



# Email Data Analysis

Email Communication Patterns

Sentiment and Engagement Analysis



## Within Workdays

- ☐ no  
☐ yes

## Device

- ☐ Desktop  
☐ Mobile

## Within Work Hours

- ☐ no  
☐ yes

Total Emails Sent  
**1132**

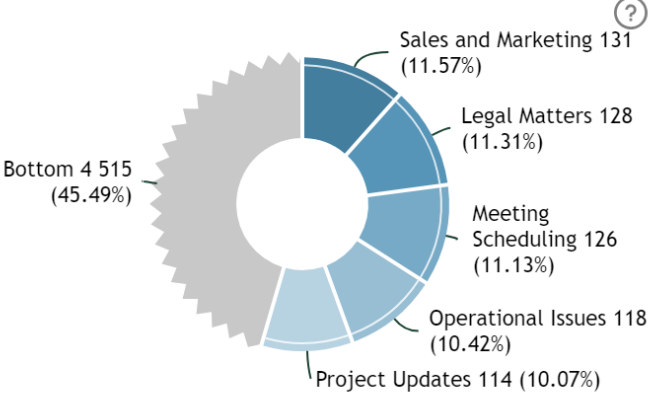
Total Emails Received  
**1132**

Total Emails Opened  
**1034**

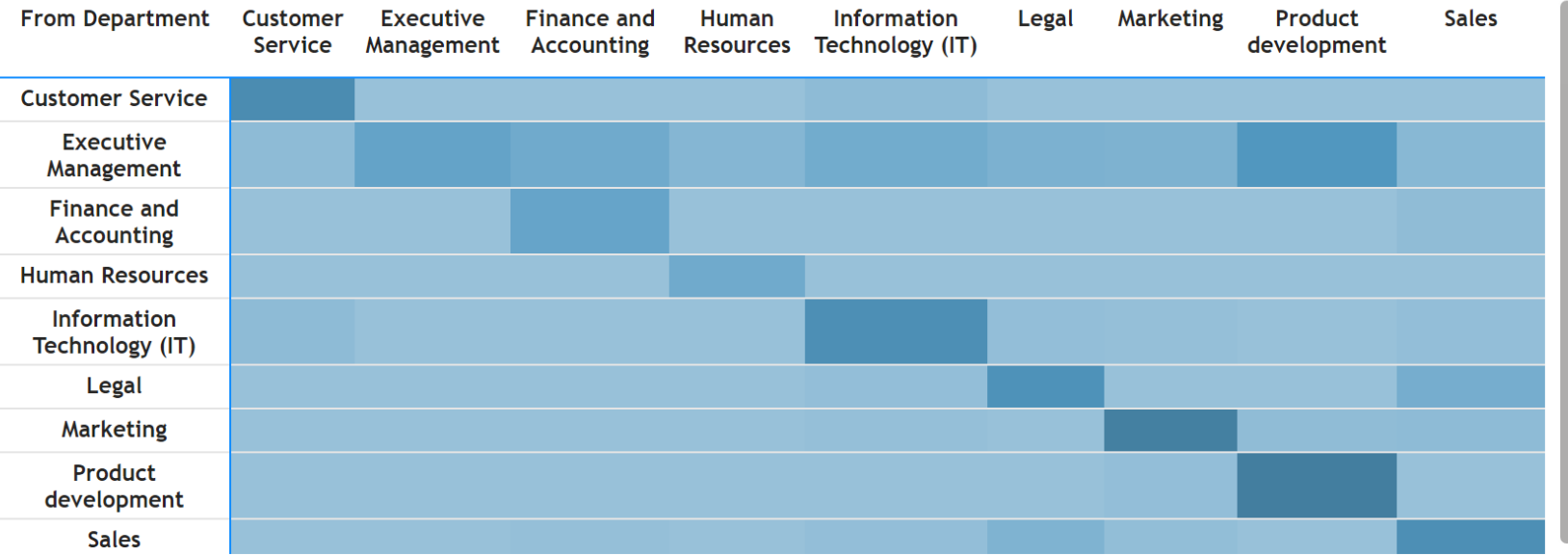
Average Emails Per Day  
**39.03**

## What are the main topics discussed in emails, and how do they break down by department?

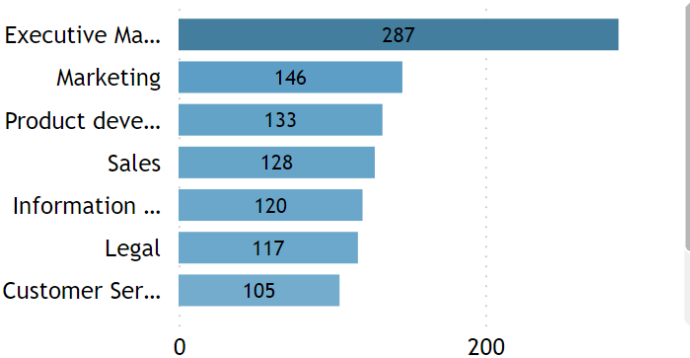
All Topics > From all Departments > To all departments



