

Case study: Uncovering business contextual topics/themes based on customer engagement datapoints using NLP



U.S. based leading hospitality chain



- Associates were manually processing the text corpus such as email, chat, forms to glean insights on the customer engagement improvement areas.
- > The process failed to capture the latest trends timely, and tagging was limited to associate's knowledge



- Built an NLP-based text pipeline to automate the topics/themes identification across our client's portfolio of brands, geography and loyalty levels of customers.
- Operationalized it as a daily process to generate insights faster for business consumption



Objective

To identify & extract the frequently occurring topics in a multi-channel data and to automate this process daily



Data Sources

- > Email Data: inbound manual emails, web forms, email-based forms, reservation mails etc.
- > Case Notes Data: notes created by associates about each customer engagement
- > Chat Data: dialogue conversation between a customer and an associate/chatbot



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Data Processing

Applied data processing techniques to extract critical features across dimensions such as Brand, Loyalty, Geo from the text corpus data. Handled ~60K data on a daily basis across emails, case notes, and forms data



Benefits

Our robust Text Analytics pipeline enabled our client in...



Identifying contextual themes across 30 portfolio of brands and 6 loyalty levels



Ranking top themes & sub-themes using the automated daily scheduler



Summarizing the text and establishing association between most talked themes

