

Media Campaign Report

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Summary

Four rounds of a media campaign took place between April 2015 and November 2016 as part of the [Useful to Usable \(U2U\)](#) project. The campaign was intended to increase awareness of the U2U tools. 35,559 people were sent at least one round of the campaign either through email, mail or both. 3,916 people opened at least one email advertisement, and 923 people clicked on links the the online DSTs within the emails. There were 16,384 opens and 1,507 clicks in total across all four rounds. Round three had the most recipients of the campaign due to an increased budget for that round. Forty-seven percent of contacts only received one round of the campaign, however 6,649 people (19%) received all four rounds. The campaign was sent to individuals in 12 target states (Iowa, Illinois, Indiana, Kansas, Michigan, Minnesota, Missouri, North Dakota, Nebraska, Ohio, South Dakota, Wisconsin), however Iowa, Illinois, Indiana and Minnesota had the highest percentage of contacts. Individuals on the Certified Crop Advisor (CCA) list and U2U core contact list (people who signed up to receive the project's quarterly e-newsletter) opened their emails the most. The overall open rate was 48% compared to industry standards in the 20% range signaling one indicator of campaign success. Round 4 open and click rates were much lower than rounds 1-3 (which had similar open rates), perhaps due to low interest in the Irrigation Investment tool. The Round 1 click rate was much higher than the other three rounds, perhaps because Corn GDD was a more popular tool among recipients. The Agriculture Extension employee, U2U core contact, and CCA lists had consistently high open rates across the rounds (low to upper 30% range, still significantly higher than industry standards). People who were sent only email in a round were more likely to open their email in the same round (for rounds 3 and 4) than people who were sent email and mail. However, those who got both an email and mail advertisement in a previous round were more likely to open in a subsequent round. There was a highly statistically significant positive effect of opening an email in a previous round and opening an email in a subsequent round (p -value=0.000). Finally, the number of rounds a recipient received predicted if they opened an email in Round 3 and Round 4 (not Round 2).

Background

To supplement in-person outreach at events, a four-round media campaign, including direct mail (large folded postcard) and email advertisements on the U2U decision support tools (DSTs), was conducted to reach farmers and agricultural advisors across the 12-state North Central Region. The goal of the marketing campaign was to increase awareness of U2U DSTs and drive people to the website where the DSTs are hosted. Each round advertised a different DST and had a tagline (e.g., the CPV campaign tagline for Round 2 was "El Nino is here: How does it affect your yields?").

Free contact lists of farmers and advisors were obtained and additional contact lists were purchased working with U.S. International Media. Round 1 of the campaign included five recipient lists: Agricultural

Extension employees, Certified Crop Advisors (CCAs), *Progressive Farmer* subscribers, Soil and Water Conservation Society (SWCS) current and past members, and Technical Service Providers (TSPs). Rounds 2, 3 and 4 included eight lists: the above plus *AgProfessional* subscribers, local conservation district/department employees (NACD), and the U2U core contact list (U2U) (people who signed up to receive the project’s quarterly e-newsletter) (Table 1 in Appendix). Not everyone received both modes (direct mail and email) of communication. Table 2 shows the timeline of when each round was sent.

Table 1: U2U Media Campaign Rounds

Round	Tool	Month	Year	Tagline
1	Corn GDD	April	2015	“Timing is everything. Are you ready?”
2	Climate Patterns Viewer	June	2015	“El Niño is here. How does it affect your yields?”
3	Corn Split-N	October	2015	“Use it or lose it. Could you profit from a Split Nitrogen application strategy?”
4	Irrigation Investment	October and November	2016	“Irrigation Equipment: Can it be profitable for you?”

Draft campaign messaging was piloted with target audiences using the same platform as usability testing of DSTs, and changes were made based on feedback before deployment. The reach of the email campaign was evaluated by monitoring the percent of contacts who opened the email and clicked on the “call to action” (www.agclimate4u.org) within the email. These statistics were assessed overall and by the different types of contact lists. Visits to the website by state and by DST(s) were tracked around the campaign dates. A Pearson Product Moment Rank (PPMR) correlation coefficient was computed to determine the association between number of people the campaigns attempted to contact by state and the number of U2U website users tracked by Google Analytics during the campaign weeks by state. This report provides a detailed description of the results of all four rounds of the media campaign.

Data and Discussion

35,559 people were sent at least one round of the campaign either through email, mail or both. 3,916 (11%) people opened at least one email advertisement, and 923 (3%) people clicked on those emails. There were 16,384 opens and 1,507 clicks in total across all four rounds.

