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**Train tweets and the social licence to operate: Exploring stakeholder engagement through the use of Twitter by train operating companies in the United Kingdom**

**Howard, J.M.**

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**Train tweets and the social licence to operate: Exploring stakeholder engagement  
through the use of Twitter by train operating companies in the United Kingdom**

Jeffrey Martin Howard

This thesis is submitted in partial fulfilment of the requirements of the University of  
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## **Abstract**

This thesis provides an examination of the social media platform Twitter and its use by private train operating companies in the United Kingdom. The relationship between the operator and its stakeholders is central to the use of Twitter by these operators. Despite Twitter being widely adopted by public transport operators, there is a lack of understanding of the motivations and uses of Twitter in the context of private train operating companies. Literature on the use of Twitter by public transport operators has focused on the functions of Twitter, content analysis of Twitter user tweets, the collection of data through Twitter, and message framing for tweets. A gap in the literature exists, however, in examining Twitter stakeholder engagement by private train operating companies, particularly from the perspectives of the operator's staff tasked with managing their Twitter accounts. To better understand the use of Twitter by private train operators, an analysis was conducted using the theoretical framework of the social licence to operate, focusing on how Twitter is used as a stakeholder engagement tool to gain legitimacy, credibility, and trust from the operator's stakeholders. The aim of this research was to examine the extent to which the use of Twitter by train operating companies in the United Kingdom reflects the social licence to operate. As such, this study was broken down into four objectives: 1) To analyse the Twitter accounts, tweets, and policies of train operating companies in the UK to understand the ways in which Twitter may be used as a means to obtain a social licence to operate; 2) To examine the social licence to operate in the context of UK railway regulatory requirements and Twitter use by train operating companies; 3) To explore the motivation for using Twitter through the perspectives of staff managing rail operator Twitter accounts; and 4) To explore how the COVID-19 pandemic has affected the use of train operating company Twitter use to obtain a social licence to operate. This study was conducted through an analysis of rail operator's Twitter accounts, policies, regulations, and through a

content analysis of their tweets. Semi-structured interviews with Twitter staff from franchise and open access operators were conducted to understand the motivations and policies from the perspectives of staff managing their Twitter accounts. From these objectives, four main findings emerged: 1) This study found evidence that the aspects of the social licence to operate are reflected in the use of Twitter; 2) This study shows the evolution of Twitter use from a mainly information sharing platform to one where customer service functions are offered, reflecting the finding that operators use Twitter as a tool for their customers, rather than a wider set of stakeholders; 3) The study found a lack of regulatory requirements for Twitter use and that the addition of Twitter as a committed obligation in franchise agreements, in the absence of regulations, was included as a means to set measurable requirements for operators; and 4) This study found that train operating companies used Twitter to engage with the wider community during the COVID-19 pandemic instead of only with their customers. This thesis offers recommendations for policy and practice for operators to take full advantage of Twitter's functions in obtaining a social licence to operate. These recommendations include the establishment of regulatory guidance for Twitter use by train operating companies, a coordination of policies and practices across the rail industry, and expanding stakeholder engagement to include the community rather than focused solely on customers.

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## **Preface**

In the days before social media's existence, I worked in communications for the Chicago Transit Authority (CTA). Communication with customers was a different experience back in the early and mid-2000s. In order to communicate with the public, we used advertisements, public hearings, announcements in newspapers, and other forms of traditional communications. In times of service disruption, signs for stations, trains, and buses had to be written, printed, and distributed to bus and rail operations to be posted. That process could take hours, and often only occurred during planned disruptions or those which resulted in longer-term impacts on service. If you had customer service enquiries, you either called, wrote, or visited the CTA's headquarters. As a result, the CTA was seen as bureaucratic and sometimes difficult to navigate. Communications between CTA and the public was a process that involved wait times.

By the time I moved to London, social media had become an important tool for me to receive updates from train operating companies in the UK. I noticed that Twitter accounts, in particular, not only shared information but also interacted with other Twitter users. I found the accounts to be informational, friendly, personable, approachable, and fostered a sense of community among rail enthusiasts. This had not been my experience with American public transport agency Twitter accounts. It was this use of Twitter that caught my attention and piqued my interest in learning more about their use of Twitter. It was not until I saw social media use by transport operators as a potential dissertation topic for my master's transport planning programme that the idea of researching this area occurred to me. It was a casual discussion with Enrica Papa that led me to consider exploring this topic through a doctorate in transport. With her support and guidance as my PhD director of studies, I now had opportunity to complete this research.

My hope for this research is that it will provide valuable insights on Twitter use for researchers and practitioners in the fields of transport planning, communications, and social media. As I have discovered, social media use by transport operators is still an emerging field in the literature as well as within the transport industry. This topic is pragmatic in nature and the research may be able to help practitioners as they continue to develop and use Twitter, and social media as a whole. I hope this thesis will be as insightful for you as it was for me and will continue to assist in your research and practice.

Jeffrey M. Howard

30 September 2021

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My sincere gratitude goes to the staff from c2c, Caledonian Sleeper, Chiltern Railways, CrossCountry Trains, East Midland Trains, Govia Thameslink, Grand Central Railway, Great Western Railway, Greater Anglia, Heathrow Express, Hull Trains, London North Eastern Railway, Northern Rail, ScotRail, Southeastern, South Western Railway, TransPennine



Express, Transport for Wales Rail, Virgin Trains, and West Midlands Trains who gave their time to participate in the interviews.

I would also like to thank my friends for keeping me grounded throughout this process and supporting me every step of the way. Many thanks, especially, to Hannah Atkins, Simon Ahern, Nola Cooper, Stacey Ergang, Ross Guthrie, Sarah Linn, David Mathewson, Thomas Moore, Kristin Murphy, Anthony Papini, Alex Serb, Ashir Shah, Dave Snell, Jeremy Watson, and Alex Zoubine for your encouragement and keeping me sane throughout this process.

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## **Author's Declaration**

I declare that all the material in this thesis is my own work.

# **CHAPTER 1**

## **Introduction**

*“just setting up my twttr”* (Dorsey, 2006).

## **1.1 Research background**

Twitter was launched in 2006. The social media platform allows users to ‘tweet’, or post, messages in 280 characters or less. Since its founding, Twitter has grown to an average of 192 million daily active users as of the end of 2020 (Twitter, 2021). Indeed, social media has become an important part of modern society (Gal-Tzur et al., 2014).

Public transport operators have turned to social media to communicate and engage with their customers (Manetti et al., 2016). One of the most widely cited studies is from the Transit Cooperative Research Program which found public transport agencies use social media to share general and real-time information, engage with the public, recognise employees, and as a means of entertainment (Bregman, 2012). Twitter has become the primary social media platform for transport operators to share updated information (Cottrill et al., 2017; Mellon and Prosser, 2017; Pender et al., 2014). Similarly, Twitter users can share real-time information with transport operators, which can be particularly useful during service disruptions (Rashidi et al., 2017).

Research on social media use by public transport operators largely focuses on the analysis of social media messaging by transport operators and stakeholders. Public sentiment, in particular, has been a focus of literature through the content analysis of public transport user’s posts (Casas and Delmelle, 2017; Collins et al., 2013; Schweitzer, 2014). Research has also noted that analysing the content of social media can benefit transport agencies, as posts are real-time data that can be collected at minimal cost, which allows transport agencies to determine specific

needs of users (Collins et al., 2013; Gal-Tzur et al., 2014). A study by Rashidi et al. (2017) found that this social media data can also be beneficial as it is an easily accessible source of data that can collect some travel information without requiring a travel diary to be completed, with Twitter, in particular, being useful for examining mobility patterns through geo-location information through the usage of smart phones or tablets.

While research on Twitter has focused on public transport operators, there is more limited research on Twitter that is specific to passenger railways. Pender et al. (2014) identified the information sharing aspect of Twitter as particularly useful for passenger railways, where service disruptions can have a major impact. This is reflected in Clegg et al.'s (2018) study that indicated speed and accuracy of information shared was critical for effective response and recovery from service disruptions. Studies on Twitter use by train operating companies (TOC) specific to the UK focused on message framing and its effects on customer relationships (Nisar and Prabhakar, 2018) and analysing customer tweets to understand their experience of rail services (Mogaji and Erkan, 2019).

