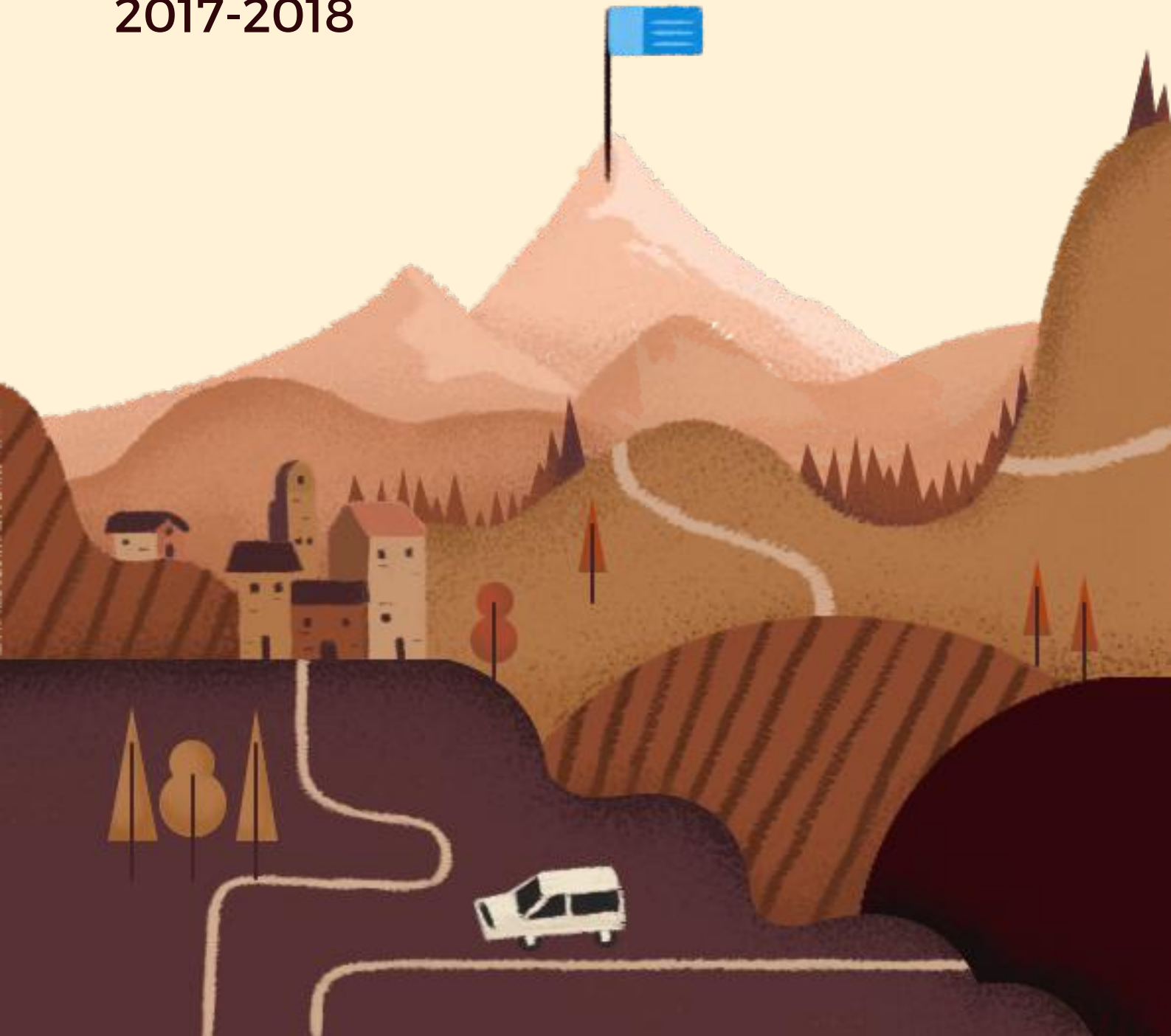


Powered by  pushcrew

The State Of Web Push Notifications

2017-2018



NOTE TO THE READER

Web Push Notifications have come a long way since 2016 and they hold immense potential, for marketers and businesses alike. With this report, we intend to discover and share insights on its user landscape and best practices. **The report is based on three data sources:**

Firstly, it's based on a survey conducted by PushCrew, with responses from more than 100 PushCrew users. The aim of this survey was to understand the specific reasons why websites use Web or Browser Push Notifications, their preferences in terms of timing and features, and also uncover the hesitations in implementing Push Notifications.

The second data source was a consumer survey, where we collected responses from 375 general internet-users across the globe. The intent of this survey was to understand how Web Push Notifications are perceived among the internet-browsing public, and what observations they have about making the Push Notification experience better.

OUR DATA SOURCES:

- [375 General Internet-users](#)
- [100+ PushCrew Users](#)
- [Data on Push Notification usage for 1000+ Websites](#)

Lastly, the report also includes insights uncovered by an analysis of PushCrew usage across 1000+ websites. This analysis resulted in insights about optimizing Browser Push Notifications to achieve better results in terms of Frequency, Timing, Personalization, and Rich Push Notifications.

TAKEAWAYS

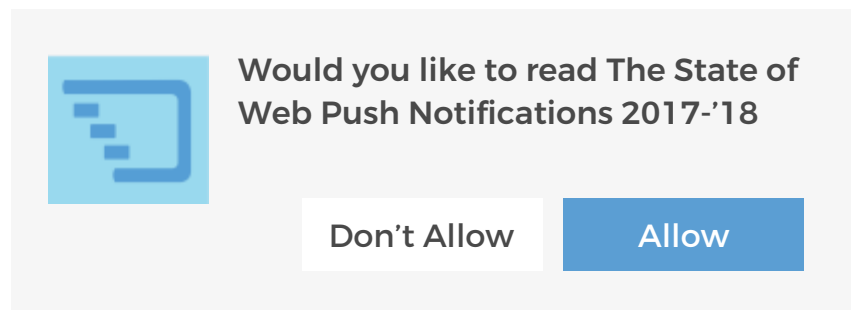
1. The eCommerce industry takes the lead when it comes to Website Push Notification usage with more than **22.03%** of Push Notification users belonging to this industry.
2. Most of the top industries currently prefer to send notifications between **2 PM - 7 PM, on weekdays.**
3. **53.1% subscribers preferred notifications with Big Images** over plain Push Notifications.
4. **100% of marketers considered Rich Push Notifications important.**
5. Most people believed that Push Notification users should **send less notifications, and send personalized and relevant notifications.**
6. **50.42%** of General Audience said that Push Notifications are beneficial if they can **choose to opt-in** to websites or apps of their choice.
7. More than **74%** of the audience think that receiving **more than 5 notifications in a day, is too many.**
8. **39.8%** subscribers wanted **more relevant and personalized notifications.**
9. Users didn't consider sending notifications at odd hours as spamming. However, subscribers strongly believed otherwise.

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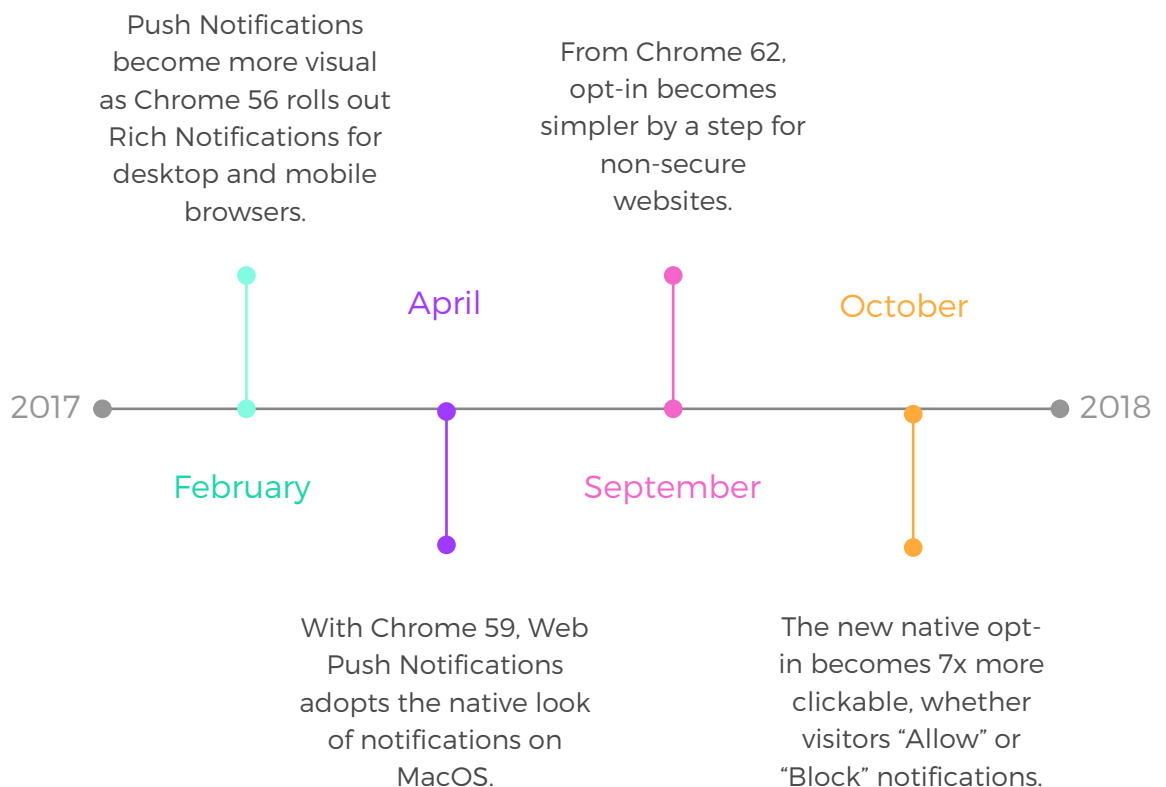
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- 1. Who Uses Push Notifications?
- 2. How Do Subscribers Perceive Push Notifications?
- 3. How Can You Time Your Push Notifications?
- 4. What Role Does Frequency Play?
- 5. Do Rich Push Notifications Perform Better?
- 6. What Do Subscribers Think About Personalization?
- 7. What Are the Delivery Rates for Push Notifications?
- 8. What Are the Important Features of Push Notifications?
- 9. How Do the Top 5 Industries Use Browser Push Notifications?
- 10. What Are the Hesitations and Expectations from Push Notifications?
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INTRODUCTION

2016 was the year when Web Push Notifications made its appearance as the dark horse in marketing stacks across industries and domains. 2017 was the year it came out as a fully-fledged and confident marketing medium, giving other channels a run for their money.



Let's do a quick recap of the major changes that Push Notifications went through in 2017.