Round three had the most recipients due to the purchase of the *Progressive Farmer* list. This was discontinued in Round 4 because of poor results (low open/click rates) in Round 3 and a reduced budget in Round 4. The media company was unable to email Round 4 to any Agricultural Extension contacts, and they emailed to a reduced number of contacts on all other lists. This was due to challenges with the media company’s email disbursement software. An in-house publisher at the Environmental Resources Center on UW-Madison campus is in the process of emailing the Round 4 campaign to Agricultural Extension contacts and some of the missing contacts from the other lists, however they are not included in this analysis. Recipients by round can be seen in Table 3.

Table 2: Total recipients, by round

Round	Total people who received campaign
1	15,036
2	16,265
3	30,710
4	10,005

Most individuals received only one round of the campaign (Table 3). A similar amount of recipients received two and four rounds, with a slightly smaller group receiving three rounds. In each round, Iowa, Illinois, Minnesota and Indiana consistently had the highest percentage of recipients (Table 6).

Table 3: Breakdown of recipients and how many rounds they were sent

	One round	Two rounds	Three rounds	Four rounds
Number of people	16990	6957	5083	6649

Table 4: Number of recipients from each state in each round

State	Round 1	Round 2	Round 3	Round 4
IA	2690 (18%)	2789 (18%)	4227 (17%)	730 (10%)
IL	2407 (16%)	2772 (18%)	3405 (14%)	779 (10%)
IN	1448 (10%)	1643 (11%)	2110 (9%)	673 (9%)
KS	736 (5%)	1027 (7%)	1560 (6%)	580 (8%)
MI	559 (4%)	727 (5%)	1142 (5%)	483 (6%)
MN	1605 (11%)	1739 (11%)	2735 (11%)	820 (11%)
MO	830 (6%)	1074 (7%)	1494 (6%)	566 (7%)
ND	503 (3%)	680 (4%)	1086 (4%)	488 (6%)
NE	1378 (9%)	940 (6%)	2241 (9%)	611 (8%)
OH	989 (7%)	740 (5%)	1656 (7%)	542 (7%)
SD	741 (5%)	496 (3%)	1399 (6%)	551 (7%)
WI	914 (6%)	919 (6%)	1476 (6%)	710 (9%)
Other state*	40 (0%)	22 (0%)	45 (0%)	26 (0%)

Note. * includes Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Florida, Georgia, Kentucky, Louisiana, Montana, North Carolina, New Mexico, New York, Oregon, Pennsylvania, Texas, Vermont, Washington, West Virginia

Overall, the open and click rates were much higher than industry averages, suggesting that the campaign was successful in reaching our target audience (Table 6). The number of opens from an individual ranged from 1 to 303 times, though the median number of opens was 1 for all four rounds. Similarly, the number of clicks from an individual ranged from 1 to 27, but the median number of clicks

was 1 for all four rounds. Individuals who opened 30 or more times were almost all from the CCA list. However, 0.1% of the CCA list opened 30 or more times, while 0.4% of the U2U list opened 30 or more times. Therefore, it is possible that those who used the tools the most, and/or shared them with others the most were from the CCA and U2U groups.

Table 5 Overall Open and Click Rates with industry averages

	Overall	Agriculture and Food Services	Education and Training	Software and Web App
Overall open rate by person	48%	25%	22%	22%
Overall click rate by person	11%	3%	3%	2%

Note: individuals have not been double-counted in these calculations. The overall rate was calculated by dividing the total number of people who opened an email at least once in any round and the total number of people who were emailed at least once in any round.

Round 2 had the highest open rate of all the rounds, but Round 1 had the highest click rate (Table 7). While statistically different, the difference is very small (within 1 or 2 percentage points). Rounds 1 through 3 all had much higher open and click rates than Round 4, suggesting that either the Irrigation Tool was less interesting to the target audience, or the campaign was poorly timed, or some other extraneous reason. While the Ag Extension list was not emailed in Round 4, this does not appear to be the cause of the low click and open rates; The rates of all rounds remain the same even if Ag Extension is removed from the first three rounds. Round 1’s click rate is much higher than all the other rounds perhaps signaling a greater interest in the Corn GDD tool.

