



Determinants of User Behavior Towards Push Notification via Apps

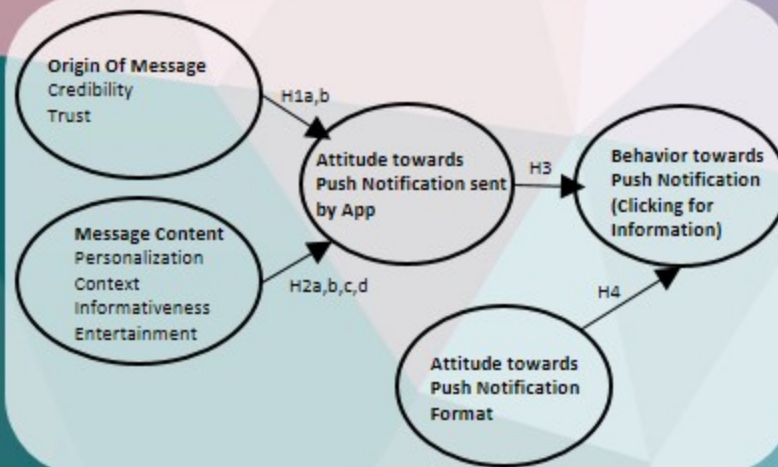
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Abstract

This study attempts to understand the determinants of user behavior towards push notifications sent by apps. The study looks at the effect of the format of notification on the act of clicking on the notification as well. A sample of 154 was collected through an online survey and from both Tier I and Tier II Cities. The respondents included only individuals who use smartphone or a tablet. The results show us that Trust has a positive influence on attitude towards push notification. The study also shows us that Attitude doesn't have a significant influence on behavior of clicking the notification in case of text and picture notification but it has a positive influence in case of notifications with action buttons. The format of notification had an positive influence on behavior of clicking on all formats.

Conceptual Model



Sample & Methodology

- Data was collected by circulating online questionnaire
- The respondents must own a smartphone or a tablet
- Sampling technique used was Quota Sampling
- Total Sample of 154 was collected from Tier I and Tier II Cities
- Structural Equational Modeling (SEM) was used with STATA due to the mediating effect of attitude on the behavior
- There are two dependent variable and three independent variable who's relationship is highlighted in the table given below

Interpretation of Data

The data can be interpreted as follows:

- Trust on the app that sends the push notification has Significant impact on the attitude towards the push notification in all the three formats.
- But Attitude towards notification does not influence the behavior of clicking the notification in both the text and the picture format.
- However, in action button format attitude towards the format does influence the behavior of clicking for information.
- Factors other than Trust does not significantly influence Attitude towards Push notification from Apps.
- From descriptive data we can see that there is significant difference in the number of people who prefer Notification with action buttons over text notification. i.e. it is considered a better format over Text and picture notification

Motivation for Study

India is currently the second largest smart phone market with a YoY growth of 23% with 6 million app downloads in 2016 which is a whopping 71% growth in the number of downloads since 2015. Increasing number of app developers are using the feature of push notification as a tool to get the users back to on the app as well as to market their products. Many companies have cropped up in the last few years solely providing push notification services in various formats as a part of their service offering to bring back the users to the app.

Hypotheses

- H1a:** The higher the credibility of the sender the more positive will be the attitude towards the notification received from them.
- H1b:** The higher the trustworthiness of the sender the more positive will be the attitude towards the notification received from them
- H2a:** Better the context of a push notification the more positive is the attitude towards the push notification.
- H2b:** Higher the personalization of a push notification the more positive is the attitude towards the push notification.
- H2c:** Higher informativeness of a push notification the more positive is the attitude towards the push notification.
- H2d:** Higher the entertainment value of a push notification the more positive is the attitude towards the push notification.
- H3:** There is a positive relationship between attitude towards push notification and the behavior of clicking on the notification
- H4:** There is a positive relationship between attitude towards the format of push notification and behavior of clicking through that format.

Results

Formats			Questions	Text	Picture	Action Button	Scale Reliability
				P- value			y
Constructs	Sender of Message -> Attitude Towards PN	Trust	236	0.0000.0000.000			0.7576
			237				
			238				
		Credibility	231	0.6010.5220.541	0.8200		
			233				
	Content of Message -> Attitude Towards PN	Personalization	221	0.7750.6260.629	0.8263		
			222				
			223				
		Context	224	0.1230.1540.169	0.7601		
			225				
			226				
		Informativeness	227	0.850.9300.849	0.8008		
			228				
	Entertainment	229	0.570.7170.627	0.8330			
		230					
	Attitude Towards PN -> Behavior	Attitude Towards Format -> Behavior	Dislike/like	27,34,41	0.0000.0000.000		
Worst/Best			28,35,42	-			
Poor/Excellent			29,43	-			
Hate/Love			30,44	-			
Reliability Coefficient for Attitude Towards Formats				0.9034			

Contribution

Literature:

- This is the first study that considers the format of notification and its influence on the behavior of clicking
- The model shows that trust in the App is a significant factor contributing towards the attitude towards push notification

Industry:

- Action button push notification is a much-preferred format for push notification
- For the action button notification to work effectively it is important the app users have trust and a positive attitude towards the notifier.

Limitations & Future study

Limitations:

- The sample size is small as I am still in the process of collecting data
- Since majority of the respondents are Android users the responses do not show the preferences of iOS or windows user

Future Study:

- A similar study can be conducted with respect to preference of format with respect to app category
- Additional Formats can also be studies

References:

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- Xu, D. J. (2006). The Influence of Personalization in Affecting Consumer Attitudes Toward Mobile Advertising in China

Targeted Conferences & Journal:

- ICACCI Manipur to be submitted by 7th April 2017
- Indian Journal of Marketing, Bi-Monthly Issue

Literature Review

Scales	Papers
Attitude	Attitudes towards mobile advertising - A research to determine the differences between the attitudes of youth and adults
Content	The influence of content and trust on consumers' intention to accept mobile advertisements
Format	The Function of Formats: Consumer Responses to Six On-line Advertising Formats

Research Gap

Consumer's attitude on message through a channel like push notification or particular format of push notification has not yet been studied in India

Push notification studies have not considered the mediating effect of attitude on behavior, which has been looked at in case of advertising messages.

Descriptive Data