In this report, we start our journey by understanding the user landscape of Web Push Notifications. From there, we look at the good, the bad, and the ugly perceptions surrounding this marketing channel.

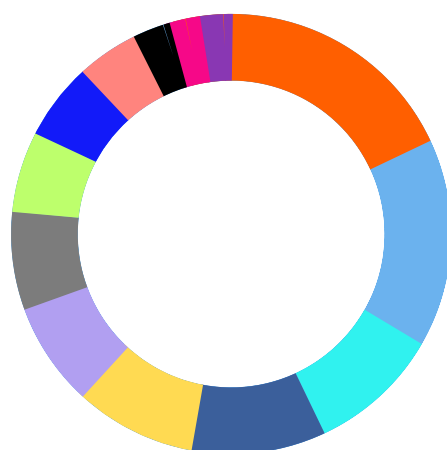
A good Notification Strategy stands on four pillars:

- 1. **Timing**
- 2. **Frequency**
- 3. **Richness**
- 4. **Personalization**

We will examine all of them in detail in this report, backed by our research. We are following it up with the top use cases across different industries. Finally, we have the hopes and hesitations surrounding this medium, all of which are integral to getting the best out of Web Push Notifications in 2018.

WHO USES PUSH NOTIFICATIONS?

Among the industries that we analyzed in our study, eCommerce once again bagged the top spot among Push Notification users*, with **22.03%**. Here's what the overall user-landscape looks like.



Website Push Notification Usage by Industry

- 22.03%, eCommerce
- 18.79%, Media, Publishing & Blogging
- 8.35%, BFSI
- 7.62%, Software & SaaS
- 7.52%, Digital Marketing Agencies
- 6.89%, Arts/Sports/Entertainment
- 6.37%, Education/eLearning
- 5.01%, Healthcare/Wellness
- 4.91%, Others*
- 4.8%, Gaming
- 2.71%, Careers & Training
- 2.61%, Travel & Hospitality
- 2.4%, Online Directories & Aggregators

***Users:** Users refer to PushCrew users who are actively sending Push Notifications.

Chapter 01

In this report, along with universal Push Notification trends, we'll be covering the top 5 industries in depth. They are:

1. eCommerce
2. Media, Publishing & Blogging
3. BFSI
4. Software and SaaS
5. Digital Marketing Agencies

For any other industry-specific data (apart from the ones mentioned above) or any additional information in terms of Push Notifications, do write to us at info@pushcrew.com and we will help you out.

*

'Others' comprises 5 industries, which are - Automotive, Business Consulting/Advisor, Dating/Relationship, Hardware, and Non Profit/Charitable Organizations. Although diverse in nature, they have been put together due to the limited data we have on them.

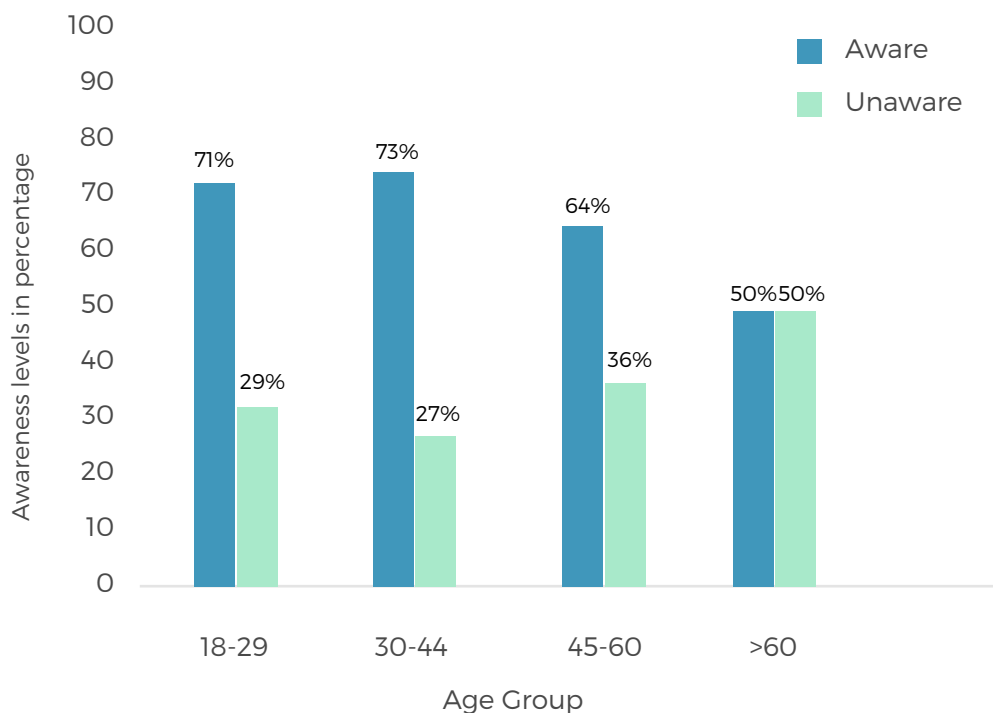
HOW DO SUBSCRIBERS PERCEIVE PUSH NOTIFICATIONS?

A complete understanding of audience perception depends on many factors. Firstly, let's look at awareness levels.

Awareness about Web Push Notifications

Awareness is the first step towards opting in for Web Push Notifications. We asked our General Audience if they are aware that websites can send notifications, just like mobile apps do.

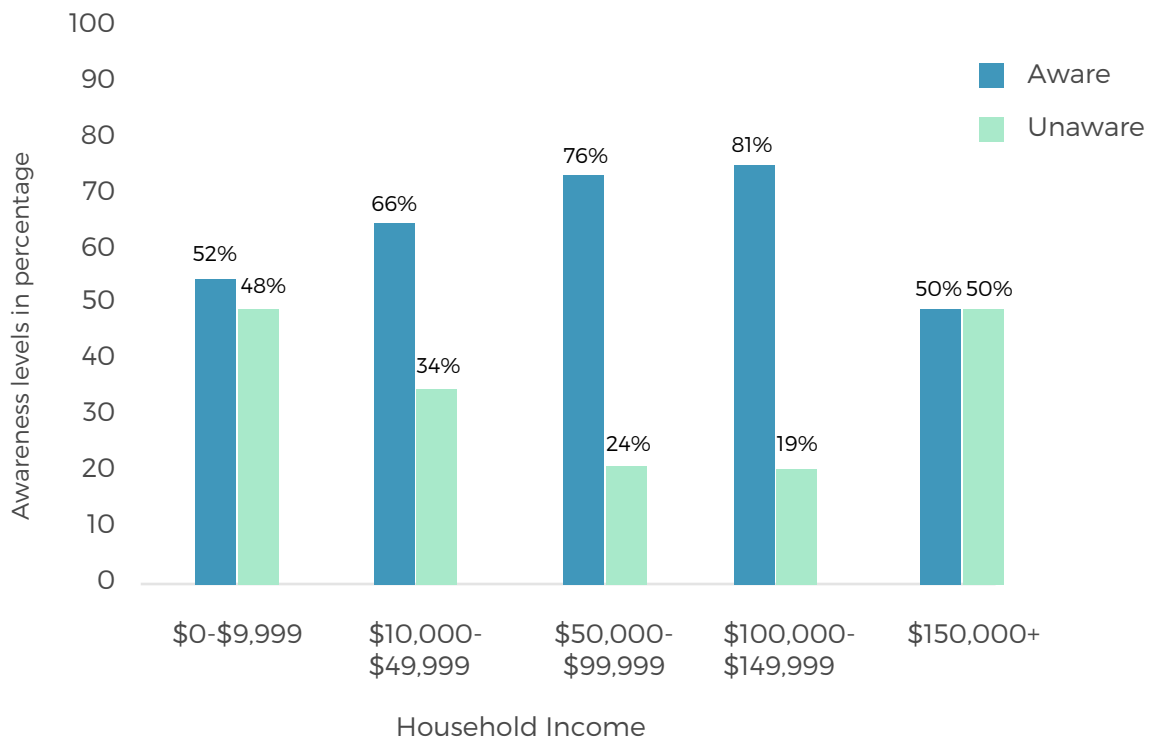
The awareness levels look heartening among all age groups. Marketers targeting a younger demographic should be even more happy as the **18-44** age group shows an **average awareness level of 72%**.



Awareness about Web Push Notifications among different age groups

Chapter 02

Now, let's look at awareness levels based on household income. You can see here that awareness about Push Notifications increases with increase in household income, ergo increase in spending power. This information is especially relevant to eCommerce and BFSI websites. **Income groups between \$50,000-\$150,000 show an average awareness level of 78.5%!**



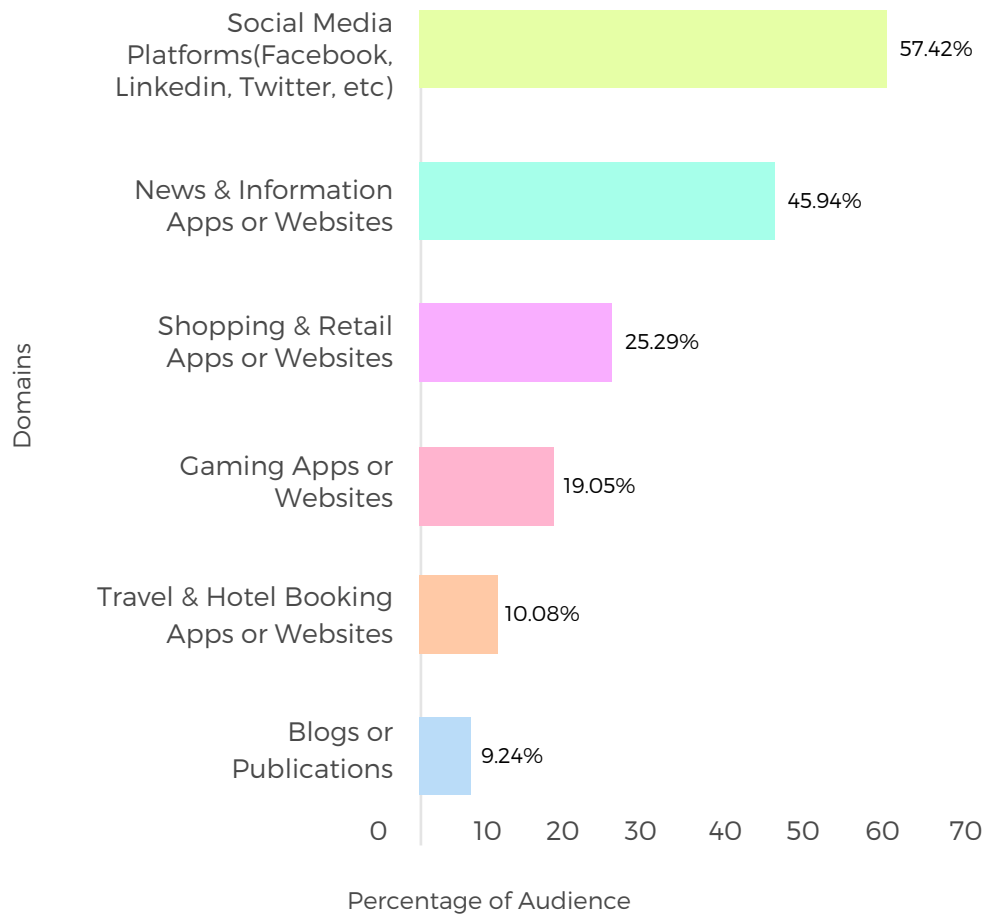
Awareness about Web Push Notifications among different income groups

Preference of websites sending notifications

The subsequent part of our research involved people who were aware about Web Push Notifications. We asked them what kind of websites or apps they preferred getting notifications from.

