

USER RESEARCH REPORT

By: Dave Bartkowiak | dbartkow@kent.edu

Revised: May 1, 2016

News Push Notifications Research Study

Contents:

Executive Summary
Research Overview
Research Methods
 Recruitment
 Data Analysis
 Findings
Recommendations
Appendix

EXECUTIVE SUMMARY

Introduction:

The purpose of this document is to summarize a news app push notifications user research study for WDIV/ClickOnDetroit which sought to answer the following research questions:

- What compels a person to receive app notifications from a news service?
- More specifically: What compels a person to receive app notifications from a local news service?

User research methods including interviews and diary studies were conducted to yield data which helped answer the listed research questions.

Summary of methods conducted:

Interviews:

Three members of a target audience were interviewed about his or her experiences with app news push notifications. The interviews were analyzed and summarized, providing data to support conclusions and recommendations.

Diary studies:

Three members of a target audience conducted week-long diary studies of his or her use of app news push notifications. The participants were provided with a diary study worksheet to help guide the type of data he or she would provide. This data also was organized, analyzed and configured into graphic representations to help illustrate findings.

NOTE: An explanation of the target audience can be found in an attached research report.

Research limitations:

This research was conducted by a one-person research team within a two-week period. Only six members of a target audience participated — the sample pool was very small.

However, the findings of this research very clearly provide justification for conducting more such research with a larger sample of the target audience. More research methods, such as a survey, should be conducted by a larger research team within a wider timeframe.

EXECUTIVE SUMMARY

Key findings:

- *Those who subscribe to push notifications find strong value in them (see Fig. 1.0)*
- *App users are unlikely to enter an app upon receiving push notification — **87 percent** of the time users will not enter the app upon receiving a push notification*
- *Local news app push notification subscribers not only want local news push notifications, but also want national and international news push notifications*

Diary studies findings

Interviews findings



Fig. 1.0

Conclusion:

Users of this type of app consider it his or her primary news source. Moreover, the push notification itself may be his or her primary news source — the user rarely enters the app upon receiving the notification, but still values the notification a lot.

See recommendations on the next page ...

EXECUTIVE SUMMARY

Recommendations:

Three main recommendations focus on how a local news app should construct its content strategy for app push notifications:

1. **Broaden content:** A local news app such as ClickOnDetroit should provide local news, national news, international news and sports news push notifications so users do not have to use another app for such alerts.
2. **Be useful, valuable:** The ClickOnDetroit app needs to offer hard-hitting, useful news in a push notification. Users won't be entering the app for the most part, so the push notification should be considered a stand-alone piece of content, and needs to be constructed with that in mind.
3. **Send more push notifications:** If the notifications meet the criteria listed above, then more of them should be sent. Subscribers want them, otherwise they already would be unsubscribed.

RESEARCH OVERVIEW

Purpose

Research of WDIV Local 4's news app notifications and users was conducted to yield data which can help enhance app user experience, increase app sessions, improve bounce rate and modify content strategy accordingly. The report identifies user research questions for WDIV Local 4. It offers detailed research questions which will be addressed by conducting specific user research methods.

Introduction

As part of a relatively large American news media market (Detroit), WDIV Local 4 is working to understand the makeup of its digital audience and specifically why users choose to receive such notifications from Local 4's newsreader app. Moreover, the station wishes to understand why the same, or different, users are receiving app push notifications from competing news services, especially those in the Detroit area.

Problem

As a digital news service, WDIV Local 4 is operating a newsreader app without a solid understanding of who its app users are and why they are or aren't choosing to receive notifications. Save for some data analytics, little is known about the effectiveness of the station's app notifications service, which leads to the following research question.

Research Question:

What compels a person to receive app notifications from a news service?

More specific research questions:

- What compels a person to receive app notifications from a *local* news service?
- How often do users opt out of news app notifications? Why do they opt out?
- Why do users choose to enter the news app upon receiving a notification?
- What kind of content are users seeking to receive from an app notification?

Research Methods Conducted

- Interviews
- Diary Studies

- Interviews

Why:

Conducting interviews is an ideal research method for this scenario based on feasibility and the desired qualitative data being sought. Interviews can be conducted in a relatively short amount of time. Participants from a target audience can offer data to help answer all of the listed research questions by answering specific, yet open-ended, questions.