*“@chilternrailway is giving away 5 pairs of tickets to the Ideal Home Show. Visit [www.chilternrailways.co.uk](http://www.chilternrailways.co.uk) for more information.”* Chiltern Railways (2009).

Although it was not the first to set up a Twitter account, Chiltern Railways was the first train operating company in the United Kingdom to use Twitter by tweeting about a promotion. Since the 2009 Chiltern Railways' first tweet, every train operating company in the United Kingdom has launched their own Twitter account or, for several operators, more than one account (Table 1.1). Twitter is of particular value to rail operators as a Passenger Focus (2012) study indicated that passengers preferred Twitter over other social media platforms as the place to receive

information from rail operators. English rail passengers indicated the expectation that rail operators use Twitter to share information in a fast and accurate way which was crucial to be considered credible and trustworthy (ibid., 2012).

**Table 1.1** United Kingdom train operating companies' Twitter accounts<sup>1</sup>

<b>Train operating company</b>	<b>Twitter handle(s)</b>	<b>Twitter created</b>
<b>Franchise Operators</b>		
<b>c2c</b>	@c2c_Rail	2011
<b>Caledonian Sleeper</b>	@CalSleeper	2014
<b>Chiltern Railways</b>	@chilternrailway	2009
<b>CrossCountry</b>	@CrossCountryUK	2010
<b>East Midlands Railway</b>	@EastMidRailway	2008
<b>Govia Thameslink<sup>2</sup></b>	@GatwickExpress @GNRailUK @SouthernRailUK @TLRailUK	2010
<b>Great Western Railway</b>	@GWRHelp	2008
<b>Greater Anglia<sup>3</sup></b>	@GreaterAnglia @GreaterAngliaPR @Stansted_Exp	2010
<b>London North Eastern Railway (LNER)</b>	@LNER	2011
<b>Northern</b>	@northernassist @northern_pr	2010
<b>ScotRail</b>	@ScotRail	2009
<b>South Western Railway (South West Trains)</b>	@SW_Help @SW_Railway (@SW_Trains)	2011
<b>Southeastern</b>	@Se_Railway	2011
<b>TransPennine Express</b>	@TPExpressTrains @TPEassist	2009

<sup>1</sup> Due to the changes in franchise operators, the creation date of the Twitter accounts may list two separate dates for each train operating company. The former operators are indicated in parenthesis. In some instances, train operators have multiple accounts. Where this occurs, only the date of the oldest account is listed.

<sup>2</sup> Franchise includes Gatwick Express, Great Northern, Thameslink, and Southern railways.

<sup>3</sup> Franchise includes Greater Anglia and Stansted Express railways.

<b>Transport for Wales Rail<sup>4</sup> (Arriva Trains Wales)</b>	@tfwrail (@ArrivaTW)	2018 <sup>4</sup> (2009)
<b>West Coast Partnership (Virgin Trains)<sup>5</sup></b>	@AvantiWestCoast (@VirginTrains)	2019 (2009)
<b>West Midlands Trains<sup>6</sup> (London Midland)</b>	@LNRailway @LNRailwayNews @WestMidRailway @WMRailwayNews (@LondonMidland)	2017 <sup>4</sup> (2009)
<b>Open Access Operators</b>		
<b>Heathrow Express</b>	@HeathrowExpress	2009
<b>Hull Trains</b>	@Hull_Trains	2014
<b>Grand Central</b>	@GC_Rail	2014
<b>Concession and Public Operators</b>		
<b>London Overground<sup>7</sup></b>	@LDNOverground	2011
<b>Merseyrail</b>	@merseyrail	2009
<b>Translink (NI Railways)</b>	@nirailways	2010
<b>Transport for London (TfL) Rail<sup>7</sup></b>	@TfLRail	2014

### 1.1.1 United Kingdom franchise and open access train operating companies

In the United Kingdom, passenger railways consist of the publicly operated NI Railways and private franchise, open access, and concession operators. The Railways Act 1992 dissolved the state-owned railway operator British Rail and, by 1997, the privatisation of the rail industry was complete (Funnell and Jupe, 2017). This piece of legislation set out the guidelines for

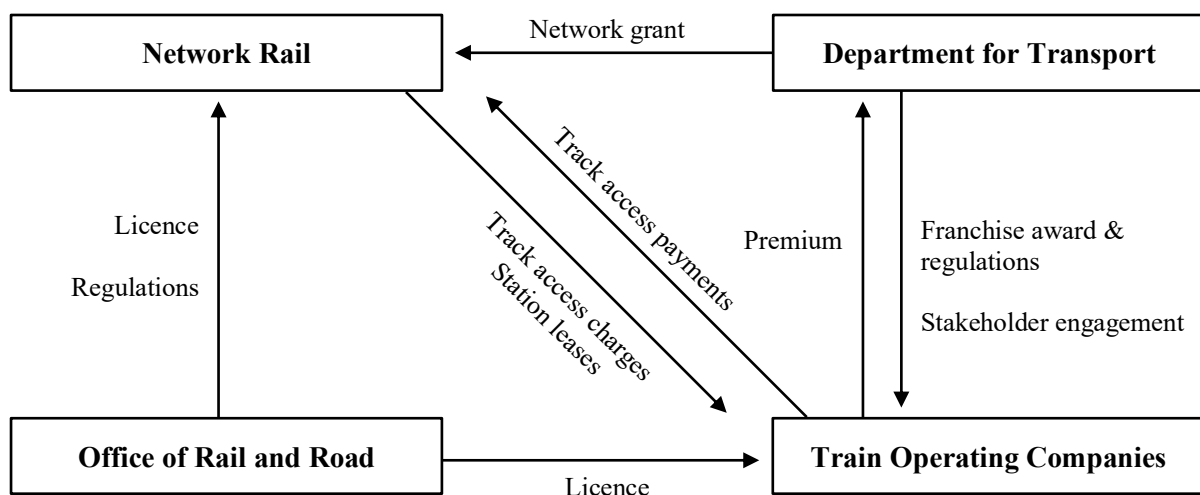
<sup>4</sup> Transport for Wales Rail and West Midlands Trains created new Twitter accounts when the franchises changed operators in 2018 and 2017 respectively. The original franchise dates are used as TOC staff did not change in the franchise transition and provided continuity in Twitter usage.

<sup>5</sup> West Coast Partnership was awarded the West Coast Franchise which was previously operated by Virgin Trains.

<sup>6</sup> Franchise includes London Northwestern Railway and West Midlands Railway.

<sup>7</sup> In 2020, Transport for London closed these Twitter accounts and consolidated them under their main (@TfL) Twitter account.

private passenger rail franchising in the United Kingdom and established 25 passenger rail franchisees (White, 2017). Since then, British railways have come to include 18 franchises, three open access operators, and two concession operators. The Campaign for Better Transport and Department for Transport Rail Executive explains the differences in private TOCs as (i) franchises where TOCs operate a rail service under contract and licence from the government; (ii) open access operators who operate their own rail services and are regulated by the Office of Rail and Road; and (iii) concessions where services are contracted to private operators and managed by local transport authorities (Abrams, 2015).



Source: Adapted by author, drawing from Abrams (2015).