The intention of this question was to find out the domains to which they were most likely to opt in.

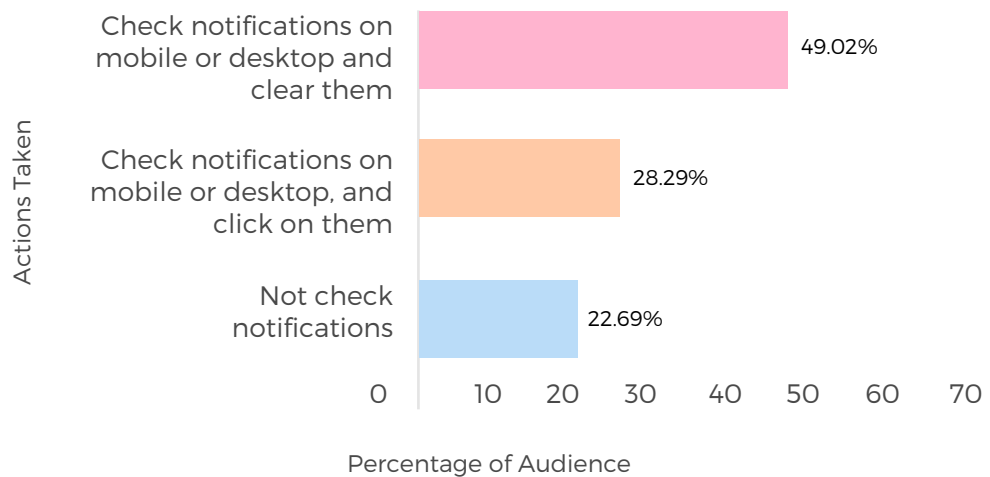
Here are the top domains as per audience preference.



Audience preference for receiving notifications

Response to Push Notifications

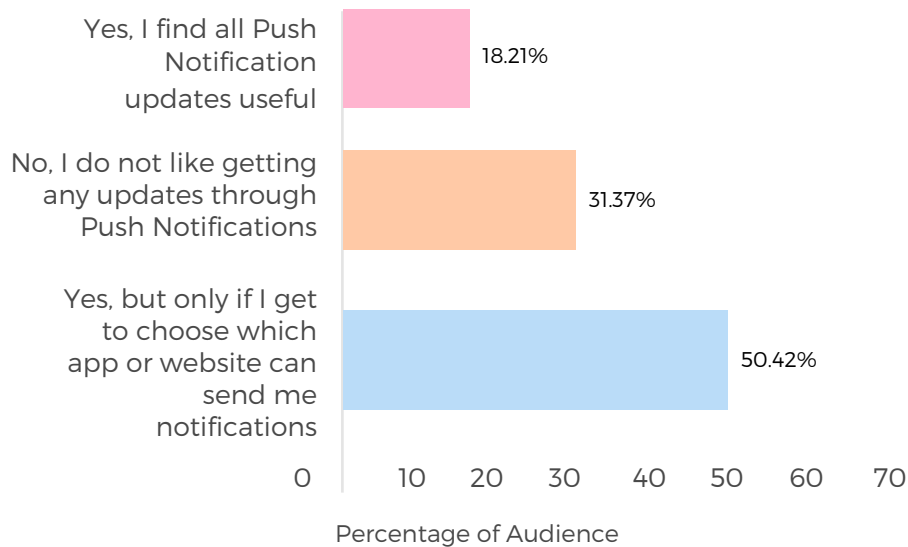
Next, we asked the audience, how they responded to Push Notifications. **28.29%** responded that **they click on notifications.**



Audience response to receiving a Push Notification

Usefulness of Push Notifications

Finally, we asked them the most important question: Do you think subscribing to Push Notifications is beneficial to you?



Usefulness of Push Notifications

A whopping **50.42%** said that Push Notifications are beneficial if they can choose to opt-in to websites or apps of their choice. This is great news for Web Push Notifications. By having a mandatory opt-in in place, this is exactly what they offer to the public. Unlike mobile Push Notifications, **web push is 100% permission-based**, just the way the audience like it.

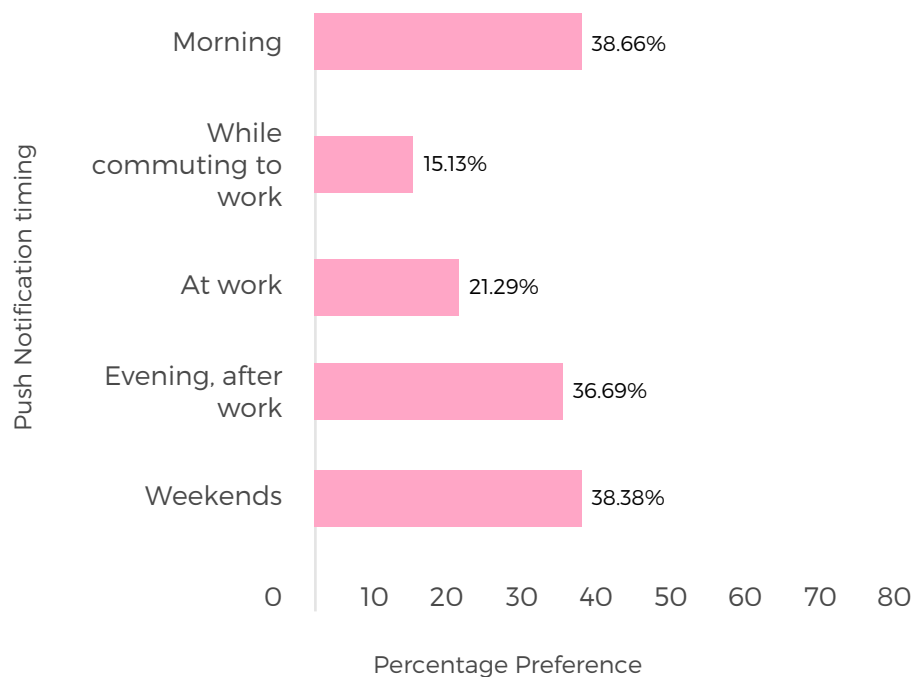
31.37% of the audience responded that they did not find Push Notifications useful. The top two reasons were - they found Push Notifications irritating, and Push Notifications distracted them from whatever they were engaged in.

This is exactly what we are trying to solve in the forthcoming sections of this report. We'll uncover the factors that'll make Push Notifications 'less irritating', and how you can send them without 'distracting your subscribers'. We are now going to look at the foundations of a good and non-intrusive Push Notification Strategy, namely: **Timing, Frequency, Richness, and Personalization.**

HOW CAN YOU TIME YOUR PUSH NOTIFICATIONS?

45% of the General Audience feel they are being spammed if they receive a Push Notification at the wrong time. This highlights the importance of bettering your Push Notification timing, and not earning unsubscribes and the wrath of your audience.

Preferred time for receiving Push Notifications



Preferred time for subscribers to receive Push Notifications

The General Audience prefers to receive notifications in the morning, before they get to work. Weekends also work for them. We decided to look into how Push Notifications are being sent by different industries, to see if there is common ground between both.

Chapter 03

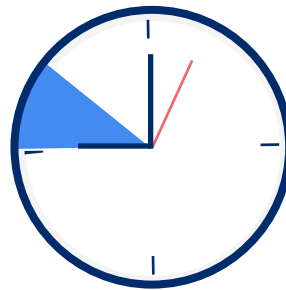
Preferred time & day for sending Push Notifications

Here's what we uncovered on how PushCrew users from the top 5 industries were timing their notifications. Please note that a majority of the websites we studied, have their audience in the USA. Also, the time denoted here corresponds to the local time of their respective audiences.



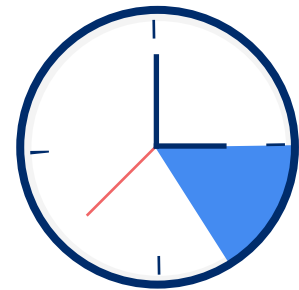
eCommerce

3PM - 4PM
Wednesday



Media,
Publishing &
Blogging

9AM - 10AM
Tuesday



BFSI

3PM - 5PM
Tuesday



Software &
SaaS

4PM - 7PM
Wednesday



Digital
Marketing
Agencies

2PM - 7PM
Tuesday

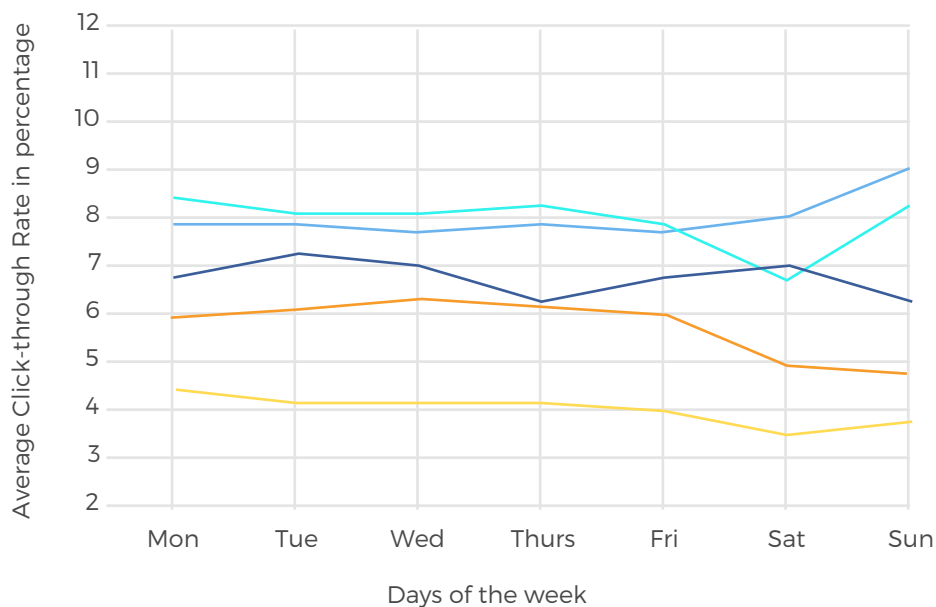
Preferred day and time
to send Push
Notifications

Chapter 03

Except for Online Publishing, all the top industries currently prefer to send notifications between **2 PM - 7 PM**, on weekdays, at the local time of their audience. Bloggers and publishers prefer to send notifications between **9 AM - 10 AM**.