Conducting interviews can yield similar qualitative data as would a focus group without the need to recruit a larger group of people who would work well together. There is not enough time to recruit participants for a focus group. It's also tougher to schedule a focus group. Getting everyone in the same place at the same time can be problematic, and it's a lot of work for a one-member research team to undertake. Moreover, individual interviews allow the participants to answer questions without being swayed by focus group members' views and opinions.

How:

Three 10-minute interviews with recipients of news app push notifications were conducted at the participant's desired meeting location. The interviews will included open-ended questions.

- Diary Studies

Why:

Diary studies were conducted within a set amount of time by the participant alone. Since there was limited access to the target audience, diary studies are ideal because such a method focuses on expert users. Expert users can compile their own data, which then can be analyzed and reported by the research team.

As noted, there was a time constraint to this research and not a big enough window to access a large sample of the target audience, which excludes a quantitative method such as an online survey. Diary studies allow the research team to focus on a few expert users who can do a lot of the research themselves.

RESEARCH METHODS

A potential drawback to diary studies is reliability of the participants. A heavy emphasis was placed on recruiting the correct participants.

How:

Three expert users conducted a one-week diary study. Participants were asked to:

- Keep a log of news app push notifications they receive during a given day
- Log how he or she interacts with such a push notification
- Log what he or she was doing when receiving the app notification
- Log what he or she thinks of the content (the quality, the timing, etc.)
- Log whether or not he or she entered the app upon receiving such an alert.

Note: See appendix for a sample of the diary study worksheet.

Target Audience

Summary:

The target audience is comprised of people who find value in news app push notifications and use them on a daily basis. Ideally, these are people who use more than one app for news push notifications.

Profile:

A member of the target audience should, ideally, meet the following criteria:

- Speaks and reads English fluently
- Frequently uses smartphone and/or tablet device
- Actively consumes news, whether it's national and/or local
- Receives push notifications from at least one news app

Recruitment Screener

To screen for ideal participants, the following questions were posed to prospective members of the target audience.

Script:

Here is a script to follow when screening people:

Assumption: The person speaks and reads English fluently.

Opening: Can you answer a few questions for me to see if you would be an ideal fit for a user research study? This will be quick and there are no wrong answers.

Question 1: On average, how frequently do you use a smartphone and/or tablet device?

Ideal answer: The person uses such a device throughout his or her daily life.

NOTE: If the answer to Question 1 is “never,” then skip Question 2 and move on to Question 3. This likely will not be an ideal participant.

Question 2: Do you receive app push notifications? What kind?

RECRUITMENT

Ideal answer: Yes, the person receives app push notifications. Receiving notifications from news apps is ideal.

Question 3: Do you keep up on current events, both local and national? How?

Ideal answer: The person actively consumes news — both local and national — and they do so through a smartphone and/or tablet device.

NOTE: If the answer to Question 1 is “no,” then skip Question 4 and proceed to “Closing.”

Question 4: What kind of news do you consume most?

Ideal answer: Any kind of news works, whether it’s sports, national, local, niche. It doesn’t really matter what kind of news.

Closing: Thank you for answering my questions.

NOTE: If the person fits the criteria for participating in the research study, ask them if he or she would like to participate. If yes, then ask for his or her contact information so you can be in contact.

Reaching out to potential participants

Participants needed:

At least three participants were needed for interviews and three people are needed for diary studies. It was possible to enlist a person to take part in both an interview and a diary study.

Reaching out:

The following methods were executed when reaching out to potential participants:

- Existing personal contacts will be enlisted if they meet the target audience criteria
- Contacts through friends and coworkers will be enlisted if they meet the target audience criteria
- If needed, a guerrilla method, such as enlisting people at a local coffee shop, will be used

Managing research session logistics

Here is a timeframe with how and where the interviews and diary studies were conducted.

Interviews

- Interview participants were contacted on the first day of the recruitment week to set up a time to meet before the end of the following week.
- Participants were reminded by his or her preferred method of contact the day before the scheduled meeting to confirm.
- Interviews were conducted at a home office setting. These were recorded sessions — both audio and visual. Each session took no more than 10 minutes.