Table 6 Overall open and click rates by round (includes those in multiple lists)

	Round1	Round2	Round 3	Round 4
Open rate***	30%	31%	28%	18%
Click rate***	8%	4%	3%	1%

*** Pearson Chi-square test significant at the 1% level

Note: Pearson chi2 is still significant at the 1% level if Round 4 is removed

In Round 1, Ag Extension had the highest open and click rate (Table 8). In rounds 2 and 3, U2U had the highest open and click rates. The U2U list consisted of individuals who had been exposed to U2U already, either at a presentation on the DSTs or via the U2U newsletter. Therefore, it is unsurprising that the U2U list had the highest open rates in rounds 2 and 3 because the individuals on the list already had shown an interest in or had been exposed to the tools (U2U list was not included in Round 1). In Round 4, TSPs had the highest open and click rate, though not by much (2 to 3 percentage points compared to CCA and U2U lists). Overall, all lists had very low open and click rates for Round 4. This suggests there may have been an overall lack of interest in the Irrigation Investment tool.

The NACD list had consistently lower open and click rates implicating that the list may not have been our target audience as much as some of the other lists. The TSP list was also somewhat lower than other lists in rounds 1-3. The TSP list also had about 10% of its contacts from non-target states (outside of the

12 state region); this could have impacted open and click rates if that 10% of the contact list deemed the tools irrelevant for their work.

Table 7 Open and click rates by list type (does not include those who were on multiple lists)

		Ag Ext.	CCA	NACD	TSPs	U2U	All lists
R1	Open rate***	36%	31%	N/A	30%	N/A	31%
	Click rate***	12%	8%	N/A	7%	N/A	8%
R2	Open rate***	25%	31%	11%	23%	38%	31%
	Click rate***	2%	3%	4%	1%	11%	4%
R3	Open rate***	27%	29%	12%	19%	35%	28%
	Click rate***	4%	3%	2%	1%	6%	3%
R4	Open rate***	N/A	13%	2%	15%	12%	12%
	Click rate	N/A	0%	0%	1%	1%	0%
All	Open rate	29%	28%	9%	23%	32%	27%
	Click rate	6%	4%	2%	3%	7%	4%
Range of n		296-371	2931-5573	106-436	159-316	214-529	3582-7098

Note: Ag Professional and Progressive Farmer individuals were not emailed during any round

*** Pearson Chi-square test significant at the 1% level

Note: The SWCS list was excluded from this table because individuals had to opt-in to receive the campaign. Therefore it is not comparable to the other lists. This table also excludes those individuals from multiple lists (e.g. someone may have been on one list in Round 1 and a different list in Round 2), and so the total open and click rate percentages are not comparable to the ones in Table 7.

Google Analytics

The number of U2U website users (as tracked by Google Analytics) around the campaign weeks was positively correlated with the number of people the media campaign attempted to contact and was statistically significant at the 0.05 level (Round 1 (Corn GDD): $r = .65$, $p^* = 0.02$; Round 2 (CPV): $r = .58$, $p^* = 0.04$; Round 3 (ACV): $r = .65$, $p^* = 0.02$; Round 4 (Irrigation Investment Tool): $r = .63$, $p^* = 0.02$). According to Gregory and Mallery (2003), the magnitude of all four correlations can be considered substantial.

The campaign weeks of Rounds 1, 2 and 3 recorded two to three times more website users compared to the weeks before the campaigns, whereas the number of website users during the campaign week and the week before remained almost same on Round 4. In Round 1, the campaign week recorded a median number of 102 users per day compared to 31 users in the week before the campaign, in Round 2, the campaign week recorded a median number of 78 users per day compared to 40 users beforehand, and in Round 3 the campaign week recorded a median number of 77 users per day compared to 31 users the weeks before. However, on Round 4, the median number of users per day during the campaign week was 24 compared to 23 users the week before the campaign.

Usability Testing

Based on usability testing, we learned directly from the testers what they cared about the most: "improve productivity and planning." Additionally, they were very responsive to the DSTs being free. Further, we learned that the funding source was not a concern to them; they were more concerned about the benefits of the DSTs, not who was developing them.

Incorporation of Information into Decision-Making

Throughout the duration of the campaign, many decisions were made based on ongoing campaign results. For example, based on open and click results from Round 1, we decided to add more physical addresses for a Ag Extension in Round 2. New lists were also added in Round 2 and maintained for the remaining rounds based on the open and click results from Round 1.

Statistical Analysis

We used chi-square tests and logistic regression to test for effects of mode of receipt on whether an individual opened/clicked their email. Rounds 3 and 4 showed statistically significant effects of mode on if an individual opened in the same round. In both of these rounds, individuals who received only email campaigns were more likely to open their email (Table 10 through Table 13). This could be because contacts were more likely to notice a postcard advertisement than an email campaign that could look like spam. Therefore those contacts may have gone to the U2U website to view the tools via the link on the postcard, not through their email link. Rounds 1 and 2 did not see any effect of mode on whether a recipient opened their email when looking at the overall sample.