How CTR varies with the day of the week

So far, we've looked at how users have been timing their notification. Now let's look at the **average click rates** they receive on different days of the week.



Average CTR as per days of the week, for the top 5 industries

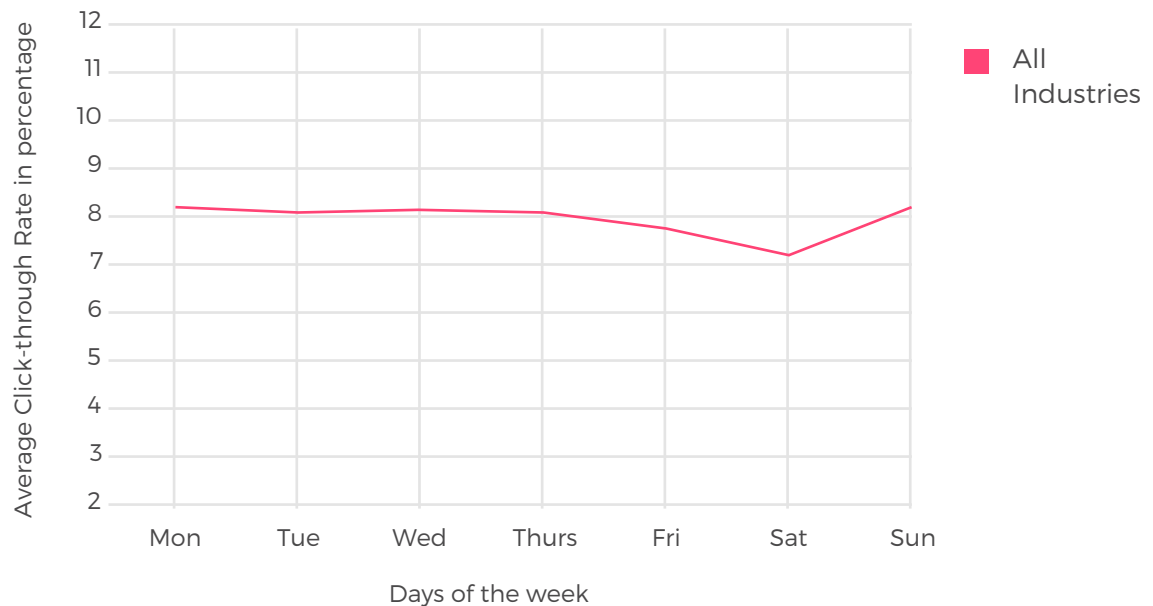


Click rates for eCommerce pick up mid-week and fall over the weekend. This coincides with their current preferred day (**Wednesday**) for notifications, as well.

The **Media, Publishing, and Blogging domain gets higher CTR on the weekends**. However, as per the data we have, **Tuesday** is their preferred day of sending notifications.

Chapter 03

Now here's how the average CTR for all industries varies, across the week. It was found to be the highest on Sunday and Monday, at 8.2%.

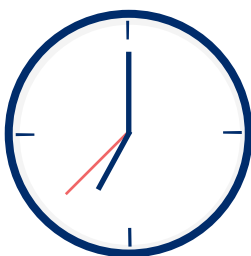


Average CTR as per days of the week, for all industries

Optimal day & time for sending notifications based on locations

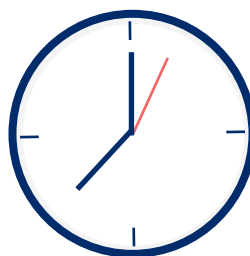
As discussed earlier, the days and timings mentioned here are strongly derived from websites who have an audience in the US. However, we decided to extend our study to other regions (after considering certain local factors), and arrived at the best time for sending notifications, based on the location of the audience.

Please note that all time mentioned is in **Eastern Standard Time (EST)**. Do not be worried if you see odd hours on the clock. Also, this is the average for all industries, and the times can most definitely vary from industry-to-industry



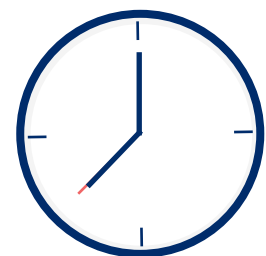
United States

7PM EST
Tuesday



Brazil

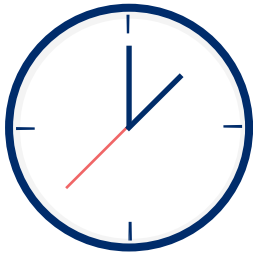
8PM EST
Friday



UK

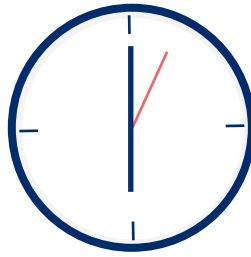
8AM EST
Friday

Chapter 03



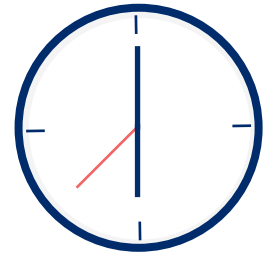
Turkey

2AM EST
Sunday



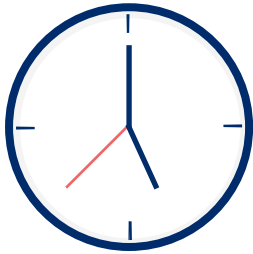
France

6AM EST
Sunday



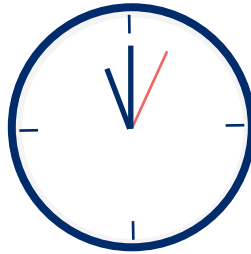
India

6PM EST
Sunday



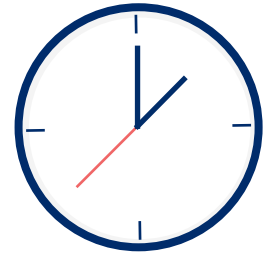
Canada

5PM EST
Saturday



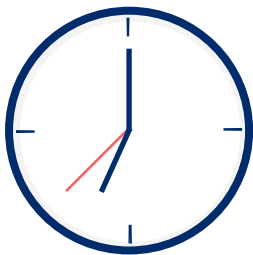
Germany

11AM EST
Friday



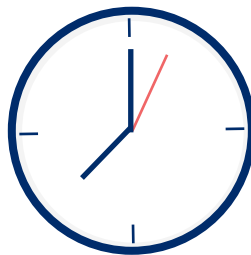
Poland

2PM EST
Thursday



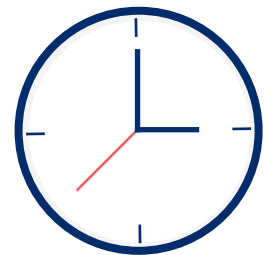
Italy

7AM EST
Thursday



Israel

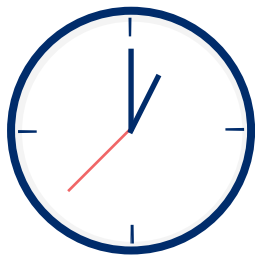
8PM EST
Tuesday



Thailand

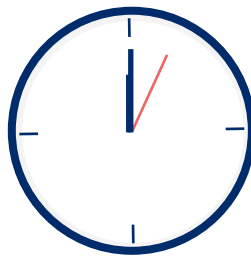
3AM EST
Thursday

Chapter 03



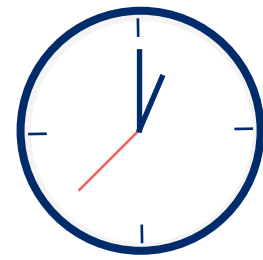
Australia

1PM EST
Sunday



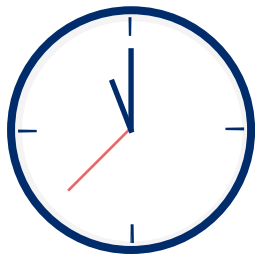
Malaysia

12AM EST
Thursday



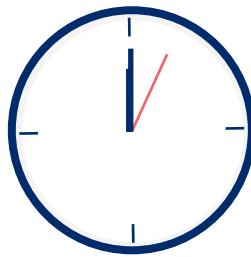
Romania

1PM EST
Sunday



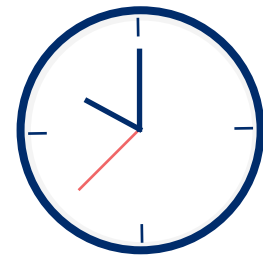
Russian Federation

11AM EST
Friday



Indonesia

12PM EST
Monday



Singapore

10AM EST
Sunday

Optimal time and day for sending notifications based on
the location of your audience

Timing your notification can be tricky. The optimal timing depends on three factors:

1. **The time your audience don't mind receiving notifications**
2. **How the CTR varies as per the day of the week**
3. **Where your audience are located**

There is no such thing as perfect timing. Consider the factors mentioned above, and keep experimenting!

WHAT ROLE DOES FREQUENCY PLAY?

Frequency plays a very important part in Push Notification success. It's all about getting it just right; not too many, not too less... just right. Let's call this the **Goldilocks Principle of Push Notification Frequency**.

Send too many notifications, and your subscribers will unsubscribe.



Send too less, and your subscribers might just forget about you.

If the frequency is **just right**, then goldilocks (your subscribers) will eat the porridge (click on your notification and convert).