Diary Studies

- Diary studies participants were given a worksheet (see appendix) to help guide log entries.
- Participants began conducting the studies immediately after agreeing to participate. They conducted the study for at least five business days.
- Diary studies data were returned to the research team leader at the end of week two either in person (hard copies).

Variables and Observations

The following participant variables were sought during the research study:

Variables:

- Gender
- Age
- Device used (smartphone or tablet)
- Number of news app push notification services subscribed to
- Number of app push notifications received in a day
- Type of news content participant consumes most (I.e.: Local, national, sports, niche, etc.)
- Push notification satisfaction scores — Likert scale
- Success rate — whether or not participant enters app upon receiving push notification
- Participant's overall thoughts and feelings toward app push notifications

Observations:

- Six people were observed in either an interview or diary study.

Data Analysis Methods Used

The interviews and diary studies yielded both categorical and ordinal data (see findings section).

The following data analysis methods were used:

- Summarizing
- Coding
 - Compiling codes into spreadsheet
- Deliverables including:
 - Graphs
 - Personas
- **Summarizing**

Each interview and diary study were summarized, highlighting the appropriate variables from each — both quantitative and qualitative variables were summarized.

Summary documents include both written summaries and edited videos which will highlight the most valuable variables, values and observations from each

DATA ANALYSIS

interview or diary study. This helped the research team form target audience personas, too.

- **Coding**

Variables, values and observations were coded into useful data groups which helped form the listed deliverable items including graphs.

Spreadsheets

Codes were compiled into spreadsheets helped form the listed deliverables.

- **Graphs and Personas**

Graphs

The data from interviews and diary studies was depicted in graphs.

For example: Variables and values shared by participants were displayed in several different types of graphical documents. Success rates and satisfaction scores — which participants were asked to compile as part of a diary study — were displayed in graphs.

Personas

Summaries of the data from interviews and diary studies can lead to the development of personas. These summaries were based on specific data gathered about these members of the target audience.

Research Instruments

The following research instruments were used to conduct the listed research methods with a focus on the above variables and observations (see appendix for samples):

- [Interview guide](#)
- [Video recordings](#)
- [Interview notes](#)
- [Diary study guide](#)

DATA ANALYSIS

- **Interview guide**

The interview guide made sure specific questions are posed to each participant. The guide also will make sure the research question(s) stays in focus during each interview.

- **Video recordings**

Video recordings of interviews allowed the research team to deeply analyze each interview and create edited reels to highlight specific portions of the interview which provide useful data.

- **Interview notes**

Taking notes during each interview is a very important part of the data analysis. Notes helped the research team sift through the recorded interviews to find the useful parts, to put it plainly.







- **Diary study guide**

Diary study participants were given a diary study guide which helped them record specific data — both qualitative and quantitative.

Example items on diary study guide:

- Participants were asked to categorize each app push notifications received by content type.
- Participants were asked to provide the time at which each notification was received.
- Participants were asked to rank each push notification based on how useful or useless he or she finds it — a Likert scale.

Meet the Participants

| Interview Participants | Diary Study Participants |
|--|---|
| <p></p> <p>Carl</p> <ul style="list-style-type: none"> • Age: 57 • Occupation: Business owner • Lives in Detroit news market • Uses iPhone to receive news app alerts • Uses ClickOnDetroit news app | <p></p> <p>Mark</p> <ul style="list-style-type: none"> • Age: 25 • Occupation: Public Relations • Lives in Detroit news market • Uses iPhone to receive news app alerts • Uses ClickOnDetroit news app |
| <p></p> <p>Mary</p> <ul style="list-style-type: none"> • Age: 58 • Occupation: Pre-school teacher • Lives in Detroit news market • Uses iPhone and tablet to receive news app alerts • Uses ClickOnDetroit news app | <p></p> <p>Larry</p> <ul style="list-style-type: none"> • Age: 27 • Occupation: Waiter • Lives in Detroit news market • Uses iPhone to receive news app alerts • Uses ClickOnDetroit news app |
| <p></p> <p>Lynn <i>(participated in both)</i></p> <ul style="list-style-type: none"> • Age: 28 • Occupation: Middle school teacher • Lives in Detroit news market • Uses iPhone to receive news app alerts • Uses ClickOnDetroit news app | <p></p> <p>Lynn <i>(participated in both)</i></p> <ul style="list-style-type: none"> • Age: 28 • Occupation: Middle school teacher • Lives in Detroit news market • Uses iPhone to receive news app alerts • Uses ClickOnDetroit news app |

