Analysis of E-Mail Performance

Case Study



Background

Boehringer Ingelheim has been working on a multi channel customer engagement approach as part of their strategy. As such, email communication has been identified as a viable channel in which to communicate with physicians. As customer centricity is a focus for BI, the online communication should be tailored to the physician's preferences and requirements.

BI has been working with physicians to obtain their consent to receiving communication from the company via email. This is mainly done by having the customer facing team ask the physician for their consent during face to face visits.

The Brand Team has created compliance approved promotional materials for online communication. A campaign cycle has been completed using a mix of face to face and email communication and data has been collected to look at the email activity of physicians.



Your Task

In the data provided to you, there is record of the email communication sent to physicians who have opted in. As email communication is regulated by law, BI can only contact physicians via this channel if an opt in is available.

You will also find the categorization of email addresses of customers in private practice or in a clinic, which indicates the preferred email address of the physician with which they would like BI to use.

Based on the needs of the Brand Team, analyze the data and **prepare a management presentation** to provide recommendations for optimizing the email communication approach including recommendations on how to measure the success of subsequent email campaigns.

Your presentation should be no longer than 15 minutes. The audience will be a mixed group of brand team members including analysts.

You are welcome to use any presentation medium.



Data Description

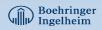
Below is the detailed data description:

1) E-Mail Performance Data:

In the file "Email_Performance.csv", you will find simluated data for email communication from BI with physicians. That data includes which email was sent to which physician, which product, email send time and wheither the email was opened and a link was clicked within the email.

2) Account Cluster:

In the file "Account_Cluster.csv", you will find the classification of the physician's email address as private practice or clinic. It will also provide information as to which email BI should use for communication. If the information cannot be clearly assigned, then it is marked as "not unique".



Data Description

• Email_Performance.csv

This table shows data relating to Boehringer Ingelheim email communication by customer

Field	Content (Example)	Description	Expressions
HCP_ID	HCP0001018487	Physician's ID (at least 1 record per person, multiple records for promotions and multiple emails)	(diverse)
EMAIL_ID	ID1	Email ID that can be used to uniquely identify an email. The same emails have the same ID	ID1, ID2,ID120
DELIVERY_STATUS	sent	Delivery Status of email	Sent, opened, clicked, failed
PRODUKT	Produkt1	Product Name	Produkt 1, Produkt 2,Produkt 6
DATUM_ID	20190109	Email activity date, format YYYYMMDD (can be NULL)	(diverse)
DAY	09.01.2019 21:00	Date and time of the email activity, format DD.MM.YYYY HH: MM (can be NULL) The times are always rounded to the hour	(diverse)

• Excerpt from the data file

	HCP_ID	EMAIL_ID	DELIVERY_ST	PRODUKT	DATUM_ID	DAY
	HCP0001001023	ID1	sent	Produkt 1	20190109	09.01.2019 21:00
	HCP0001001024	ID2	opened	Produkt 1	20181024	24.10.2018 01:00
	HCP0001001025	ID3	sent	Produkt 2	20181130	30.11.2018 13:00
	HCP0001001026	ID4	opened	Produkt 3	20181119	19.11.2018 14:00
	HCP0001001027	ID5	opened	Produkt 4	20181213	13.12.2018 14:00
	HCP0001001028	ID6	sent	Produkt 3	20181221	21.12.2018 13:00
	HCP0001001029	ID7	sent	Produkt 5	20190130	30.01.2019 23:00
	HCP0001001030	ID8	opened	Produkt 3	20190111	11.01.2019 16:00
	HCP0001001031	ID9	sent	Produkt 1	20181022	22.10.2018 19:00
n	o					

Data Description

Account_Cluster.csv

This table shows the category of the email address per customer with which he or she would like to communicate with Boehringer Ingelheim.

Field	Content (Example)	Description	Expressions
HCP_ID	HCP0001018487	Physician's ID (at least 1 record per person, multiple records for promotions and multiple emails)	(diverse)
ACCOUNT_TYPE	Account type	Specifies the account type of the customer's email address.	Private, Klinic (clinic), Nicht eindeutig (ambiguous)

Excerpt from the data file

HCP_ID	ACCOUNT_TYPE
HCP0001018487	private
HCP0001006058	private
HCP0001013999	private
HCP0001002071	private
HCP0001008572	private
HCP0001010278	private



Have fun & we wish you success in completing your task

Should you have any questions, please reach out to your BI HR contact & your questions will be forwarded to the appropriate person