We also examined whether the mode of receipt in a previous round impacted whether a recipient opened their email in a subsequent round. We found that Round 1 mode predicts whether or not they click in Round 2 (Table 14 and Table 15). Receiving both the email and mail campaign in Round 1 predicts that a recipient is more likely to click on their email in Round 2. We also found that Round 3 recipient of both email and mail campaigns predicts that a recipient is more likely to open their email in Round 4 (Tables Table 16 and Table 17). We did not see a similar effect of Round 2 on Round 3. We did not see a combined effect of all past modes on whether a recipient opened in a subsequent round (for example, there was no effect of the combined modes of rounds 1-3 on Round 4 "opened").

It is interesting that in the same round, those who received the email only were more likely to open their email (or for rounds 1 and 2 mode didn't have any effect at all in the same round), whereas in a subsequent round those who had received both modes in the previous round were more likely to open. Perhaps receiving both modes in a previous round built the U2U brand and an individual's trust in the brand. Therefore when they received a subsequent email they were already familiar with the U2U brand and more readily opened the email. To test this further, we wanted to learn if there was an effect of having actually opened an email in a previous round on opening in a subsequent round. If a contact opened an email in a previous round this would similarly build trust in the legitimacy of the tools and the U2U brand. The results were highly statistically significant in all tested cases (p-value=0.000 for all cases):

- Opened in Round 1 on opened in Round 2

- Opened in Round 1 on opened in Round 3
- Opened in Round 1 on opened in Round 4
- Opened in Round 2 on opened in Round 3
- Opened in Round 2 on opened in Round 4
- Opened in Round 3 on opened in Round 4
- Opened in Rounds 1 and 2 on opened in Round 3
- Opened in Rounds 1 and 2 on opened in Round 4
- Opened in Rounds 1, 2 and 3 on opened in Round 4
- Opened in Rounds 2 and 3 on opened in Round 4

This suggests that those who opened their emails in the past were more likely to open subsequent emails and that trust and branding may have been built over time. This may also reflect an individual's character or "preferences" – some individuals have a greater tendency to open emails than others. Individuals who opened in multiple rounds may also have been more interested in DSTs in general.

We also tested whether the number of rounds someone received impacted whether they opened their email in a subsequent round. For example, we wanted to know if someone received both rounds 1 and 2, were they more likely to open in Round 3? A logistic regression showed that number of rounds sent to a contact has a positive effect on someone opening an email in Round 3 and Round 4 (odds ratio of 1.33 significant at the 1% level and 1.76 significant at the 1% level, respectively). There was not a statistically significant effect of number of rounds on if they opened in Round 2.

Table 8: Effect of Round 3 mode on Round 3 "opened"

	Key	Didn't open	Opened	Total
Both	Frequency	874	231	1,105
	Row percentage	79%	21%	100%
	Column percentage	17%	12%	15.50%
Email	Frequency	4,280	1,744	6,024
	Row percentage	71%	29%	100%
	Column percentage	83%	88%	84.50%
Total	Frequency	5,154	1,975	7,129
	Row percentage	72%	28%	100%
	Column percentage	100%	100%	100%

Note: Pearson Chi2 p-value=0.000

Note: We also found that R3 mode has a statistically significant positive effect on whether a recipient clicked on their email in Round 3 (p-value = 0.05).

Table 9: Logistic Regression output for R3 mode and R3 "opened"

	Odds ratio	z	P-value	[95% Conf. Interval]	
Both	0.65	-5.46	0	0.56	0.76
Email	1.54	5.46	0	1.32	1.8

Table 10: Effect of Round 4 mode on Round 4 "opened"

	Key	Didn't open	Opened	Total
Both	Frequency	1,021	118	1,139
	Row percentage	90%	10%	100%
	Column percentage	32%	27%	32%
Email	Frequency	2,138	320	2,458
	Row percentage	87%	13%	100%
	Column percentage	68%	73%	68%
Total	Frequency	3,159	438	3,597
	Row percentage	88%	12%	100%
	Column percentage	100%	100%	100%

Note: Pearson Chi-square p-value=0.023

Table 11: Logistic Regression output for R4 mode and R4 "opened"

	Odds ratio	z	P-value	[95% Conf. Interval]	
Both	0.77	-2.26	0.02	0.62	0.97
Email	1.3	2.26	0.02	1.04	1.62

Table 12: Effect of R1 mode on R2 "clicked"

	Key	Didn't open	Opened	Total
Both	Frequency	1,803	75	1,878
	Row percentage	96%	4%	100%
	Column percentage	30%	37%	30%
Email	Frequency	4,157	129	4,286
	Row percentage	97%	3%	100%
	Column percentage	70%	63%	69.50%
Total	Frequency	5,960	204	6,164
	Row percentage	97%	3%	100%
	Column percentage	100%	100%	100%