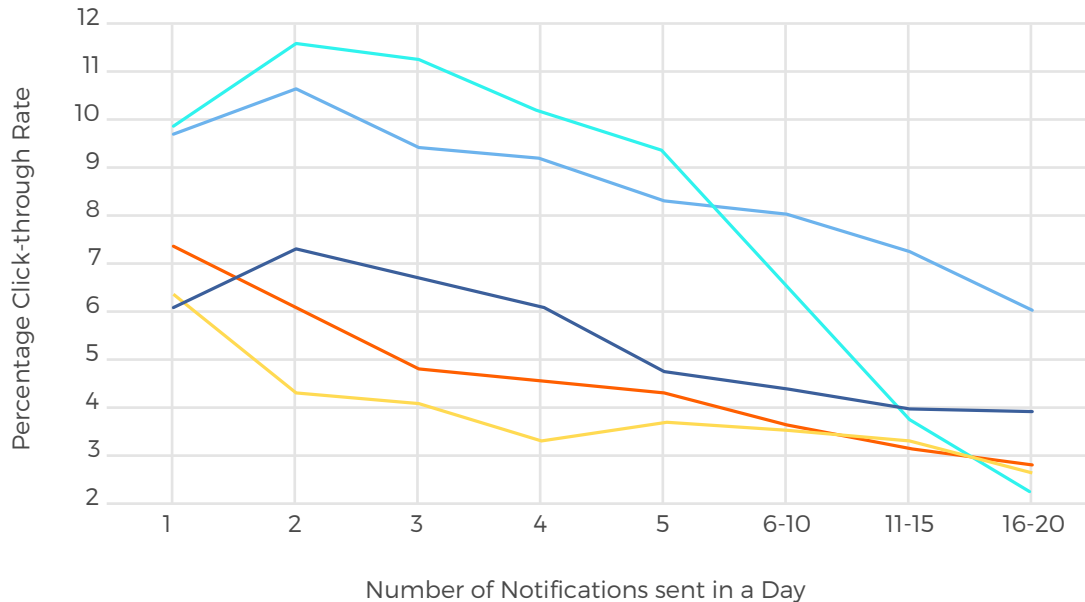
What do you mean by too many?

As per the survey responses we collected from the General Audience, receiving **1-5** notifications in a day are ideal. **More than 74% of the audience think that receiving more than 5 notifications in a day, is too many.** Although remember, 5 notifications in a day is still a lot. **The General Audience response is based on the overall number of Push Notifications they receive in a day.**

We looked into PushCrew's customer data as well, and found certain patterns in terms of Frequency.

CTR falls when the frequency increases

The Click-through Rate and Frequency of notifications have an **inverse relationship**.



Relationship between Frequency of Notifications and Click-through Rate by Industry

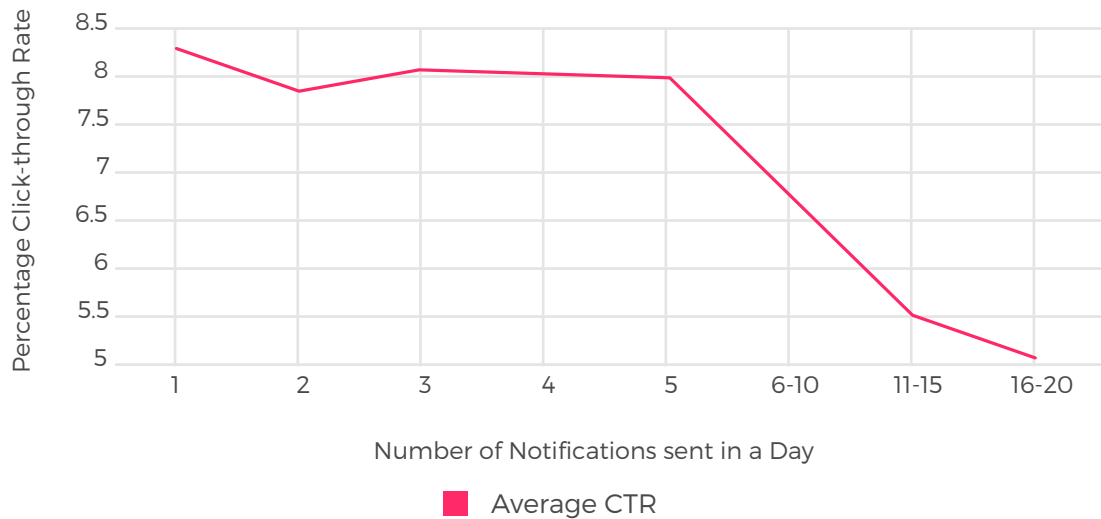
- eCommerce
- Software & SaaS
- Media, Publishing & Blogging
- Digital Marketing Agencies
- BFSI

The pattern is evident. The more number of notifications sent, the lower the Click-through rate is. There is a fall in CTR which can be seen after **5 notifications** (and sometimes even earlier).

Taking a closer look at eCommerce, we can see that the CTR was highest in the first Notification. The CTR drops from **7.3% to 5.9%** with the second notification. By the third notification, the CTR comes down to **4.9%**, and continues to drop.

Chapter 04

Upon going through all the industries, we found that this relationship is common across all of them as well. Here's how the trend looks for Frequency and CTR across all industries.

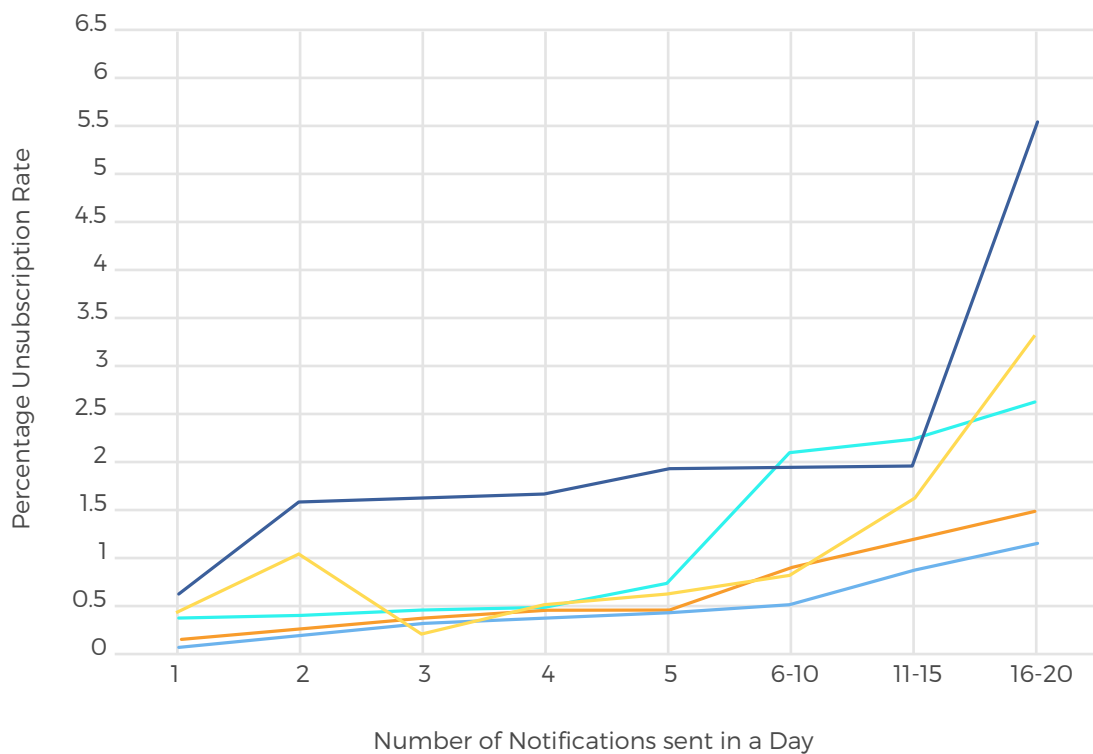


Relationship between Frequency of Notifications and Average Click-through Rate

Unsubscribes increase when frequency increases

The Unsubscription Rate and Frequency of notifications have a **direct relationship**.

The more number of Push Notifications we send, the more people unsubscribe. Sending too many notifications is considered to be spamming which is why people unsubscribe.



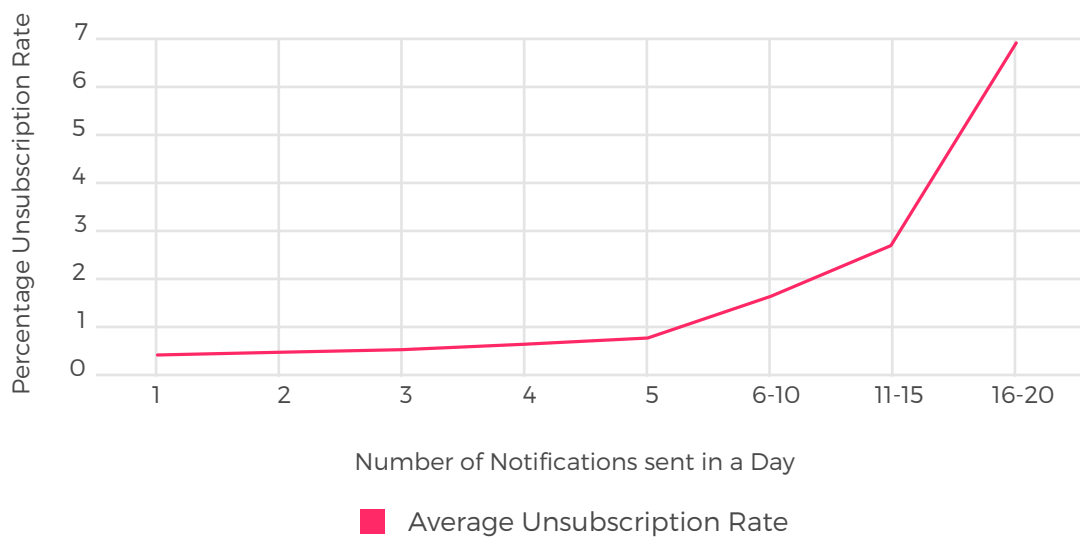
Relationship between Frequency of Notifications and Unsubscription Rate by Industry

- eCommerce
- Software & SaaS
- Media, Publishing & Blogging
- Digital Marketing Agencies
- BFSI

Chapter 04

As you can see in the case of BFSI, in the first 4 notifications the Unsubscription rate varies from **0.34 to 0.45%**, and it shoots up to 0.75% by the fifth notification. There is a constant increase in unsubscribes, and when Push Notification frequency exceeds 15, the Unsubscription rate reaches **2.63%**.

An average of all the industries follow the same pattern.



Relationship between Frequency of Notifications and Unsubscription Rate

Optimal Frequency

On the basis of our analysis, we found the ideal daily frequency of sending Push Notifications. This is based on the frequency at which you'll have the lowest unsubscribe rate, and the highest CTR.

Industry	Optimal Frequency per Day
Arts/Sports/Entertainment	1
BFSI	2
Careers and Training	5
Digital Marketing Agencies	5
eCommerce	1
Education/eLearning	2
Gaming	2
Healthcare/Wellness	2
Media, Publishing, and Blogging	2
Online Directories and Aggregators	1
Software and SaaS	1
Travel and Hospitality	2
Others	3

Optimal Frequency of Notifications per day

As you can see, this aligns with the subscribers' preferences, since the Optimal frequency throughout stays **within 1-5 notification(s)**.

DO RICH PUSH NOTIFICATIONS PERFORM BETTER?

Richness = The state of existing in or containing plentiful quantities of something desirable.

— Definition as per the Oxford Dictionary.