**Figure 1.1** Overview of railway structure of the United Kingdom, excluding Northern Ireland, as of 2019.

The rail system in the UK, except for NI Railways, is comprised of four main actors: private train operating companies and the government agencies of Network Rail, the Department for Transport (DfT), and the Office of Rail and Road (ORR) (White, 2017). With devolution in the UK, franchising in Scotland is managed by the Scottish Executive, and franchising in Wales is jointly managed by the Welsh Assembly and the DfT (Headicar, 2009). Figure 1.1 provides an overview of the railway structure as of 2019 when data collection, except for COVID-19



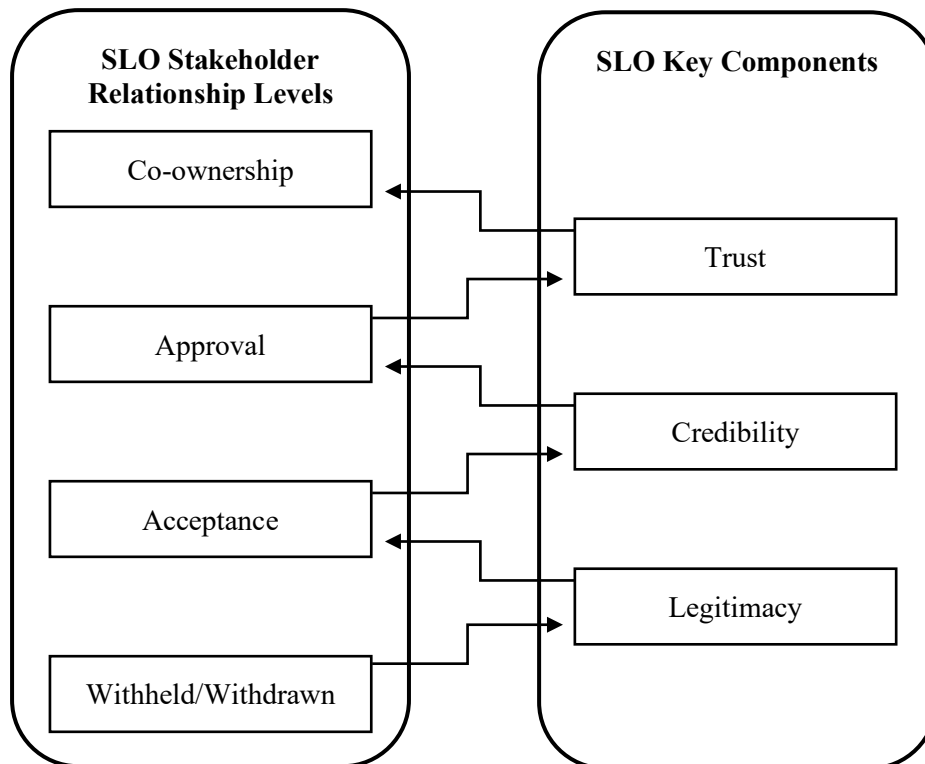
data, for this study was completed. In regard to train operating companies, DfT is responsible for stakeholder engagement regarding franchises and the awarding and regulation of those franchises; ORR is responsible for licensing franchise operators and approving and granting open access operators track access; and Network Rail maintains the railway infrastructure (Abrams, 2015). Train operating companies are responsible for paying track access charges and station leases to Network Rail, while franchise operators are responsible for premium payments to the DfT (ibid., 2015). Due to this structure, train operating companies are responsible for running passenger services as part of a government franchise or as an open access operator, with the primary focus on their passengers.

### *1.1.2 Theoretical foundation*

The theoretical foundation for this study focuses on the relationship between train operating companies and their stakeholders through the operator's Twitter account. This relationship is reflected in Kietzmann et al.'s (2011) functionality of Twitter as a place for conversations, information sharing, building relationships, establishing a presence, building a company's reputation, and building trust. Many of these functions are also key to the social licence to operate (SLO). Thomson and Boutilier (2011) identified that relationships with stakeholders could be built through communicating and sharing information with stakeholders, listening to their stakeholders, and establishing their reputation in order to be seen as credible by stakeholders and worthy of their trust. Further, as Twitter use by train operating companies was considered key to being seen as credible and trustworthy (Passenger Focus, 2012), using the social licence to operate is an ideal theoretical foundation for examining the use of Twitter by rail operators.

Thomson and Boutilier's (2011) widely cited social licence to operate theory provides the research framework for this study (Figure 1.2). The SLO is of particular interest in this study

as it explores stakeholder engagement outside of the regulatory framework. In this sense, the SLO focuses on the relationship between a company and its stakeholders (Brueckner and Eabrasu, 2018; Thomson and Boutilier, 2011). This is important as TOCs may be licensed by the Office of Rail and Road; however, the legitimisation and acceptance of their operations come from stakeholders.



*Source: Adapted by author, drawn from Thomson and Boutilier (2011).*

**Figure 1.2** Social licence to operate stakeholder relationship levels and required components

This study focuses on the three key components of the social licence to operate: legitimacy, credibility, and trust (Figure 1.2) (Thomson and Boutilier, 2011). These components are necessary to achieve the various stakeholder relationship levels of the social licence to operate: acceptance, approval, and co-ownership of the company’s activities and operations (ibid., 2011). The use of Twitter by train operating companies is examined using these three key components as they are achievable with stakeholder engagement, rather than the relationship

levels of the social licence to operate which are given by the stakeholder based on the success of rail operators in achieving these components.

## **1.2 Research aim and objectives**

This research aims to analyse how private train operating companies in the United Kingdom are using Twitter to engage with their stakeholders. To facilitate this, four research objectives were developed around the following research aim:

***Research aim: Examine the extent to which the use of Twitter by private train operating companies in the United Kingdom reflects the social licence to operate.***

*Objective 1: To analyse the Twitter accounts, tweets, and policies of private train operating companies in the UK to understand the ways in which Twitter may be used as a means to obtain a social licence to operate.*

This objective seeks to provide a comprehensive analysis of the use of Twitter by private train operating companies in the UK. To accomplish this, an examination of Twitter messaging, functions, policies, and stakeholder engagement are conducted through a combination of semi-structured interviews with TOC Twitter staff, TOC social media policy analysis, and an examination of Twitter data including tweets and engagement metrics. This objective is addressed in Chapters 3 through 6.

*Objective 2: To examine the social licence to operate in the context of UK railway regulatory requirements and Twitter use by train operating companies.*

This objective seeks to understand how regulatory requirements affect how Twitter is used by UK TOCs to engage with stakeholders. In this study, regulatory requirements such as legislation, franchise agreements, and track access agreements are examined in addition to interviews with TOC Twitter staff to understand how they affect Twitter use by train operating companies. This analysis allows for an understanding of how regulations are affecting TOCs' use of Twitter to obtain a social licence to operate from stakeholders. This objective is addressed in Chapter 4.

*Objective 3: To explore the motivation for using Twitter through the perspectives of staff managing private rail operator Twitter accounts.*

This objective seeks to examine the perspectives of private train operating company staff who are responsible for TOC Twitter accounts. Through semi-structured interviews, the development, goals, and functions of Twitter use by TOCs is discussed and analysed. These responses provide an opportunity to understand the context Twitter operates both at the TOC and within the UK railway regulatory environment. This objective is addressed in Chapters 4 and 5.

*Objective 4: To explore how the COVID-19 pandemic has affected the use of train operating company Twitter to obtain a social licence to operate.*

This objective seeks to examine how TOCs are using Twitter during the start of the pandemic through the first month of the UK's lockdown. Through a tweet content analysis based on the

methodology in Chapter 3, TOC tweets and engagement levels are examined. The findings from this examination offer an insight into changes in stakeholder engagement in comparison to the findings in previous chapters, and how this affects the social licence to operate. This objective is addressed in Chapter 6.

### **1.3 Originality/Contributions**

This thesis seeks to fill a gap in the research by examining Twitter use in the context of private passenger rail operators. This research seeks to contribute to existing literature in six ways:

1. Previous research has largely examined social media use in the context of public transport operated by public agencies, such as Bregman (2012) and Schweitzer (2014). This thesis examines social media, specifically Twitter, in the context of private passenger rail operators in the UK.
2. Literature on the social licence to operate has not been written in the context of stakeholder engagement by public transport operators, nor through the use of social media as a stakeholder engagement platform. In this thesis, the use of Twitter by train operating companies is examined through the social licence to operate theory. Using social licence theory provides a new means to examine stakeholder engagement in public transport and in social media.
3. Much of the previous literature on Twitter use in public transport has focused on a content analysis of Tweets by passengers (Casas and Delmelle, 2007; Collins et al., 2013; Mogaji and Erkan, 2019; Schweitzer, 2014). In this thesis, semi-structured interviews are conducted to offer new insights into the use of Twitter by train operating companies.

