

# Mima: an AI-powered Disruption Bot

Transport information data feeds are disparate and travellers are subject to a range of information feeds and services creating a segmented digital user experience. These become particularly challenging to navigate during periods of transport disruption.

Disruption is one of the major factors affecting customer satisfaction in rail and contributes to a significant portion of the unsatisfied 20% rail users. One way to increase satisfaction is to improve the way that disruption is managed and communicated.<sup>1</sup>

SOCIAL MEDIA IS AN  
INCREASING CHANNEL  
FOR CUSTOMER SERVICES.<sup>2</sup>

40%

The number of customers  
who complain in social  
media and expect a  
response within one hour.<sup>3</sup>

One in four social media users in the UK frequently reverting to social media to ask questions, make complaints, or share information rather than pull information from the provided channels.<sup>4</sup>

Twitter is an increasingly popular channel for customer service questions and complaints, where the expectation of more immediate responses is even greater.

# The Current Situation

Customer service teams struggle to cope, particularly during periods of disruption. The typical customer response time during disruption is 25 minutes. Customers expect and require fast access to real-time information.

To deal with these peaks in customer interactions, companies have an 'all hands on deck' approach - bringing in extra resources from other teams, and often working long hours. These periods are stressful and expensive for customer service teams.

“We receive unmanageable amounts of information via social media during a disruption which is difficult to respond to in a timely manner”

John Melville. Virgin Trains.



NORMAL  
OPERATION

DISRUPTED  
OPERATION

Average  
number of  
tagged tweets  
per day:

500

8000+

Average  
number of  
tagged tweets  
with responses:

220

5280

# Meet Mima.

Our project will assist in addressing this challenge by helping transport providers respond to travellers in real-time across social media with the assistance of a 'bot'; Mima.

Mima will perform data analysis and prioritise information so that important safety and security items are not missed.

Mima assists customer service operators by removing the repetitive and time-consuming tasks - so that they can respond faster and provide a superior customer experience.

Mima can respond to an assortment of questions automatically, at the discretion of the customer service team.

Mima gathers analytics regarding customer queries; providing customer service teams more information about their customers problems.



# How Mima works:

## Mima assists customer service teams manage their responses by:

- auto-filling responses: allowing faster and higher quality customer responses,
- prioritising messages: based on security and sentiment. High priority messages move to the top of the backlog.
- real-time data look-up from live data-feeds, company resources and FAQ's.
- automating simple queries: with customer support operators normal responses.
- providing social-feed analysis

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## Mima working for you:

1. Give Mima access to your social media accounts
2. Mima reads and understands your queries in real-time. If Mima doesn't understand, she'll pass them straight to you.
3. Mima identifies high priority requests and moves them to top of your backlog.
4. Mima auto-completes responses for the customer service team based on:
  - Company FAQ's
  - Live data-feeds
  - Customer support operator's normal responses.

# Mima in Action:

## EXAMPLE 1

1

Customer tweets, frustrated during disruption: **‘When is the next train leaving from London Euston to Manchester Picc? It’s chaos here!’**

2

Mima receives tweet and performs initial analysis, prioritising based on sentiment and emergency key words

3

Mima orders your backlog based on the message prioritisation

4

Mima assist you by auto-filling a response to the question for you, including the answer to the user’s question from real-time data feeds.

5

You can personalise the tweet, add the human element and in doing so train Mima further

6

**The customer receives their response in a timely manner**

# Mima in Action:

## EXAMPLE 2

**1**

Customer tweets, frustrated during disruption: 'My pregnant girlfriend isn't feeling very well and this train has been stuck at a standstill en route to Birmingham for 20 minutes. Help!'

**2**

Mima receives tweet and performs initial analysis, prioritising based on sentiment and emergency key words.

**3**

Mima identifies the tweet as requiring high priority assistance, moves the tweet to the top of the customer service backlog and provides an emergency tag.

**4**

Mima automatically sends a holding tweet to the customer, informing them that their tweet has been identified as high priority and that a customer service agent will be on the case ASAP.

**5**

**The customer receives a response from a customer service agent in a timely manner, despite additional noise from disruption.**

# What makes Mima unique?

## **Mima recognises where humans and bots perform best.**

Mima saves humans time by removing the repetitive and time-consuming tasks - dealing with the data - whilst letting the humans be personable and provide a friendly humanised customer service.

Mima learns from the agents as they work, improving their ability. Mima has the ability to take over and automate responses if the going gets too tough - at your discretion

## Benefits for the customer

- Faster response times, particularly during disruption
- High priority messages are not missed
- Accurate and coherent information provided from one channel.
- Improvement to the way that disruption is managed and communicated.
- Increase customer satisfaction!