Findings

How data was analyzed:

The data from diary studies was compiled into spreadsheets based on a participant's responses to the supplied worksheet (view in appendix). Interviews were transcribed (view in appendix) and summarized, from which codes were drawn. Codes were placed into a spreadsheet (view in appendix) to help organize the data. This allowed for key data to be pinpointed.

Key Findings From Diary Studies:

- Users find strong value in news app push notifications
- Users likely won't enter app upon receiving a push notification
- Users want international news push notifications
- Users want national news push notifications
- Users want political news push notifications
- Users want sports news push notifications
- Users want local news push notifications

Key Findings From Interviews:

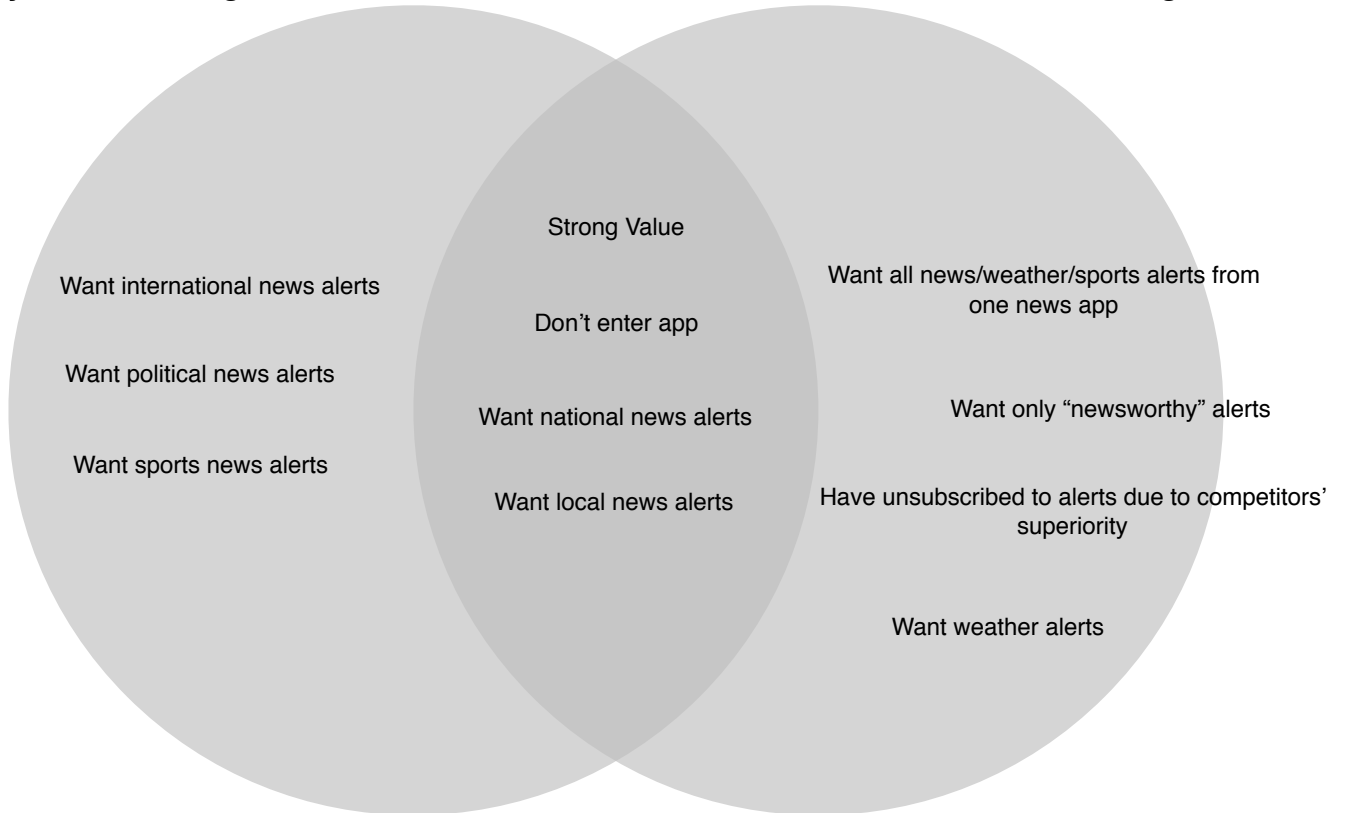
- App push notifications serve as primary news source in daily lives (strong value)
- Users want all news/sports/weather push notifications from one app
- Users likely won't enter app upon receiving a push notification
- User want weather push notifications
- Users want national news push notifications
- Users have unsubscribed to app notifications due to competitor's superiority
- Users only want newsworthy* push notifications — nothing else
 - *newsworthy is considered to be national, weather, local, sports alerts from a news source