4. In addition to content analysis, previous literature has also focused on Twitter data use for quantitative spatial analysis (Rashidi et al., 2017). This thesis offers a mixed-method approach through an examination of stakeholder engagement through Twitter, offering insights into how and why this stakeholder engagement is used by rail operators.
5. Research has not been conducted to examine the role of Twitter as a stakeholder engagement platform within the railway regulatory framework in the UK. To address this, this thesis provides an understanding of stakeholder engagement through the use and development of Twitter within the UK railway regulatory context for franchise and open access operators conducted through an analysis of semi-structured interviews, legislation, regulations, and franchise agreements.
6. The COVID-19 pandemic has significantly affected public transport. While literature examining the use of Twitter by governments and their leaders during the pandemic exist (Gong and Ye, 2021; Haman, 2020; Rufai and Bunce, 2020; Solnick et al., 2020; Zeemering, 2021), literature does not exist regarding Twitter use by rail operators during the pandemic. In this context, a Twitter content analysis of COVID-19 tweets by train operating companies in the UK is offered to understand how Twitter was used for stakeholder engagement during the beginning of the pandemic.

#### **1.4 Research design and methods**

The research methodology uses a mixed-method approach to this study, as it allows for a focus on exploration and understanding of the use of Twitter by train operating companies (Creswell and Creswell, 2018). This section provides a brief overview of the methodology for each chapter, with a more detailed methodology provided in Chapters 3 through 6. Table 1.2 provides an overview of the purpose and methodology for each thesis chapter.

**Table 1.2** Summary of thesis chapters' purpose and methodology

<b>Chapter</b>	<b>Purpose</b>	<b>Methodology</b>
3	To understand the ways in which Twitter may be used as a method to obtain a social licence to operate.	Content analysis of 3,267 tweets and retweets (combined) and 18 Twitter policies content analysis for three concession, 17 franchise, and three open access operators in the UK.
4	To understand how regulatory requirements affect how Twitter is used by UK TOCs to engage with stakeholders.	Content analysis of UK railway regulations and 17 franchise and 3 three track access agreements. 21 semi-structured interviews with TOC staff responsible for TOC Twitter accounts.
5	To examine the perspectives of train operating company staff responsible for the TOC Twitter accounts.	21 semi-structured interviews with TOC staff responsible for TOC Twitter accounts.
6	To examine how TOCs are using Twitter during the start of the COVID-19 pandemic through the first month of the UK's lockdown.	Content analysis of 9,325 tweets for 28 TOCs in the UK.

Participants were selected from private train operating companies in the United Kingdom. Concession, open access, and franchise train operating companies were invited to participate in the study. All open access and franchise operators chose to participate, while no concession operators accepted the invitation to participate. Concession operators were included, however, in tweet and policy analyses. Further, NI Railways was not included in the study except for a tweet analysis related to COVID-19 as the pandemic is a public health emergency and as a public agency was included for this reason.

The research methodology for Chapter 3 used a content analysis of 3,267 tweets and retweets (combined) and 18 policies for three concession, 17 franchise, and three open access train operating companies in the United Kingdom. The content analysis was conducted using Bregman's (2011) functions of social media use and Thomson and Boutilier's (2011) key components of the social licence to operate.

**Table 1.3** Interview participant overview

<b>Position title</b>	<b>Social media career length</b>
Customer Information Delivery Manager	1 year
Contact Centre Manager	1.5 years
Customer Engagement Manager	2 years
Campaigns and Promotions Manager	3 years
Social Media and Events Manager	3 years
Social Media Advisor	4 years
Communications Business Partner	5 years
Head of Customer Experience	5 years
Operations Director	5 years
Commercial & Customer Policy Director	6 years
Content and Social Media Manager	6 years
Customer Communications Specialist	6 years
Social Media Executive	6 years
Head of Social Media Customer Service	7 years
Digital Community Manager	8 years
Media Manager	8 years
Passenger Information Manager	8 years
Senior Customer Relations Manager	8 years
Social Media Manager	8 years
Digital Manager	9 years
Campaigns Manager	10 years
Communications Manager	10 years
Social Media Strategy Manager	10 years

The research methodology for Chapter 4 used a content analysis of British railway regulations, 17 franchise and three track access agreements, and 21 semi-structured interviews with franchise and open access train operating company staff responsible for managing their Twitter



accounts (Table 1.3). The interview questions (Appendix) were created based on Thomson and Boutilier's (2011) social licence to operate theory and the findings from Chapter 3.

The research methodology for Chapter 5 used 21 semi-structured interviews with franchise and open access train operating company staff (Table 1.3) responsible for managing their Twitter accounts. The interviews conducted for Chapter 4 were also used in the analysis for Chapter 5.

The research methodology for Chapter 6 was similar to the methodology in Chapter 3. A content analysis of 9,325 tweets was conducted based on five COVID-19 message themes and on relevant stakeholder groups for each COVID-19 tweet. The data collected was independent from the data used in Chapter 3, having been collected during a different timeframe. Additional analysis was conducted on the levels of COVID-19 tweet engagement by Twitter users.

#### *1.4.1 Ethics*

A completed ethics assessment application was submitted and approved by the director of studies, with the assessment not requiring the approval from the University of Westminster Ethics Research Committee. Qualitative research methods required careful ethical considerations in relation to the semi-structured interviews. This is particularly important as the research involves collecting data from and about individuals (Punch, 2015). As such, ethical considerations were applied throughout this research. In obtaining permission from participants, informed consent forms were provided prior to beginning the study reflecting the participant's rights (Sarantakos, 2005). Firstly, information was provided about the research. Secondly, participants were informed that participation was voluntary and that they could withdraw from the study at any time. Thirdly, participants were guaranteed confidentiality as

well as the opportunity to remain anonymous, both on an individual level as well as on an organisational basis, if they chose to do so. In order to provide confidentiality, the name of the train operating company is cited anonymously where data is not publicly available. Individuals are quoted under the anonymised TOC name. Fourthly, permission was sought from each participant to use an audio recorder during the interview. Further, participants were informed that recordings and transcripts were to be kept in a secured location that could only be accessed by the researcher. Participants were also allowed to indicate any sensitive information that should be cited anonymously. Finally, interviews were conducted in private, closed spaces at a location of the participant's choosing in order to provide them an opportunity to use a space in which they felt comfortable to participate.

## **1.5 Thesis structure**

A paper-based approach to this thesis, with each chapter presented as a separate paper rather than as a monograph, was selected as it provided an opportunity to submit and publish the findings in journals and conferences throughout the PhD process. In doing so, the thesis benefitted from feedback of transport industry professionals and academic faculty and researchers, as well as an external peer review process. Further, the paper-based approach provided additional outputs resulting from the PhD. This thesis, then, is presented in seven chapters. The findings are presented in Chapters 3 through 6 and are presented as four papers and, as such, the literature review and methodology sections are included in these chapters.

## Chapter 2: *Theoretical and methodological foundations*

This chapter provides a critique of the social licence to operate and outlines alternative theories considered for the theoretical foundation of this thesis. This critique provides an understanding of the selection of Thomson and Boutilier's social licence to operate model. Further, this chapter provides a review of the underpinning research philosophy discussing the pragmatic research paradigm selected and its relation to the methodology selected and applied in the thesis.

## Chapter 3: *Trains, Twitter, and the social licence to operate: An analysis of Twitter use by train operating companies in the United Kingdom*

Research has not been conducted examining the social licence to operate in the context of train operating companies, or transportation more widely, nor in the context of social media. This chapter introduces the social licence to operate within the context of train operating company Twitter use. Data collection included 34 TOC Twitter accounts, 3,267 tweets and retweets (combined), and 18 social media policies which were used to understand how TOCs are using Twitter and if those uses reflect the social licence to operate.

## Chapter 4: *Twitter, regulations, and the social licence to operate: An examination of the effects of railway regulations on Twitter use by franchise and open access operators*

There is lack of research in understanding the impacts of regulations and policy on Twitter use by rail operators, and the motivating factors from the company's perspective. This chapter addresses this gap in the literature through 21 interviews with staff operating TOC Twitter

accounts and an examination of the regulations and policies that affect the use of Twitter by train operating companies. In this examination, the role of the social licence to operate is examined within the context of these regulations and policies.

*Chapter 5: Tweeting for a social licence to operate: Train operating company Twitter accounts and stakeholder engagement in the United Kingdom*

A lack of research exists in relation to a pragmatic approach to the use of Twitter from the perspective of staff managing a train operating company's Twitter account, instead focusing on content analysis as previously mentioned. In this chapter, 21 interviews with staff operating TOC Twitter accounts were used to address this and examine attitudes of staff and practices for TOC Twitter accounts. This examination explored the extent to which TOCs are taking advantage of the potential Twitter offers as a tool for engaging with stakeholders.