## How does email volume vary between different departments?



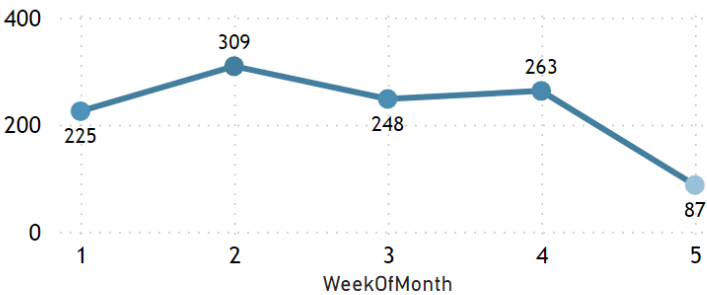
## Which departments are most active in sending emails?



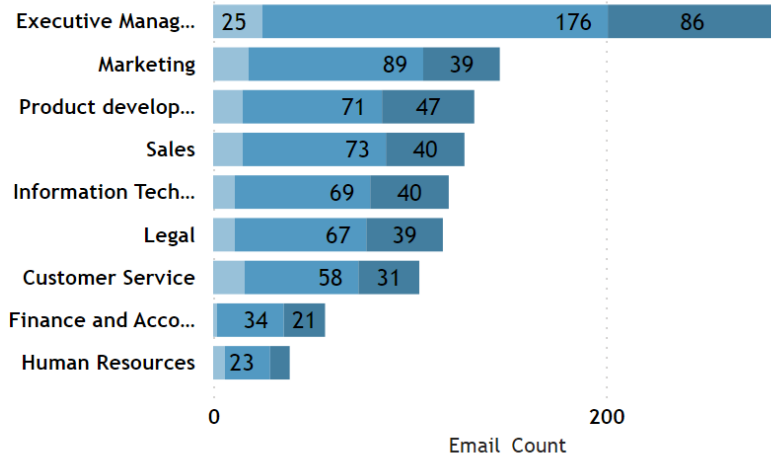
## How does the volume of email communication vary between different seniority levels within the organization?

From seniority	C-level	Middle level management	Professional	Total
C-level	48	203	36	287
Middle level management		32	313	345
Professional		200	300	500
Total	48	435	649	1132