The next page shows a Venn diagram depicting overlaps in findings from diary studies and interviews ...

FINDINGS AND RECOMMENDATIONS

Diary studies findings

Interviews findings



Findings

Interview Summaries:



Carl

Carl is a middle-aged business owner who relies on his smartphone for local, national, international and sports news. He relies on push notifications to deliver such news to him.

“Most common (source of news) is on the phone ... I don’t watch too much news because I don’t have time,” he said.

He wants weather and traffic alerts.

“If there’s a tornado warning or something happening in the area, I am responsible for the employees in the building,” he said.

His long commute to work keeps him watching out for traffic alert.

Carl has unsubscribed to at least one news app in the past because he was annoyed.

“If it’s not newsworthy, or sports ... I turn it off.”

However, he does get personal, direct messages from Facebook and Twitter.

Carl doesn’t normally enter an app after receiving a push notification, so he is relying on the push notifications to keep him informed.

“Honestly, maybe 25 percent of the time (do I actually enter the app after getting an alert).”

“I think it is likely that if the (alert) had 2-3 sentences instead of one, it would probably give me all the information I want to know.”

Watch an interview with Carl [here](#).



Mary

Mary is a middle-aged pre-school teacher who relies on mobile devices for her news. She relies heavily on app push notifications to keep her informed.

“I use the weather app, and the (ClickOnDetroit) app. I also have the CNN app,” she said.

Mary wants weather and local news.

“I always get local weather push notifications.”

She will go into the app to read about the weather.

FINDINGS AND RECOMMENDATIONS

“Sometimes I don’t (go into the app) ... and that’s why I like the push notifications because I don’t really have to read the whole thing.”

On unsubscribing to alerts: “If it’s annoying to me, that’s it, I’m done.”

“Annoying” is anything that’s not news.

Watch an interview with Mary [here](#).



Lynn

Lynn is a 28-year-old middle school teacher who relies on her push notifications — on her iPhone — for all of her local and national news.

Lynn usually doesn't go into the app to read the story after receiving a push notification. She'll go back to read something if she remembers.

“I don’t prefer to watch the news,” she said.

However, she watches CNN student news in her classroom. Other than that, all of her news is from push alerts and mobile news apps.

“I have seen stories on Facebook ... but most of the time if it is posted on Facebook, I have already seen it on an alert,” she said.