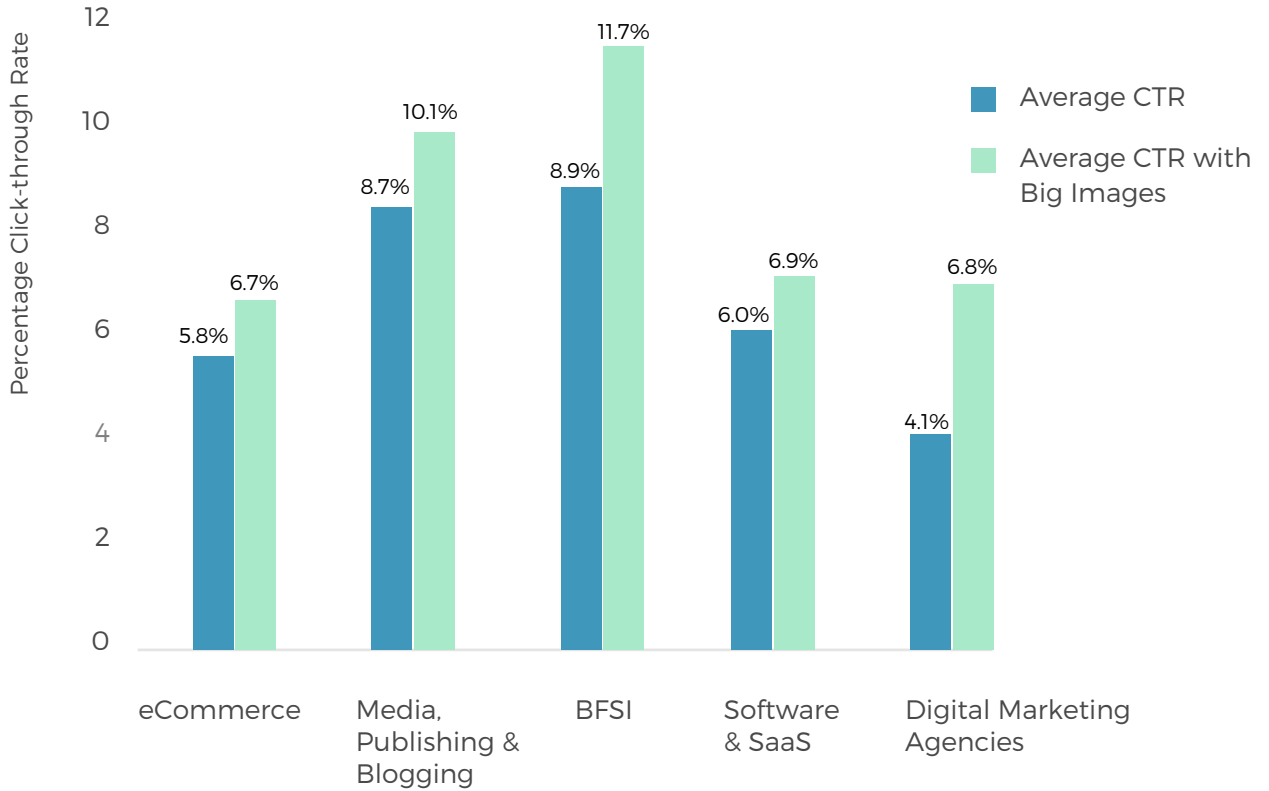
Certain components like - Banner Images, Thumbnails, Emojis, Call-to-Action buttons, etc., enrich a Web Push Notification. Visuals help in adding context, and building emotional connections with consumers.

According to the General Audience Survey, **70.3% like emojis** in Push Notifications, while **53.1% preferred Big Images** over plain Push Notifications. Upon asking PushCrew users, we found that 44% marketers do not send out Rich Push Notifications. This means, most of them believe that simple Push Notifications are better. We decided to look into this.

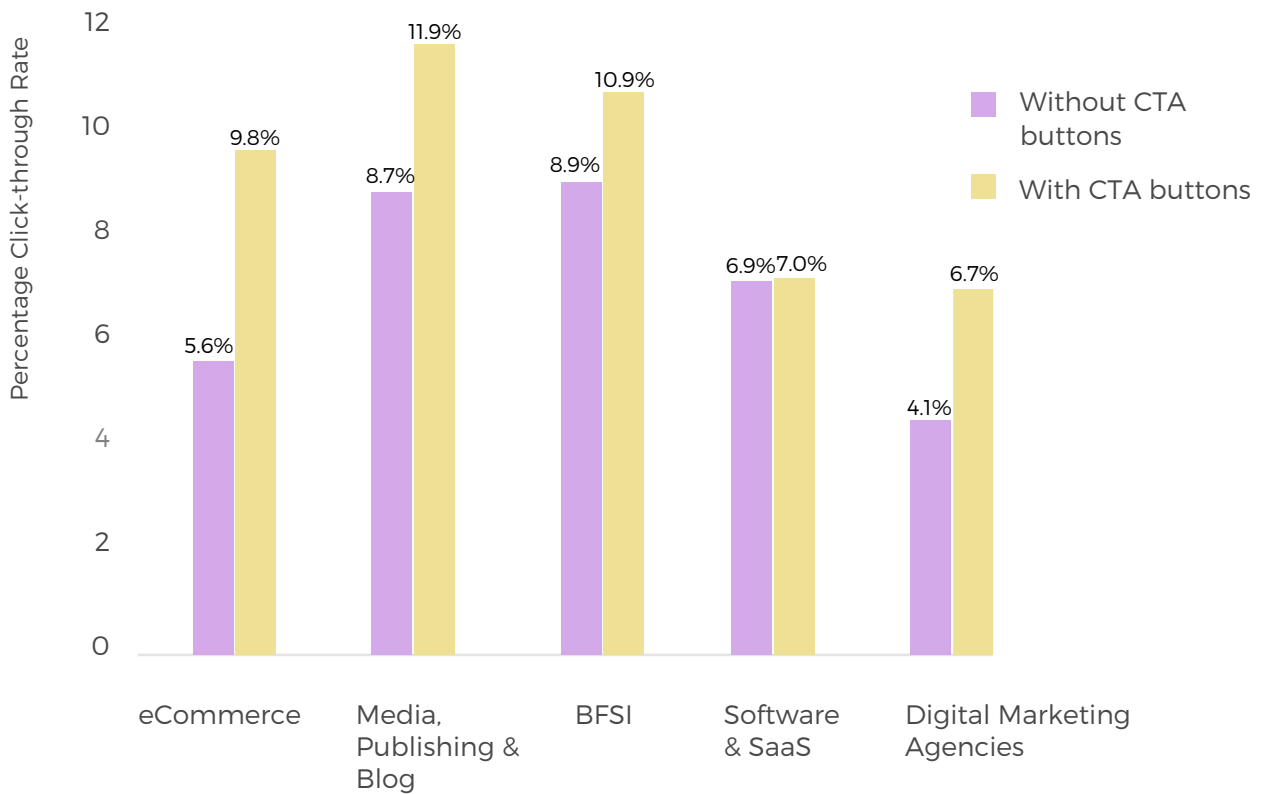
Here's what our data says

In a majority of the cases, Rich Push Notifications have performed better than the ones without Banner Images and/or CTA buttons.

Chapter 05



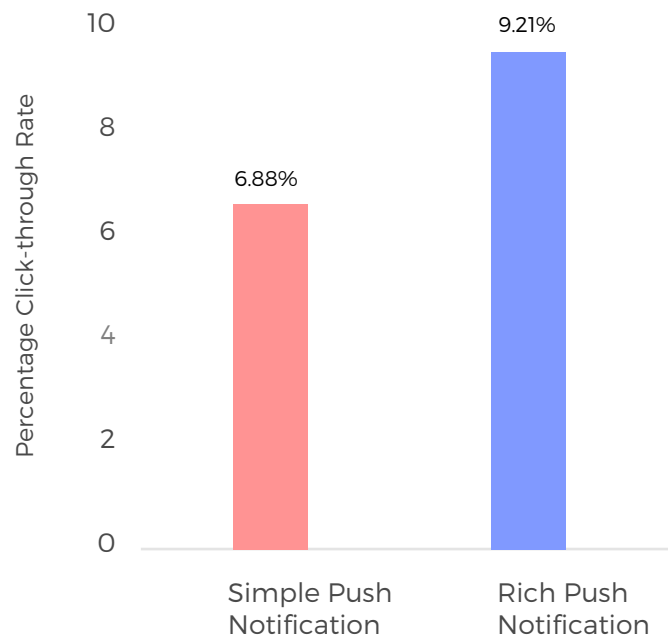
The difference in CTR between General Push Notifications and Push Notifications with Big Images



The difference in CTR between Push Notifications with and without CTA buttons

Chapter 05

In fact, across all industries, the average CTR of Rich Push Notifications is much more than simple Push Notifications. According to our data, the **average CTR of Simple Push Noifications is only 6.88%, while the CTR for Rich Push Notifications goes up to 9.21%** (which is a very high click rate for any marketing medium). Banner Images and CTA buttons make the Push Notification much more visually communicative, and increase the chances of clicks and conversion.



The difference in CTR between Simple Push Notifications and Rich Push Notifications

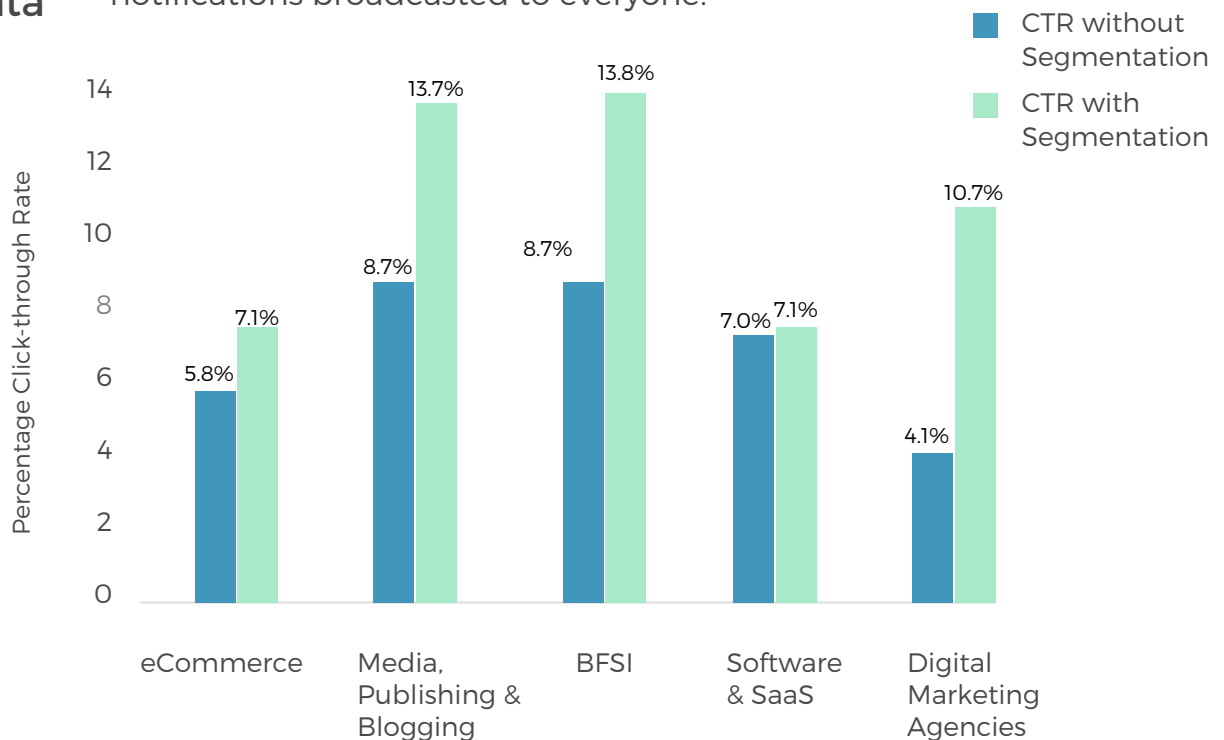
WHAT DO SUBSCRIBERS THINK ABOUT PERSONALIZATION?