# Analytics

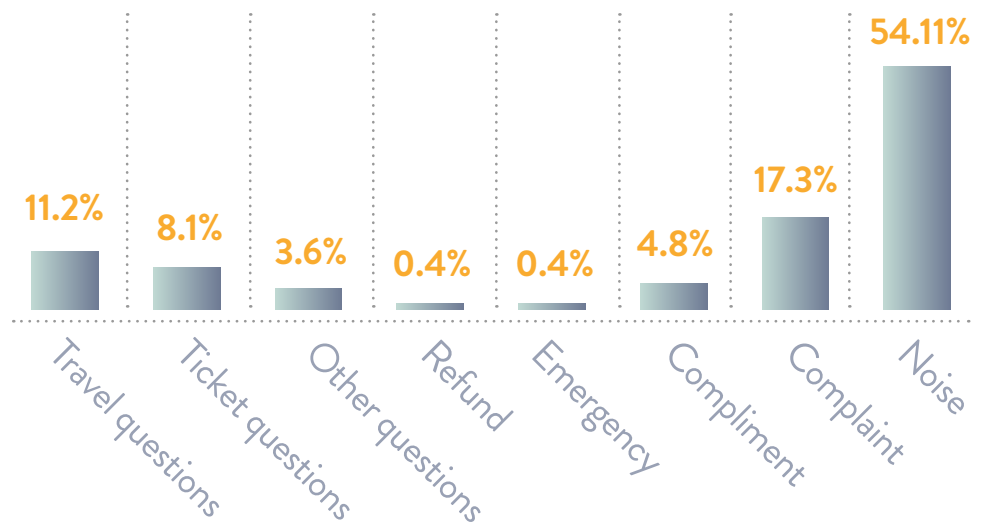
Mima can categorise queries into a number of general categories:

**TRAVEL QUERIES / TICKET QUERIES / COMPLAINTS / COMPLIMENTS / TRAIN ENVIRONMENT / SERVICE UPDATE / ON-BOARD TECH / CONVERSATIONS / CUSTOMER SERVICE / STAFF COMPLIMENTS / INCONSISTENT INFORMATION / REFUNDS / DISRUPTIONS / RESPONSE TIMES / BOOKING / DELAYS**

## NORMAL VS DISRUPTED OPERATION:

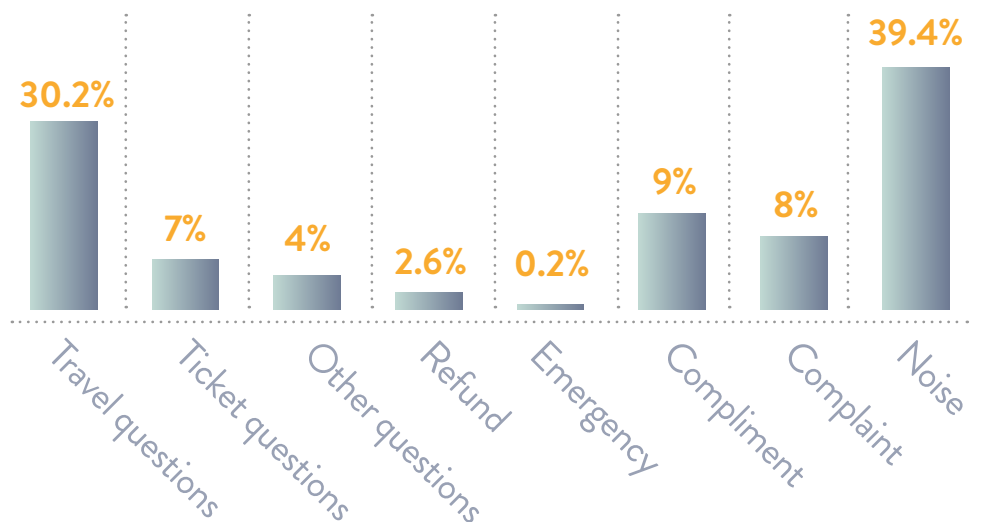
### REGULAR

per 1000 tweets average



### DISRUPTED

per 1000 tweets average



**25%**

of questions were about getting ticket refunds or refunds about other services (taxis', hotels etc)

**94%**

of travel questions were requesting updates on disrupted services



# How Mima can help

Of the tweets that require an interaction, from initial assessments, **Mima would at least be**

# 65%

that required responses.\*

\*assuming she could assist with, **75% travel, 50% ticket, 75% refunds, 80% compliments, 60% complaints** determined from assessment of subcategories and responses required.

Reduce customer response time by

# 50%

in periods of disruption.

Mima assists customer service operators by removing the repetitive and time-consuming tasks - **so that they can respond faster and provide a superior customer experience.**

Whilst, during normal operation, a 10 minute average response time could be reduced to

# 3-5

MINUTES

Based on research so far, estimating a **saving to transport operators of 10's of hours of time per day.**

## Get in touch

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<sup>1</sup> - "How rail passengers really feel - cloudfront.net." <http://d3cez36w5wymxj.cloudfront.net/wp-content/uploads/2016/06/03090223/FINAL-rail-passenger-sentiment-June-2016.pdf>. Accessed 5 Jun. 2017.

<sup>2</sup> - "Short and Tweet. How passengers want social media during disruption." 29 Jun. 2012, <https://www.transportfocus.org.uk/research-publications/publications/short-and-tweet-how-passengers-want-social-media-during-disruption/>. Accessed 5 Jun. 2017.

<sup>3</sup> - "Hug Your Haters - by Jay Baer." <http://www.jaybaer.com/hug-your-haters/>. Accessed 5 Jun. 2017.

<sup>4</sup> - "Customer complaints see 8-fold rise on social media - Institute of ...." 27 Jul. 2015, <https://www.instituteofcustomerservice.com/media-centre/press-releases/article/customer-complaints-see-8-fold-rise-on-social-media-1>. Accessed 5 Jun. 2017.