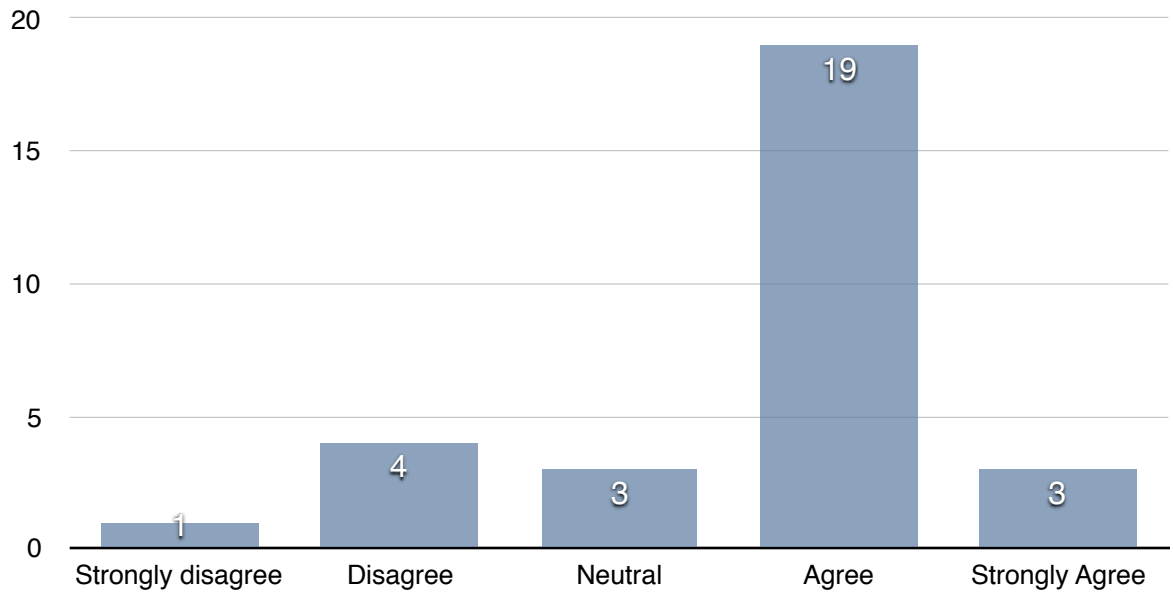
Watch an interview with Lynn [here](#).

FINDINGS AND RECOMMENDATIONS

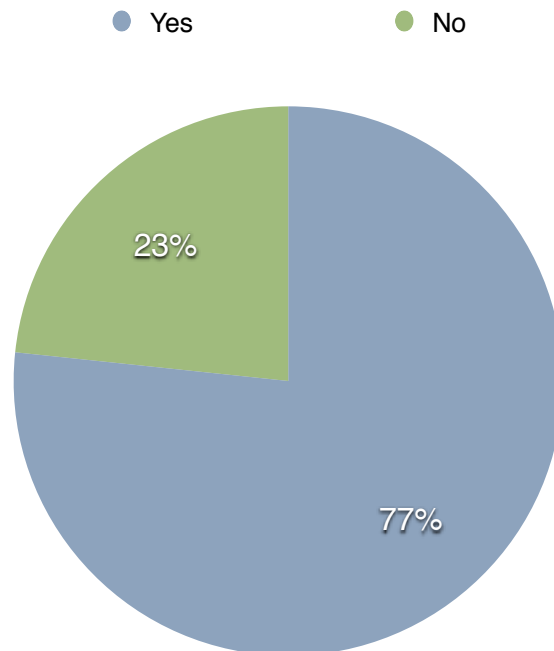
Conclusions from Findings Based on Data

- **Those who subscribe to push notifications find strong value in them**

When asked if a push notification was useful and relevant:



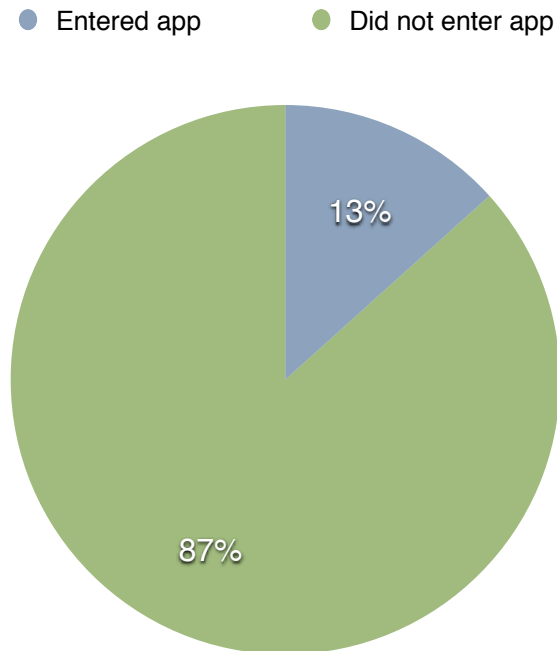
When asked if a push notification was useful:



FINDINGS AND RECOMMENDATIONS

● *App users are unlikely to enter app upon receiving push notification*

Three diary study participants received 10 push notifications:



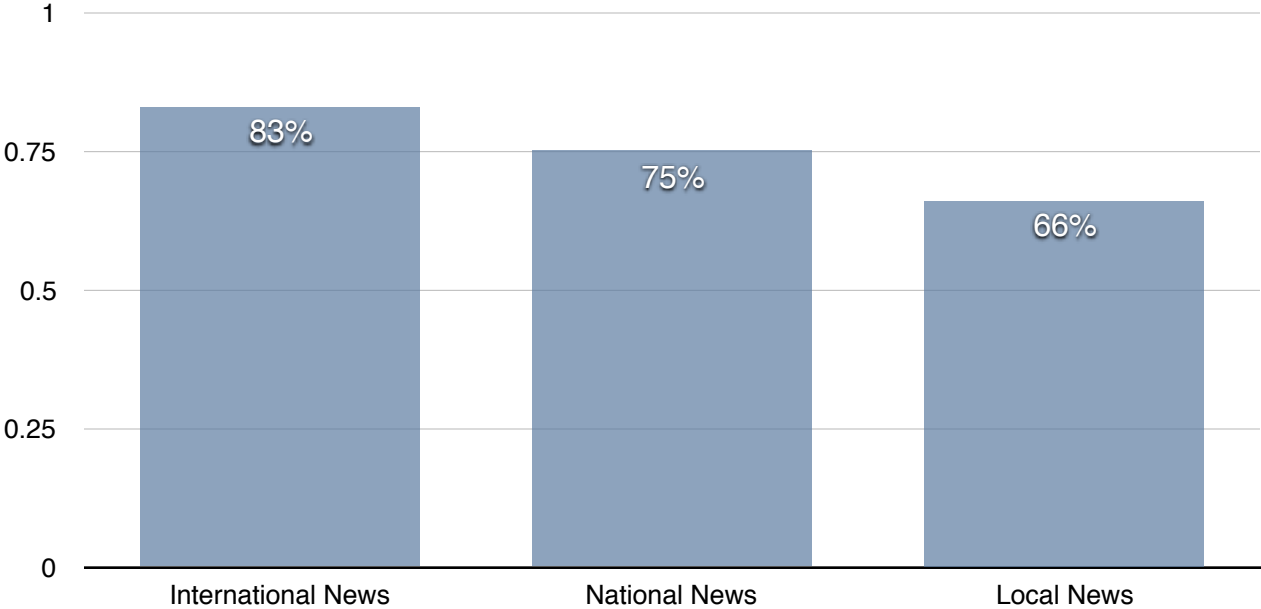
The 13 percent represents 4 instances users actually entered the app after receiving a push notification. They gave the following reasons for entering the app:

1. Wanted to know more about this
2. Wanted details on product recall
3. Wanted to see full story
4. I wanted to see the full schedule

FINDINGS AND RECOMMENDATIONS

- **Local news app push notification subscribers not only want local news push notifications, but also want national and international news push notifications**

Percent of received notifications found useful to user:



FINDINGS AND RECOMMENDATIONS

Recommendations

Based on the research conducted and the data yielded, here are three recommendations for ClickOnDetroit's push alert content strategy:

1. ClickOnDetroit app users want the app push notifications to be from the following news categories: local news, national news, international news and sports news.

Recommendation: The app should provide all of those types of alerts so users do not have to use another app for alerts he or she could receive from the ClickOnDetroit app.

2. Users of this type of app consider it his or her primary news source. Moreover, the push notification itself may be their primary news source — the user rarely enters the app upon receiving the notification, but still values the notification a lot.

Recommendation: The ClickOnDetroit app needs to offer hard-hitting, useful news in a push notification. Users won't be entering the app for the most part, so the push notification should be considered a stand-alone piece of content, and needs to be constructed with that in mind.

3. As stated, push notifications are considered a primary source of news for those who subscribe to them.

Recommendation: Send more push notifications. If the notifications meet the criteria listed above, then more of them should be sent. Subscribers want them, otherwise they would be unsubscribed already.

APPENDIX

Contents:

- Diary study worksheet
[Click here to view](#)
- Interview script
[Click here to view](#)
- Interviews transcripts
[Click here to view](#)
- Data spreadsheets
[Click here to view](#)