*Chapter 6: Tweeting during a pandemic: Examining the effects of COVID-19 on the use of train operating company Twitter*

The COVID-19 pandemic provided a unique opportunity to examine the use of Twitter by TOCs during the pandemic. Research has yet to be conducted on the use of Twitter by TOCs in exploring how they used this social media platform to engage with stakeholders during the first lockdown of the COVID-19 pandemic. This chapter addresses this gap through an analysis of 9,325 tweets for message content and stakeholder groups engaged, as well as Twitter user engagement with those tweets. Data was analysed from the beginning of travel restrictions through the first full month of the pandemic lockdown in April 2020. In the examination, the

changes to messages and stakeholder engagement are analysed through social licence to operate theory.

### Chapter 7: *Conclusions*

Chapter 7 provides a summary of the key findings and offers an overall conclusion based on the research. This chapter offers reflections on the social licence to operate in the context of train operating companies in the UK. Finally, the chapter offers recommendations for practice and future research.

## **CHAPTER 2**

### **Theoretical and methodological framework**

This chapter discusses the key concepts and development of the social licence to operate (SLO). The selection of the theoretical foundation of Thomson and Boutilier's (2011) social licence to operate is discussed along with additional theoretical perspectives that were considered for the thesis' theoretical foundations.

This chapter is organised in two main parts. Part 1 provides a literature review of issues related to the social licence to operate as a central theoretical concept of this thesis. This chapter also provides a definition of the SLO, a discussion and critique of varied SLO perspectives, an explanation of alternative concepts/theories considered for a theoretical foundation in this thesis, and an explanation of the selection of the SLO as the theoretical foundation. Part 2 focuses on underpinning research philosophy of this thesis. This section provides ontological and epistemological considerations related to this research and identifies the research paradigm which underlies the research methods selected and applied throughout this thesis.

## **Part 1: Literature review on social licence to operate**

### **2.1 Social licence to operate: A critical review of theories and concepts**

This section provides an overview of the social licence to operate theory that influenced the selection of the theoretical foundation for this thesis. A review of the key models (Table 2.1) which informed this theoretical foundation selection are presented in this section, along with a history of the development of the concept of the social licence. Finally, a critique of the SLO is provided along with an analysis of the key concepts and definitions that tie these models together.

**Table 2.1** Key social licence to operate models

<b>Model and Industry</b>	<b>Author(s)</b>	<b>Date</b>
Three Strand Model <i>Pulp and Paper Manufacturing</i>	Gunningham, Kagan and Thornton	2004
Triangle Model <i>Renewable Energy</i>	Wüstenhagen, Wolsink and Börer	2007
Local Legitimacy Model <i>Mining</i>	Gifford and Kestler	2008
Corporate-Community Involvement Models <i>Oil</i>	Idemudia	2009
Five Step Process Model <i>No Industry Specified</i>	Wilburn and Wilburn	2011
Pyramid Model <i>Mining</i>	Thomson and Boutilier	2011
Social Licence to Operate Path Model <i>Mining</i>	Moffat and Zhang	2014

The ‘social licence to operate’ was originally based on technical bulletins of extractive industries. There are conflicting reports of the exact origin of the concept of the SLO. The ‘social licence to operate’ was credited as originating in the forestry industry’s technical bulletin Paper Industry Management Association in 1996 (Moore, 1996). Alternatively, the ‘social licence’ has also been credited in the literature as having been created within the mining industry in 1997 (Boutilier, 2014). Regardless of the origins, the social licence was originally conceived in industries with environmental impacts. Although the SLO was founded in the forestry and mining industries, it has since been expanded to additional industries such as oil and gas (Idemudia, 2009), agriculture (Shepherd and Martin, 2008; Williams and Martin, 2011), forestry (Edwards and Lacey, 2014; Wang, 2005), paper manufacturing (Gunningham et al., 2004), renewable energy (Hall et al., 2012), water usage (Shepherd and Martin, 2008), and retail (Graafland, 2002). Despite the expansion of the use of the SLO, it continues to be primarily used within industries that directly affect the environment.

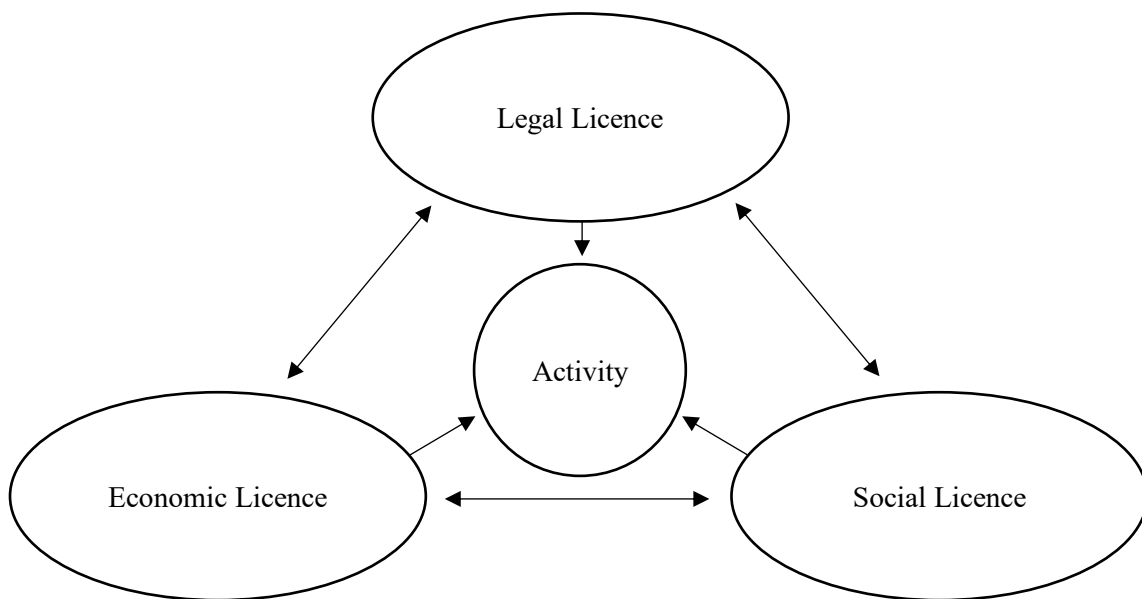


The development of the theoretical foundations of the social licence began in Joyce and Thomson's (2000) article in the Canadian Mining and Metallurgical Technical Bulletin that formed the original theoretical construction, in regard to scientific knowledge, in response to the need to manage conflicts and promote the social acceptance of mining operations (Santiago et al., 2021). Further, Santiago et al., (ibid., 2021) found that Joyce and Thomson's article stood out as the main influencer of future social licence literature and, in particular, within the mineral industry. In this foundational study, Joyce and Thomson (2000) suggests that the SLO exists when projects, in the context of managing the social acceptability of mining projects, are seen to have the approval and acceptance by society for those activities. Joyce and Thomson (2000) suggested that a company must be perceived to be legitimate in order to obtain the social licence. Legitimacy can be defined as "a generalised perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (Suchman, 1995, p. 574). Once the social licence had been granted, companies could then mitigate risks to the company and gain the access to resources needed for their operations (ibid., 2000). Further, it was Warhurst (2001) that indicated that trust must be established between organisations, communities, and government so that a full SLO can be earned. This is especially important as stakeholders include those that can affect a company's profitability (Graafland, 2002).

### *2.1.1 Three Strand and Triangle Models*

With the establishment of the social licence to operate, the further development of the theoretical foundations of the social licence began to expand to include legal considerations. Three of the first articles following Joyce and Thomson (2000) argued that the social licence was an extension of legal and economic issues (Kagan et al., 2003; Thornton et al. 2003;

Gunningham et al., 2004). Gunningham et al. (2004) developed the Three Strand Model (Figure 2.1) by identifying three complementary licence types (Table 2.2) in considering the SLO: the legal licence, the economic licence, and the social licence. Gunningham et al. (2004) recognised that legal requirements rarely do not meet the needs of society. Indeed, community expectations move beyond the legal issues, and a company's reputation can be affected by their stakeholders' perceptions, serving as motivation for companies to engage with them (Gunningham et al., 2004; Joyce and Thomson, 2000). The importance of the legal considerations of the social licence can be seen by laws allowing stakeholders to take legal actions against companies to prevent their operations (Gunningham et al., 2004).