We asked the General Audience what they thought about personalization, and the responses definitely surprised us. **51%** people felt like they're being stalked when they get personalized notifications, while **24.1%** preferred impersonal notifications.

The same audience was asked 'How they think Push Notifications you receive can be made better?', and **39.8%** wanted more relevant notifications, that convey important information. This made us realize that there is a thin line between making the subscribers feel special, and making them feel like they are being stalked. It's all about being subtle.

As per the data

As you can see, **segmented and relevant notifications do better** than notifications broadcasted to everyone.



The difference in CTR between Segmented and Non-segmented Notifications

WHAT ARE THE DELIVERY RATES FOR PUSH NOTIFICATIONS?

Unlike email, Push Notifications do not have a delivery rate of 100%. However, **notifications receive 8X-4X times click rates as that of email**. Here are a few reasons why your delivery rate might fall:

1. The browser isn't open on the subscriber's device when you send a notification.
2. Subscriber clears other site data on their browser.
3. Subscribers are facing network problems at the time of delivery.
4. The Time to Live (TTL)* of your notification expired.

We looked at the delivery rates of our customers and found out that they fall within a range of **80%-45%**. Where you are placed in this range is determined by the above factors.

While browser and network-related factors are common among all industries, TTL is especially applicable to eCommerce websites that frequently send out time-bound or seasonal offers.

The shorter your TTL, the more likely your notification is not delivered before it expires. This doesn't mean that you shouldn't set shorter TTL on your time-bound notifications. You wouldn't want your subscribers receiving expired offers, would you?

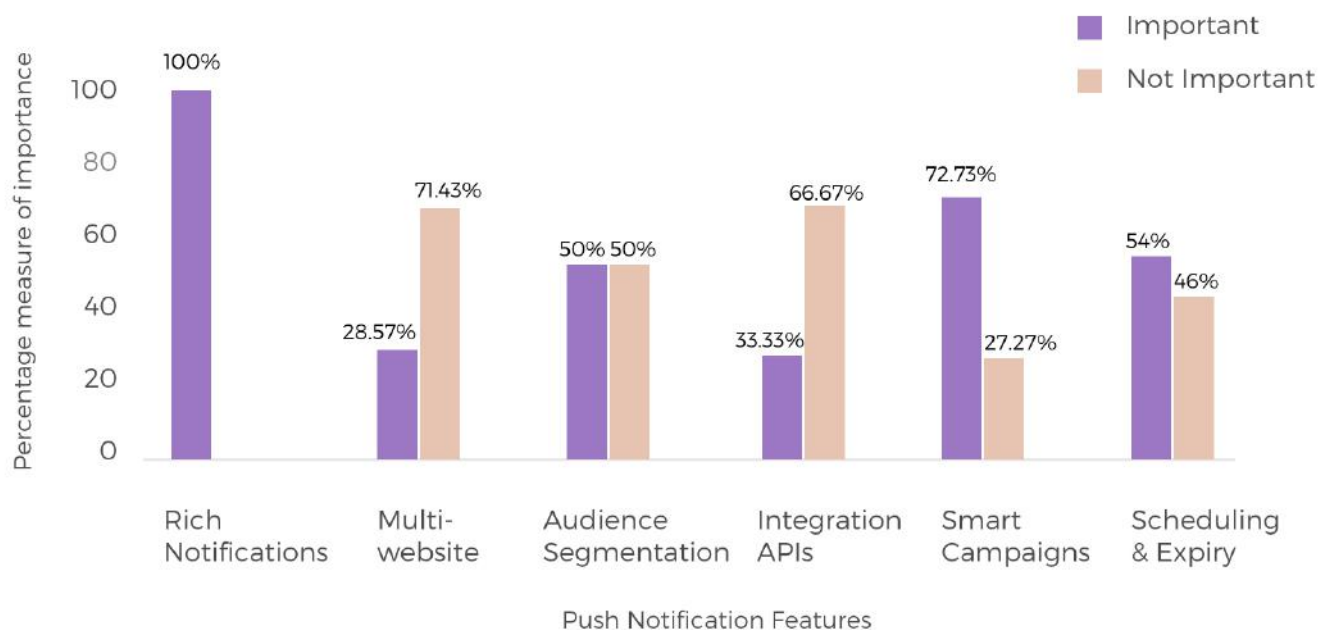
It is also to be noted that, if you have a smaller subscriber base, the chances of these factors coming into play are more.

* **TTL:** Time to Live(TTL) is used to set the Expiry Date or Time on the delivery of a Push Notification. It sets the time period after which Push Notifications aren't delivered to any subscribers.

WHAT ARE THE IMPORTANT FEATURES OF PUSH NOTIFICATIONS?

Push Notifications come with two sets of features that lend distinct capabilities to the medium. The first set enables marketers to **send richer Push Notifications**. It includes features like [Big Images](#) and [CTA Buttons](#). The second set of features **make your Push Notifications more intelligent and intuitive** when it comes to understanding what your subscriber needs. Audience Segmentation, Triggered Campaigns and [Push Notification Scheduling](#) belong to this category.

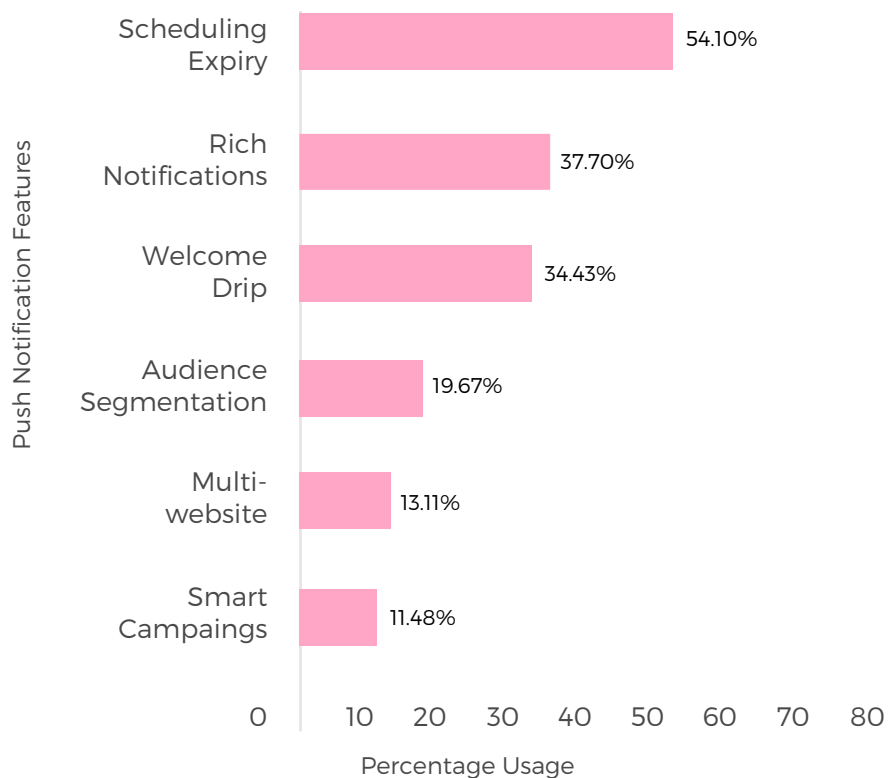
We asked PushCrew users what are the Push Notification features they perceived as the most and least important. Here's what they had to say.



How importance of Push Notification features is perceived

Chapter 08

However, we dug deeper and found out the usage patterns of Push Notification features.



The percentage usage of Push Notification Features

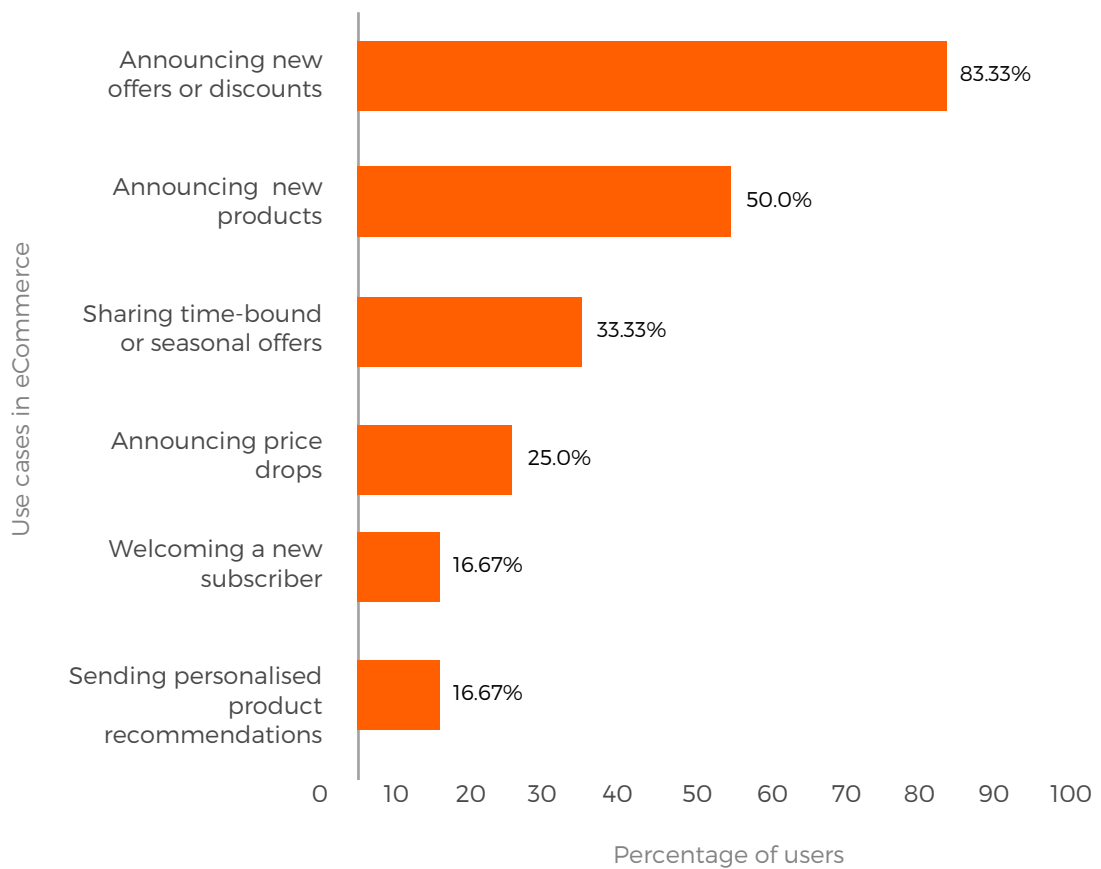
As you can see, the usage varies from the perceptions about a feature.

