tuesdays, with counts dipping through the week and into the weekend ([Lessons From Simplified Filing 2021](#), p. 42). However, it is not clear how to interpret the observational data. On one hand, perhaps it is possible that outreach is more effective earlier in the week. On the other, perhaps more outreach activities take place earlier in the week, and the higher start rates are downstream of the outreach performed. (Note that this observational pattern [later proved absent in GetCTC 2022 data](#).)

This study was intended to rigorously measure this question, by experimentally varying when in the week clients received outreach.

2. Study Design and Implementation

The study was implemented in two rounds—one in September 2022 and a replication in October 2022. In the September 2022 round, the sample consisted of 2022 GetYourRefund (GYR) clients whose GYR return had ended in a “Not Filing” status—meaning that they used GYR but did not ultimately submit a return that way, usually because they became unresponsive at some point in the process. Clients were included if all their 2022 GYR returns had a “Not Filing” status, they had not yet started a 2022 GetCTC return, they had opted in to receiving text messages, their preferred language was either English or

missing, and if the VITA organization that had prepared their GYR return did not opt out of the experiment. There were 10,737 clients in the sample.

The October 2022 sample consisted of clients who used GetCTC in 2021, had entered at least one dependent in 2021, had opted in to receiving text messages, whose preferred language was either English or missing, and who had not yet started GetCTC returns in 2022. There were 94,088 clients in the October sample. For these clients, this was the fourth or fifth outreach message the cohort received in 2022.

The first round messages went out on Friday, September 9 and Monday, September 12, respectively. The second round messages went out over the course of five business days beginning October 18—Tuesday, 10/18; Wednesday, 10/19; Thursday, 10/20; Friday, 10/21; and Monday, 10/24. The second round messages were part of a matrix design, in which clients were randomly assigned to receive a message that did or did not include an offer of hotline assistance. The cross-hotline variation is pooled in these results.

The scripts were the same for all treatments, with only the day of the week varying. Recall that the two October variants are pooled in these results.

- September script: Hello! This is GetYourRefund — you used our service or a VITA partner this year. If you haven't filed yet this year, you might be eligible to claim cash benefits. It's free and easy to get your money. Visit [GetCTC.org/file-today](https://getctc.org/file-today) today. (Responses not monitored.)
- October script—A: Hello! This is GetCTC — you used our services last year. If you haven't filed yet this year, you might be eligible to claim cash benefits. Visit [GetCTC.org/claimnow](https://getctc.org/claimnow) to file today.
- October script—B: Hello! This is GetCTC — you used our services last year. If you haven't filed yet this year, you might be eligible to claim cash benefits. Call 877 907-0937 for help or visit [GetCTC.org/claim-now](https://getctc.org/claim-now) to file today.

Message counts by day are shown below:

	Monday	Tuesday	Wednesday	Thursday	Friday
September cohort	5,366	0	0	0	5,371
October cohort	18,817	18,818	18,817	18,818	18,818

Messages were sent through The Hub, GetCTC's client interaction system, in the same vein as any other messages sent to clients, including updates on return status and customer service interactions with clients experiencing issues. Messages sent as text messages would appear from Code for America's shortcode, in the same thread with all other messages from the product.

As in other studies on Code for America products this year, outcomes can be calculated in two different ways: (1) by matching the Social Security Number of the individual receiving the outreach to the Social Security Number on GetCTC returns, or (2) by looking at returns filed using specific source URLs (e.g., getctc.org/claimnow and getctc.org/file-now) which were assigned to the groups in outgoing

messages and can be tracked through to completion. The former is a more precise count of how many clients actually submitted returns. The latter, on the other hand, allows us to look farther up the funnel at home page visits (which occur prior to entering SSN). The latter may also abstract away from some amount of noise, since clients in this population were subject to various other messages during this period; the source URLs capture something like the effect on filing *by this outreach*.

Because clients who did not file in any particular round of the experiment were included in a future round of messaging and assigned new treatment statuses, results are shown only for a two-week window after the message was sent. This means that absolute conversion rates may be a slight undercount, although in practice the vast majority of the effect of a messaging campaign comes within the first few days.

3. Results

Tables 1 and 2 show headline results for Monday versus Friday messages, based on SSN and source matching, respectively. The results show Monday messages modestly outperforming in some specifications in terms of returns started (Table 1, Columns 4 and 7), returns submitted (Table 2, Columns 3 and 4), and, suggestively, returns accepted (Table 2, Column 4). However, the results are not very definitive and, for the most part, do not carry through the funnel to accepted returns.