**Figure 2.1** Three Strand Model

*Source: Gunningham et al. (2004).*

**Table 2.2** Three Strand Model overview

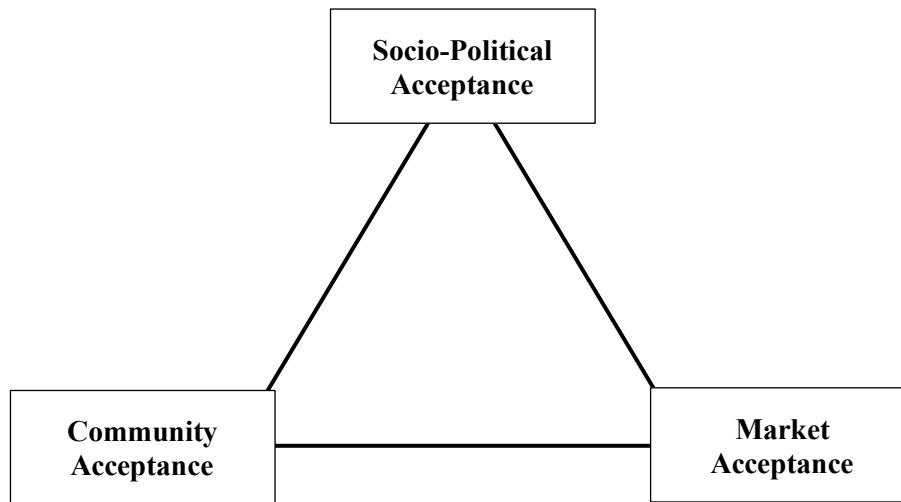
<b>Three Stand Model</b>	
<b>Licence Type</b>	<b>Description</b>
Legal Licence	<ul style="list-style-type: none"> <li>• Legal Licence is related to legislation.</li> <li>• Requires disclosure of information of activities to stakeholders.</li> <li>• Empowers stakeholders and/or provides information to stakeholders which can be used to pressure companies.</li> <li>• Allows stakeholders to take legal action against companies and their activities.</li> <li>• Pressure from stakeholders influence legislation and regulation of activities.</li> <li>• Economic costs related to high social demands may take prevalence, leading to less responsiveness from a company to take regulative or legislative stances.</li> </ul>
Economic Licence	<ul style="list-style-type: none"> <li>• Economic Licence is granted by investors and the market.</li> <li>• Prevents activities outside of compliance that incur high costs.</li> <li>• Discourages investment in costly activities that do not benefit companies unless required by a Legal Licence.</li> <li>• Stakeholder demands are less likely to affect industries than companies that offer commodity products.</li> </ul>
Social Licence	<ul style="list-style-type: none"> <li>• Social licence to operate is granted by stakeholders who monitor and unofficially enforce compliance with regulations and legislation regarding activities.</li> <li>• Stakeholders place social pressure on the Legal Licence through pressure on legislators and regulators resulting in regulation enactment, monitoring and enforcement of activities.</li> <li>• Stakeholders can affect the Economic Licence through actions such as boycotts that affect the profits of a company.</li> </ul>

*Source: Gunningham et al. (2004).*

The Three Stand Model also pointed out the importance of the social licence to operate in addressing societal pressures. Thornton et al. (2003) noted that a SLO demanded more than a legal licence, as the SLO comes from societal pressures arising from communities. Social pressure was seen to motivate companies to better perform compliance (Kagan et al., 2003). This SLO, then, is important in managing the expectations of stakeholders and gaining their acceptance. Within the mining industry the SLO was viewed as an intangible and transient means to gauge a community’s ongoing acceptance of a company’s activities (Nelsen, 2006).

The SLO is seen as the need for acceptance and approval from stakeholders (Joyce and Thomson, 2000; Nelsen and Scoble, 2006). Evangelinos and Oku (2006) also suggested that the SLO can be used in the absence of government regulations and efficiency by communities and industries agreeing to supplement the lack of regulatory requirements.

A similar model to the Three Stand Model is Wüstenhagen, Wolsink and Bürer's (2007) Triangle Model (Figure 2.2), developed in relation to support for renewable energy projects, in particular environmentally friendly developing technologies. This model views the social licence as a series of acceptance procedures and is based on the concept of 'social acceptance' which builds confidence, awareness, and trust in these technologies (ibid., 2007). In their model, three separate categories are identified to achieve social acceptance: social-political acceptance of technologies and policies by the public, key stakeholders, and policy makers; community acceptance of decisions and projects by local stakeholders consisting of local residents and authorities; and market acceptance of the adoption of new innovations from consumers, investors, and producers (ibid., 2007).



**Figure 2.2** Triangle Model

*Source: Wüstenhagen et al. (2007).*

The Three Strand Model and Triangle Model provide a useful overview of how the social licence to operate is affected by and affects legal/political and economic activity. Although this is useful in understanding the context in which the social licence operates, the weight of influence of stakeholder groups is unclear. For example, does a company view its investors or consumers as having more influence in policy? Or what happens when community acceptance for an activity is contrary to regulatory or legislative frameworks? The models also fail to consider the relationship between various activities of a company. If a company has approval for one activity, but another activity does not, which take precedence for the overall activities of a company? Would an approved activity maintain the social licence despite the resistance to another company activity? Is the social licence granted to the company or must it remain attached to the activity? Despite these questions, these models introduce the impact that external factors have in determining the social licence.

### 2.1.2 Local Legitimacy Model

In a shift from models based on societal expectations and pressures, Gifford and Kestler (2008) proposed a new management model, the Local Legitimacy Model (Table 2.3). This model focuses on multi-national enterprises working with local communities to make infrastructure improvements (ibid., 2008). This model is based in the mining industry, which can place significant strain on the existing physical infrastructure of a community, often requiring new infrastructure to be built to manage the demands, particularly in developing nations (ibid., 2008). Further, mining operations bring new jobs, training and educational opportunities, and higher annual incomes, which can change local economies and cultural lifestyles (ibid., 2008). In order to help communities adjust to the changes brought by new operations, it is important for the multi-national organisations to remain credible in the community by partnering with traditional authority structures (ibid., 2008). By including input from local community organisations and authorities, enterprises can create development from the bottom up as well as leverage and build on the community's existing social infrastructure. In doing so, enterprises will gain local legitimacy leading to the social licence to operate (ibid., 2008).

**Table 2.3** Local Legitimacy Model overview

<b>Local Legitimacy Model</b>
<b>Local Legitimacy Model Propositions</b>
1. Co-invention and analysis of community needs and issues.
2. Planning and investment in developments to enhance the social fabric of communities.
3. Planning and investment in physical infrastructure needs.

*Source: Gifford and Kestler (2008, p.350).*

The Local Legitimacy Model provides a simplified set of recommendations for obtaining legitimacy from local communities. The challenge with this model, however, is that it appears

to be context specific in working to achieve legitimacy in developing countries. Although there are key elements such as partnering with the community and working within the social structure of these communities, there is an assumption that these communities are not developed to the standards of more developed nations. What is uncertain is whether this model can be applied outside of this context. Further, the model does not take into account the possibility that unforeseen actions, that may have initial community approval to proceed, could affect the social licence to operate. Despite this, these propositions are useful for companies in considering ways in which they can engage with the community and improve the communities in which they operate.