## How does the email volume trend over the week?



## How is sentiment distributed across departments?



## Sentiment

- ☐ Negative
- ☐ Neutral
- ☐ Positive

## Department

All

## Total Emails Sent

1132

## Positive Emails

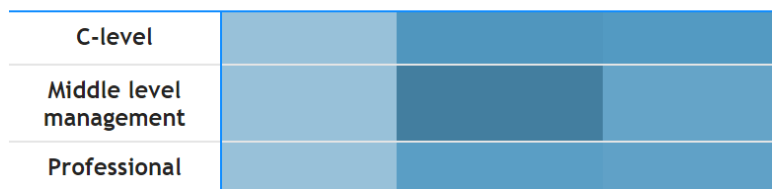
353

## Negative Emails

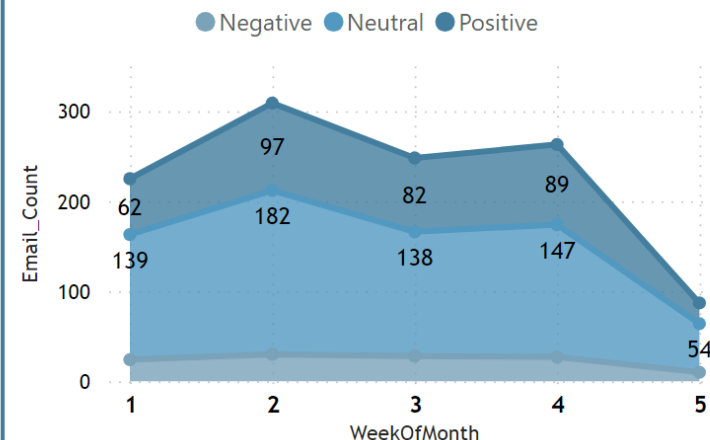
119

## How is sentiment distributed across different seniority levels using the sentiment score?

From seniority C-level Middle level management Professional

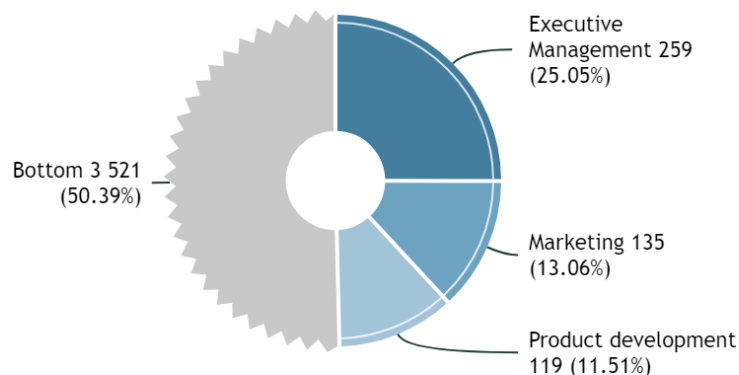


## How does the trend of sentiment over week?

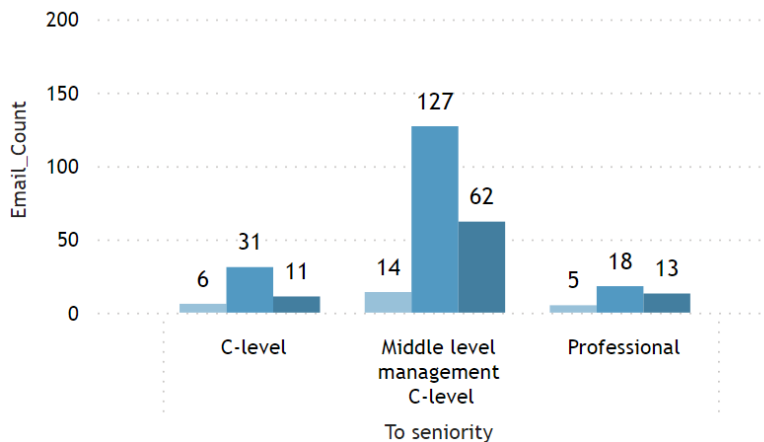


## How does engagement rate vary by department and sentiment?

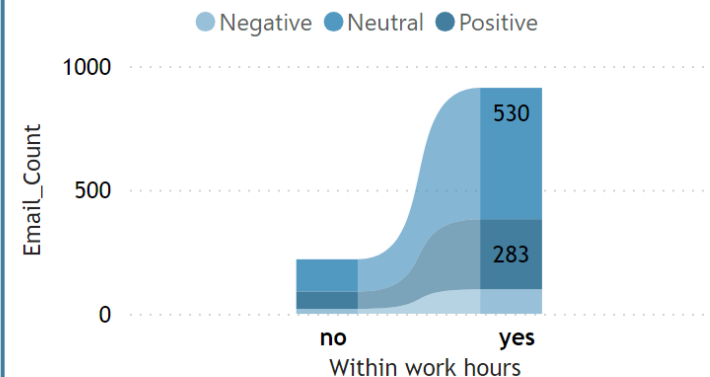
All Departments &gt; All Sentiments &gt; 1034 Opened mails



## How is sentiment distributed across seniority levels using Email Count?



## How does sentiment vary during work hours?



# My Observations

## Email Communication Patterns

- The organization exemplifies **dynamic email engagement**, exchanging a total of **1,132 emails** during the analyzed period, with an exceptional **1,034 emails actively opened**, averaging a robust **39.03 emails daily**.
- **Sales and Marketing** dominated discussions, comprising **11.57%** of communications, reflecting our strategic emphasis on driving business initiatives. In contrast, **Security Alerts**, with a modest **1.59%** representation, highlight an area where focused communication enhancement may be beneficial.
- **Executive Management** spearheaded communication efforts with **287 emails**, underscoring their pivotal role in organizational direction, while **Human Resources** exhibited a more restrained activity with **39 emails**.
- **Desktop devices** were the preferred medium for accessing emails, capturing **75.97% (860)**, with **mobile devices** accounting for the remaining **24.03% (272)**.
- Across seniority levels, **C-Level executives** initiated broad engagement with **287 emails**, **Middle Level Management** directed **345 emails** primarily to **professionals**, and **professionals** reciprocated with **500 emails**, delineating a structured communication hierarchy.
- **Email volume peaked** notably in the second week with **309 emails** and gradually eased to **87** by the fifth.

## Sentiment and Engagement Analysis

- Our sentiment and engagement analysis dashboard provides comprehensive insights into email communication patterns within the organization. **A total of 1,132 emails were sent**, with **353 positive and 119 negative** emails, indicating a predominantly positive sentiment.
- **Executive Management** emerged as the most active department, sending **287 emails**, including the highest number of positive **86** and negative **25** emails, while **Human Resources** sent the least **39 emails**. The engagement analysis showed that **Executive Management** had the highest email open rate **259 emails**, with **80 positive and 23 negative emails** opened, reflecting strong engagement.
- Weekly sentiment trends revealed a **peak in positive emails** during the second week (**97 emails**) followed by a decline, and a stable yet slightly fluctuating negative sentiment peaking in the second week **30 emails**.
- Within work hours, the positive sentiment was higher **283 emails** compared to non-working hours **70 emails**, whereas **99 negative emails** were sent during work hours, indicating potential issues in communication tone during regular hours.

The analysis of seniority levels showed that **Middle Level Management to Professional interactions** had the highest number of both positive **88 emails** and negative