Table 1: Monday versus Friday, Respondents identified by SSN match, 2 week cutoff after message sent

	Round 1 (September)			Round 2 (October)			Pooled		
	Started	Subm.	Acc.	Started	Subm.	Acc.	Started	Subm.	Acc.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Monday	1.64% (88)	0.78% (42)	0.242% (13)	2.74% (516)	1.45% (273)	0.531% (100)	2.50% (604)	1.30% (315)	0.467% (113)
Friday	1.79% (96)	0.65% (35)	0.223% (12)	2.41% (454)	1.30% (245)	0.558% (105)	2.27% (550)	1.16% (280)	0.484% (117)
P(M=F)	0.55	0.42	0.84	0.043	0.21	0.72	0.097	0.163	0.79

Table 2: Monday versus Friday, Respondents identified by source match, 2 week cutoff after message sent

	Round 1 (September)				Round 2 (October)				Pooled			
	View home	Start	Sub	Acc.	View home	Start	Sub	Acc.	View home	Start	Sub	Acc.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Mon	8.03% (431)	1.04% (56)	0.56% (30)	.186% (10)	4.33% (814)	0.86% (162)	0.40% (76)	.143% (27)	5.15% (1245)	0.90% (218)	0.44% (106)	.153% (37)

Fri	7.39% (397)	0.84% (45)	0.26% (14)	.075% (4)	4.33% (814)	0.78% (147)	0.42% (79)	.159% (30)	5.01% (1211)	0.79% (192)	0.38% (93)	.141% (34)
P(M=F)	0.21	0.26	0.015	0.111	1.0	0.39	0.81	0.69	0.49	0.19	0.30	0.73

Table 3 shows results from all five days of the week, for the October replication. Aside from the same weak results shown in the above tables, of Fridays weakly underperforming Mondays, there is no clear evidence of any pattern across the week.

Table 3: Each day, Round 2, 2 week cutoff after message sent

	SSN match			Source match			
	Started	Submitted	Accepted	View Home	Started	Submitted	Accepted
Monday	2.74% (516)	1.45% (273)	0.531% (100)	4.33% (814)	0.86% (162)	0.40% (76)	0.143% (27)
Tuesday	2.19% (412)	1.09% (206)	0.452% (85)	4.44% (835)	0.85% (160)	0.43% (81)	0.181% (34)
Wednesday	2.30% (432)	1.20% (225)	0.574% (108)	4.26% (801)	0.93% (175)	0.38% (72)	0.149% (28)
Thursday	2.36% (445)	1.32% (248)	0.468% (88)	4.29% (808)	0.87% (164)	0.42% (79)	0.143% (27)
Friday	2.41% (454)	1.30% (245)	0.558% (105)	4.33% (814)	0.78% (147)	0.42% (79)	0.159% (30)

4. Discussion

The study provides very weak results consistent with the hypothesis that outreach is more effective earlier in the week. But the results are far from definitive—and, if any effects do exist, they are probably very modest. The results are probably sufficient to weakly prefer earlier-in-the-week outreach all else equal—but only if, indeed, all else is equal.

Appendix

Table A1: Monday versus Friday, Respondents identified by SSN match, no date cutoff

	Round 1 (September)			Round 2 (October)			Pooled		
	Started	Subm.	Acc.	Started	Subm.	Acc.	Started	Subm.	Acc.
Monday	5.80% (311)	2.50% (134)	.932% (50)	4.93% (927)	2.70% (508)	.978% (184)	5.12% (1238)	2.65% (642)	.968% (234)
Friday	6.67% (358)	2.59% (139)	.726% (39)	4.74% (892)	2.59% (488)	.957% (180)	5.17% (1250)	2.59% (627)	.905% (219)
P(M=F)	0.062	0.767	0.239	0.39	0.51	0.84	0.80	0.68	0.47

Notes: Returns are included regardless of when they are filed, including more than two weeks after messages were sent, encompassing the effect of additional rounds of CFA messages sent to these clients.

Table A2: Monday versus Friday, Respondents identified by source match, no date cutoff

	Round 1 (September)				Round 2 (October)				Pooled			
	View home	Start	Sub	Acc.	View home	Start	Sub	Acc.	View home	Start	Sub	Acc.
Mon	8.63% (463)	1.12% (60)	0.71% (38)	.261% (14)	4.59% (864)	0.93% (175)	0.45% (84)	.154% (29)	5.49% (1327)	0.97% (235)	0.50% (122)	.178% (43)
Fri	8.14% (437)	0.88% (47)	0.32% (17)	.093% (5)	4.52% (851)	0.82% (154)	0.46% (86)	.175% (33)	5.32% (1288)	0.83% (201)	0.43% (103)	.157% (38)
P(M=F)	0.36	0.21	0.005	0.038	0.74	0.25	0.87	0.62	0.41	0.103	0.26	0.57

Notes: Returns are included regardless of when they are filed, including more than two weeks after messages were sent, encompassing the effect of additional rounds of CFA messages sent to these clients.