### *2.1.3 Corporate-Community Involvement Models*

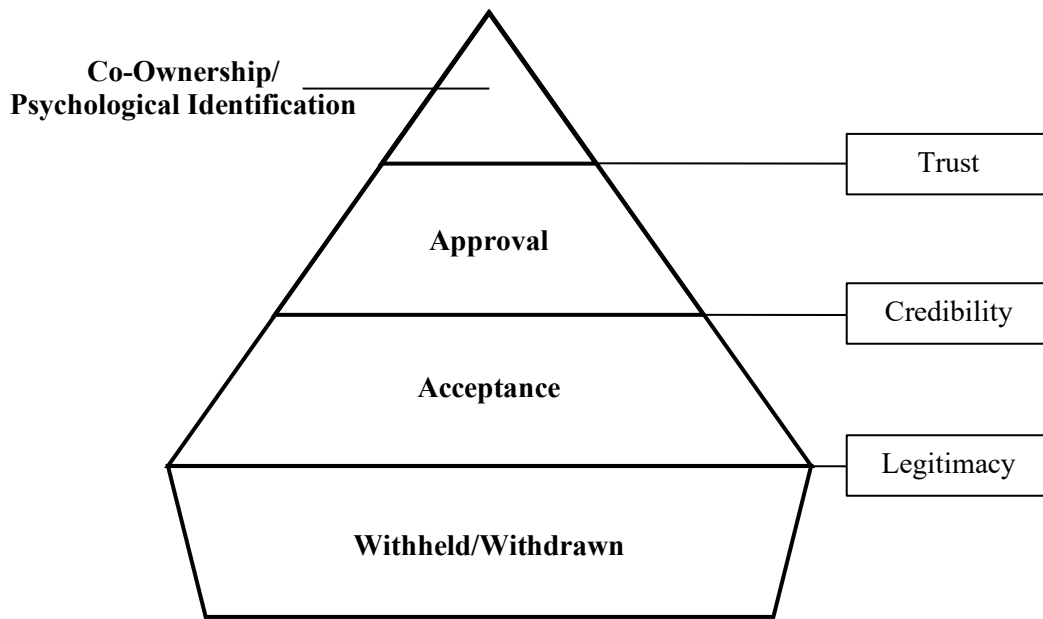
The use of corporate-community involvement models in relation to the social licence to operate was examined by Idemudia (2009). Two models were examined in the context of the oil industry: the In-House Corporate-Community Investment Model and the Corporate-Community Foundation Model (ibid., 2009). The In-House model works to manage the impacts of its activities through community relations and social investment decisions in a corporate manner while the Foundation model uses a non-governmental organisation to share decision making with the local communities (ibid., 2009). In this study, the Foundation model fostered more positive perceptions of the companies when compared with the In-House model, suggesting that this positive perception allows for a company to improve the relationships with their stakeholders, reduce any lack of trust the stakeholders feel towards the company, and improves the company's ability to obtain the social licence (ibid., 2009). Further, the study found that the Foundation model created a method for local communities to hold the companies accountable (ibid., 2009).

The examination of corporate-community involvement models provides a perspective of the corporate structure used to engage with the public. There appears to be an assumption that a company is starting from a place of mistrust from a community, with companies being seen as organisations to be wary of engaging with in comparison to engaging with a foundation. Even the Foundation model appears to suggest that relationships are something that need to be improved. This model may be useful in situations where mistrust or negative perceptions are the starting point for engagement with the community. While setting up a foundation may be more useful in improving relationships and perceptions, companies will need to take into consideration the resources needed to create a foundation. Companies with larger resources available to them may be able to set up these foundations, however small companies may struggle with allocating the resources needed to effectively implement a foundation.

#### *2.1.4 Pyramid Model*

The Pyramid Model (Figure 2.3) was developed by Thomson and Boutilier (2011) based on the definition of the social licence to operate by Joyce and Thomson (2000), often credited as the first definition of the SLO (Boutilier, 2014). Joyce and Thomson (2008) further expanded their definition to include the three components of legitimacy, credibility, and trust. They further developed the social licence to include three levels of the social licence: ‘acceptance’ which is required for legitimacy, ‘approval’ if the project is to be seen as credible, and perceptions of trust (ibid., 2008). Joyce and Thomson (2008) further differentiated between project acceptance and approval, indicating that legitimacy is required for acceptance, but credibility and trust were required for approval (ibid., 2008).





**Figure 2.3** Pyramid Model

*Source: Thomson and Boutilier (2011).*

In the Pyramid Model, Thomson and Boutilier (2011) expanded on the social licence to operate definition by Joyce and Thomson (2000, 2008) using the three key components of the SLO: legitimacy, credibility, and trust (Table 2.4); setting legitimacy as the minimum requirement of a social licence. These three components are required to achieve four levels of the SLO. Legitimacy serves as the barrier between a company’s activities being accepted, or being seen as legitimate, by the community and achieving the basic level of the social licence or the social licence being withheld or withdrawn from the company. Credibility serves as the barrier between a project being accepted by the community and the activities receiving the approval of the community, where a company is seen as providing clear and reliable information and delivering on its commitments. Trust is the final barrier in moving from a community’s approval of a company’s activities to a community’s co-ownership or psychological identification of the activities when a strong relationship is established between a company and the community where both are seen as partners with shared interests.

**Table 2.4** Pyramid Model overview

<b>Pyramid Model</b>	
<b>Key Components</b>	<b>Description</b>
Legitimacy	<ul style="list-style-type: none"> <li>• Legitimacy separates activities that are rejected by stakeholders from those that have been accepted through engagement with stakeholders according to informal standards.</li> <li>• Legitimacy occurs when companies communicate their activities and engage and listen to stakeholders.</li> <li>• Legitimacy is the basic level of the social licence to operate.</li> </ul>
Credibility	<ul style="list-style-type: none"> <li>• Credibility separates projects that have been accepted with those that have been approved by stakeholders through a formal negotiation and agreement on the roles and responsibilities of companies and stakeholders.</li> <li>• Credibility occurs when companies are open and transparent in sharing information and in their decision making, keeping their promises, and being honest about their activities so that they may earn and maintain their credibility.</li> <li>• To gain credibility, companies must also demonstrate reliability through listening to stakeholders and responding to their feedback.</li> </ul>
Trust	<ul style="list-style-type: none"> <li>• Trust separates projects that are approved to those which stakeholders have adopted through co-ownership or psychological identification by collaborating and sharing experiences and vulnerabilities.</li> <li>• Organisations must have a credible reputation in order to earn trust.</li> <li>• Two levels of trust can be identified: a basic level of trust that requires honesty and reliability and full trust that occurs when communities believe that companies are operating in their best interest.</li> </ul>

*Source: Thomson and Boutilier (2011).*

Thomson and Boutilier’s model is widely cited within social licence literature. Although it originated within the mining industry, the basic concepts are not specific to this industry. In this way the model can have applicability beyond mining. This model is useful in determining the various levels of support a company and its operations, with legitimacy being the basic level of the social licence to operate. This model sets out clear descriptions of how these levels can be obtained which were lacking in previous models. Despite this, the model does not

address the extent and form to which this engagement should function, such as the amount of time needed for engagement or how the engagement occurs, such as through community forums or other means of engagement. Further, the model focuses on the community as a stakeholder and does not account for varying levels of influence among stakeholder groups. This ambiguity, however, leaves the model open to some interpretation which can then be used by a company to better tailor the model to their specific circumstances.

#### *2.1.5 Five Step Process Model*

Wilburn and Wilburn's (2011) social licence to operate model (Figure 2.4), the Five Step Process, is based on stakeholder theory. Wilburn and Wilburn (2011) identified a lack of a definition and process for companies in obtaining the social licence. In order to address this, they based their model on normative stakeholder theory in identifying and classifying stakeholders that allows them to participate in the negotiating process and granting the social licence (ibid., 2011). Further, they incorporated De George's (1986) ethical norms serve as a set of values used in their model:

*“do no intentional direct harm, produce more good than bad for the host country, contribute by their activities to the host country's development, respect the human rights of their employees, pay their fair share of taxes, respect the local culture and work with it, not against it, to the extent that the local culture does not violate moral norms, and cooperate with the local governments in the development and enforcement of just background institutions”* (p. 264).

<b>Five Step Process Model</b>	
Step 1	Company describes how its project meets norms set out by De George (1986).
Step 2	Company collects micro-social, defined by Donaldson and Dunfee (1999) as acceptable behaviours and shared values between stakeholder groups, contract information from local community stakeholder groups.
Step 3	Company examines alignment of its norms and stakeholder's norms.
Step 4	Stakeholder engagement on a project produces a proposal that leads to a majority of vested stakeholder consent and obtaining the social licence to operate.
Step 5	Monitoring company project for compliance with stakeholder agreement.