While 100% of marketers considered Rich Push Notifications important, only 38% use this feature. Similarly, at 20%, Audience Segmentation is not yet a top priority of Push Notification users.

Push Notifications are best used as a real-time communication medium and as you can see, **Scheduling and Expiry of notifications** are the most used features.

HOW DO THE TOP 5 INDUSTRIES USE BROWSER PUSH NOTIFICATIONS?

As we saw earlier, the **eCommerce industry** takes the crown for using Web Push Notifications the most, for second year in a row. Here are the top use cases from the domain.



The top Push Notifications use cases in eCommerce industry

Chapter 09

The top use cases haven't changed much since last year: **Announcing offers or discounts** and **announcing new products** found the most takers. Furthermore, 33% of marketers are leveraging the [Notification Expiry](#) feature to send time-bound offers.

However, with the advent of [Smart Campaigns](#) and [Audience Segmentation](#), new use cases like **welcoming a new subscriber and sending personalized notifications based on shopping or browsing history of subscribers** are slowly making their presence felt.

Similarly, the **top use cases for Media, Publishing and Blogging** remain unsurprising: **90%** of publishers use it **to promote new content** and **60%** use it for **increasing number of pageviews**. Nevertheless, a whopping **30%** of publishers and bloggers have begun using it for **reader retention**.

In **BFSI**, Push Notifications are mostly used to **cross sell banking products** like personal loans or promoting other types of accounts like Demat or Deposits.

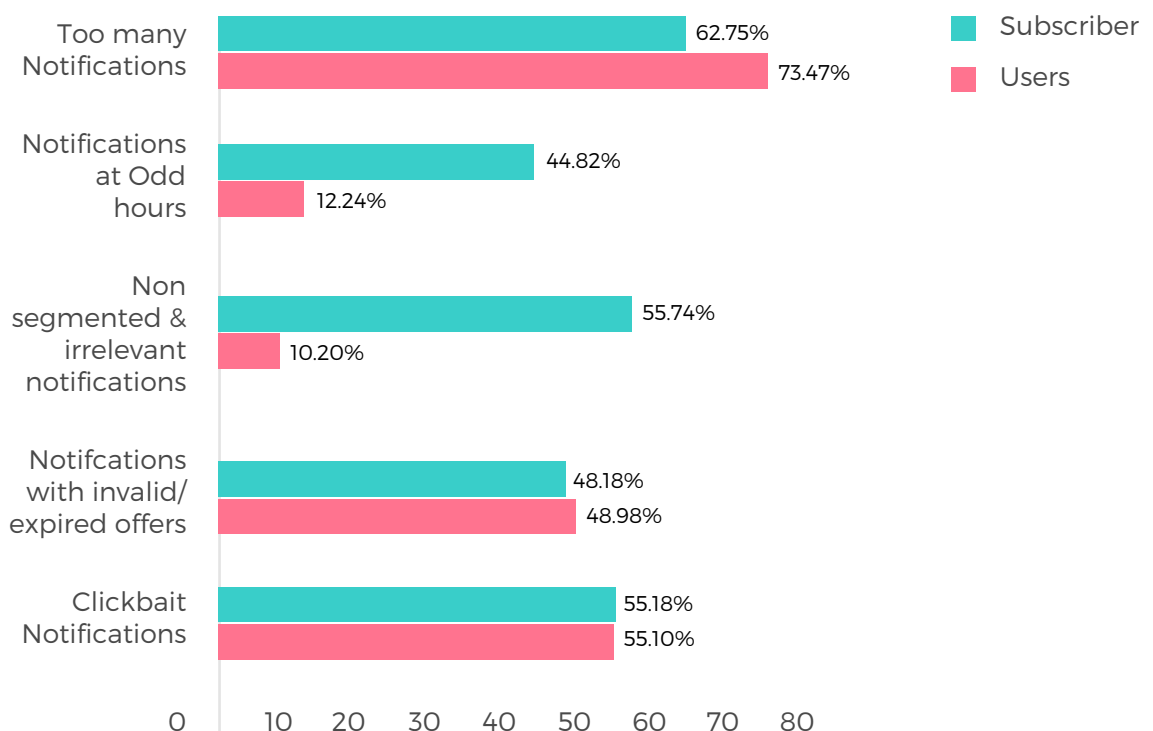
The top two use cases for **Software and SaaS** are **increasing readership of onsite blogs** and **lead generation**.

For **Digital Marketing Agencies**, the use cases vary with each client. However, **60%** of agencies pitch Push Notifications to their clients as a **marketing tool**. Only **20%** pitch it as a **customer retention tool**.

Push Notifications are mostly used as a standalone channel. Nonetheless, there's a small segment of marketers who use it for **promoting subscriptions to other marketing mediums** like email newsletters.

WHAT ARE THE HESITATIONS AND EXPECTATIONS FROM PUSH NOTIFICATIONS?

Spamming : Subscribers Vs Users We asked both Push Notification subscribers and users this question, in order to get a better idea of their respective definitions of spamming.



Percentage of Subscribers and Users
What is Spamming: Subscriber vs Users

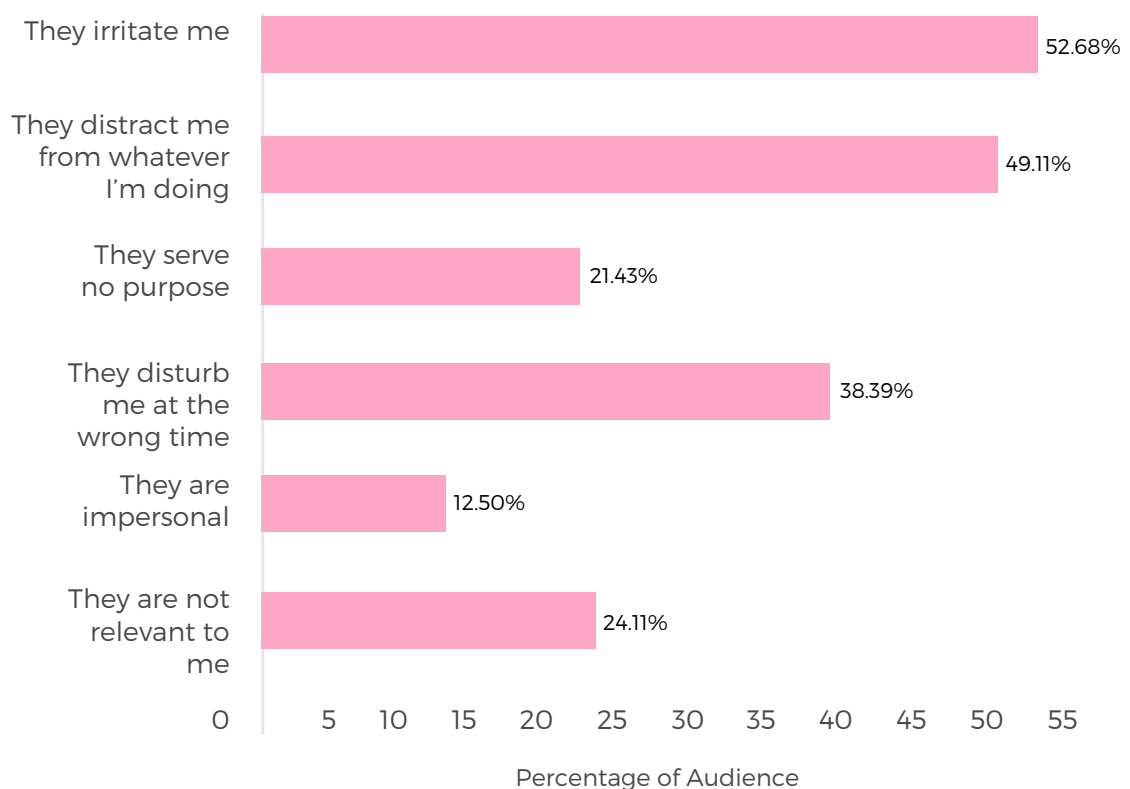
Chapter 10

Both subscribers as well as users think too many notifications, notifications with expired offers, and clickbait notifications are spammy.

But, the users didn't consider sending notifications at odd hours, or non-segmented notifications as spamming. However, subscribers strongly believed otherwise.

Subscribers' hesitations towards Push Notifications

Subscribers seem to be reluctant towards receiving notifications because they are irritating, distracting, not well-timed, and completely irrelevant. As discussed in the previous chapter, subscribers think the way Push Notifications are sent to them, currently, has a lot of room for improvement.



Chapter 10

Making the Push Notification experience better

We asked the General Audience, “How the Push Notifications you receive can be made better?”, and received some interesting responses.



Most people believed that Push Notification users should **send less notifications**, and **send personalized and relevant notifications**. They felt that Push Notifications can be incredibly spammy because they are either too many, or completely irrelevant, or both.

From all the responses we collected, we can infer that in order to have a successful Push Notification strategy, the users should:

1. Send less Notifications.
2. Schedule the Notifications for appropriate and acceptable times.
3. Segment their audience, and send personalized and relevant Notifications.
4. Be more visual, in order to add context.
5. Be Non-repetitive. And,
6. Do not indulge in clickbaiting.

CONCLUSION

The year 2017 saw Web Push Notifications grow in terms of rich and smart features. They are, now, a powerful tool to have in your Marketing Stack if you're looking to send out automated and personalized communications.

However, there's a lot of room of improvement in the way they are being used. We hope that the insights shared in this report will help you lay down an effective Push Notification Strategy and optimize it for 2018.



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