Note: Chi-square pvalue=0.05

Table 13: Logistic Regression output for R1 mode and R2 "clicked"

	Odds ratio	z	P-value	[95% Conf. Interval]	
Both	1.34	1.98	0.048	1	1.79
Email	0.75	-1.98	0.048	0.56	1

Table 14: Effect of R3 mode on R4 "opened"

	Key	Didn't open	Opened	Total
Both	Frequency	437	37	474
	Row percentage	92%	8%	100%
	Column percentage	14%	9%	13%
Email	Frequency	2,687	393	3,080
	Row percentage	87%	13%	100%
	Column percentage	86%	91%	87%
Total	Frequency	3,124	430	3,554
	Row percentage	88%	12%	100%
	Column percentage	100%	100%	100%

Note: Pearson Chi-square test p-value = 0.00

Table 15: Logistic Regression output R3 mode on R4 "opened"

	Odds ratio	z	P-value	[95% Conf. Interval]	
Both	0.58	-3.04	0	0.41	0.82
Email	1.73	3.04	0	0.06	0.12

Postcard survey sent with Round 4 of the campaign

There were only 24 respondents but we gained some valuable information. Half of the respondents who looked at a tool online reported that they continued to explore the website and find other tools, whereas around 40% did not continue to explore, showing that it was important for us to send multiple rounds of the campaign (one per tool) versus assuming that one campaign would introduce audiences to all the tools. There was not a clear preference for receiving email or mail advertisement materials, nearly half chose email whereas over one-third chose mail.

Respondents reported liking the campaign because it “caught my attention as it relates directly to my work” and because of the “partners involved, consistent message” and “brief explanation, credits university who developed them.” The main reason why the campaign made them interested in learning more was that the tools seemed relevant to their work, followed by the fact the tools are free and they trusted who the campaign was from.

One respondent noted that the campaign helped them realize what’s available, and another noted that the campaign could be improved if Extension county agents use the tools and promote them at conferences (this happened in some states but not all 12 states in the project area). Another noted that at least one round of the campaign was not relevant to them based on their specific location and weather. One noted that they “do not have time to perfect everything” (related to using climate information in agricultural decision making) and another thought maybe a campaign was “a bit too much” in a time of budget cuts. Finally, one recipient thought the campaign could be improved by showing more examples of the tools.

Media campaign effect on overall regional awareness of project among agricultural advisors

- During a large end-of-project survey to thousands of agricultural advisors across the region, the team learned that the media campaign created a similar amount of awareness as the in-person outreach events/conferences (n=123 compared to n=118) and was the second most popular way the project created awareness (followed by learning about U2U from peers/colleagues, n=166)

Conclusion

Overall, the campaign seemed to be successful on multiple levels. The mail portion of the campaign seemed to be worth the money as we usually saw an effect of receiving both portions of the campaign on whether an individual opened their email in a subsequent round. The overall open and click rates were much higher than industry standards. The campaign also saw more than 16,000 opens and 1,500 clicks throughout the four rounds.

Additionally, many of the results seemed to be tool-specific. Some tools had higher open and/or click rates (e.g. Corn GDD) than others (e.g. Irrigation Investment).

Finally, there were a few lessons learned from the implementation of the campaign. It was important to use data to modify the lists over time, as this saved us resources. Basic analysis after each round allowed us to determine if one group was impacted by the campaign more/less and we could tailor subsequent deployment to those results. We also learned to stagger the email and mail dates so we could attribute Google Analytics traffic appropriately. Adding U2U team members onto a “seed” list allowed us to see when postcards and emails arrived so we could determine a campaign effect period. We also learned that in order to look at campaign effects over time, we need to track individuals across rounds. By adding a unique ID to each individual, we were able to do this effectively.

Appendix

Table 16: Lists included in each round

Round		1	2	3	4
Ag Extension	Email	X	X	X	
	Mail	X	X	X	X
CCA	Email	X	X	X	X
	Mail	X	X	X	X
Progressive Farmer	Email				
	Mail	X	X	X	X
SWCS	Email	X	X	X	X

	Mail	X	X	X	X
TSPs	Email	X	X	X	X
	Mail	X	X	X	X
Ag Professional	Email				
	Mail		X	X	X
NACD	Email		X	X	X
	Mail		X	X	X
U2U	Email		X	X	X
	Mail			X	

*Note: An "X" signals that the list was used in the identified round with the identified mode.