**Figure 2.4** Five Step Process Model

*Source: Wilburn and Wilburn (2011).*

In this model, stakeholders are broken into two separate categories: vested and non-vested stakeholders (Wilburn and Wilburn, 2011). Vested stakeholders are those “who have a right to the possession of something tangible in the community in which the social licence to operate is being requested” (ibid, 2011, p. 9). For example, this could be property owners whose property a company needs access for natural resources such as water (ibid., 2011). In order to obtain the SLO, each stakeholder group has one vote, which also avoids one group overriding the majority (ibid., 2011). The second stakeholder group, non-vested stakeholders, are those that have an interest in the activity for which the SLO is being sought, such as activist organisations (ibid., 2011). These stakeholders do not have the ability to stop a social licence but have a voice that can influence vested stakeholders through various means, in particular communication channels such as the media, internet, or social media (ibid., 2011). Simply put,

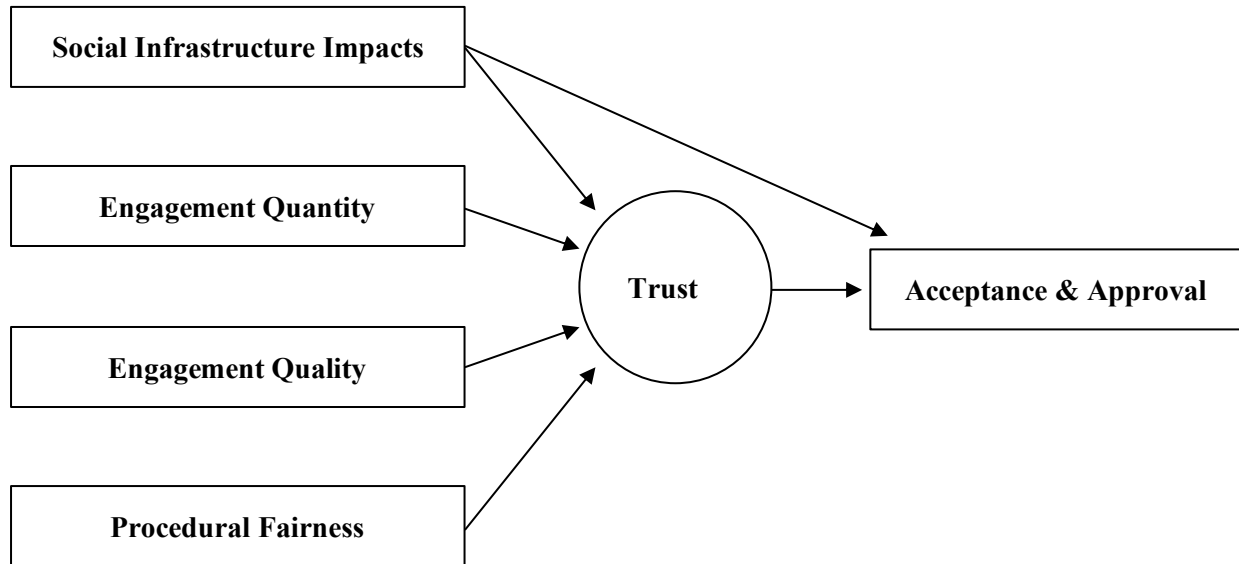
vested stakeholders have a voice and a vote in giving a SLO, while non-vested stakeholders only have a voice in the process.

This model is one which is not developed within an industry that had environmental consideration. The examples listed in the paper, however, still focuses on oil, mining, and other industries with an environmental impact (Wilburn and Wilburn, 2011). A strength of this model is a clearer definition of a stakeholder, acknowledging that there are various levels of stakeholders and that these two stakeholder groups have different levels of power when awarding the social licence. The inclusion of De George's ethical norms are useful, however these norms may become outdated, particularly as they were developed over 30 years ago. This model also does not specify what engagement and collaboration means nor what process is involved in these activities. Despite this, the model is articulated in broad terms which could allow for these shortcomings to be reviewed and the model updated to address the current norms and engagement methods.

#### *2.1.6 Path Model*

In the Path Model (Figure 2.5), Moffat and Zhang (2014) view community trust as the central aspect of the model which will lead to the acceptance and approval of the local community. This model is also focused on the mining industry and how mining companies manage and reduce the impacts of their operations, the impacts on social infrastructure, and how these affect community trust (ibid., 2014). The model also accounts for the quality and quantity of community engagement, as well as how community members are treated and the procedural fairness in the relationship between the community and company (ibid., 2014). These

engagement factors, then, influence the community's trust in a company and, ultimately, their acceptance of operations (ibid., 2014).



**Figure 2.5** Path Model

*Source: Moffat and Zhang (2014).*

In this model, Moffat and Zhang (2014) discovered several key findings. Firstly, they found that procedural fairness was the strongest predictor of trust in this model. As community members felt heard and felt that the company would act on their concerns, the trust in that company was strengthened, which led to an increase in acceptance of their operations (ibid., 2014). Secondly, the study also found that contact quantity was not a contributor to trust, but contact quality did have an important role, suggesting that positive engagement with stakeholders leads to members feeling as though they are not being taken advantage of or exploited (ibid., 2014). Moffat and Zhang (2014) also found that stakeholder experiences with social infrastructure could negatively impact and reduce trust in the company, resulting in lower levels of acceptance and approval. Further, the study found that perceptions of social infrastructure impacts was the weakest factor in a community's trust in a company.

The Path Model offers a perspective of the social licence that offers four conditions that affect trust. This is particularly useful as previous models have not indicated engagement quantity and quality, nor procedural fairness, in how companies gain trust. That this model is based in the mining industry, however, is industry specific and may not translate easily outside of this industry or other industries with environmental impacts. What is unclear, however, is if all the conditions needed for trust are required for the social licence. Further, if the public does not perceive a company to be treating them fairly, what is the mechanism to correct this? Finally, the authors noted that social infrastructure impacts were seen as negatively affecting acceptance and approval (Moffat and Zhang, 2014). This may, however, be reflective of their case study and may produce a different result in another setting. This would also provide the opportunity to test this model outside of the mining or environmental impact industries.

#### *2.1.7 Discussion of social licence to operate models*

The models presented here offer several social licences to operate concepts. This makes defining the SLO difficult as there is no consensus. Is the social licence simply the lack of opposition for the activities of a company? Despite this lack of definition, there are several key concepts that emerge from all the models. Firstly, the SLO is about the relationship between a company and its stakeholders. Secondly, companies engage with their stakeholders to gain community support for a project or operations. Thirdly, key issues emerge regarding legitimacy and trust and how those affect acceptance or approval of a company. As such, one could surmise that the SLO can be defined as companies engaging stakeholders to legitimise their actions and seek approval for their actions through relationship and building trust with their communities.

As previously mentioned, these models have been developed by the extraction industry and studies focus the social licence within these contexts. How these models can be applied to other industries has yet to be fully explored. Further, these models refer to specific projects rather than overall operations and their applicability to operations also needs to be examined in more detail. Within the extraction industry the social licence could be a biased means for companies to develop their own criteria for justifying their actions. If this is the case, the social licence appears to be a risk management strategy meant to ensure their operations are profitable, instead of intrinsically wanting to partner with their communities and operate in their best interests. Companies may be able to manipulate the concept to achieve the desired outcome. From the literature, this does not appear to be the case for now, although this could change in the future.

One of the challenges of the social licence to operate is understanding the extent of effort that is required by companies to obtain the licence. Discussions around the social licence focus on community engagement but lack specifics on what this looks like. Moffat and Zhang (2014) identified engagement quality as an important factor, but there is no suggestion of what this looks like or what types of engagement are required. Is it simply informing the public through traditional communication methods such as the media or post? Or could it be through public meetings or meeting with community organisations in their own physical space? These models also do not provide guidance on the amount of engagement required or the length of time needed to obtain the social licence, which is particularly relevant when a company needs to decide on whether to proceed with a plan or abandon it. Although there is ambiguity when it comes to what shape community engagement should take, this does not mean the ambiguity is entirely negative. A lack of definition in the extent of effort required does allow for flexibility in implementing engagement. This is particularly important as each social licence is within the



context of the community and company in which it is being sought. The danger remains, however, that companies can tailor this engagement to suit their own needs and potentially manipulate the process to achieve its desired outcome. Regardless, companies must engage with stakeholders in the process of obtaining the SLO.

The lack of consensus in defining stakeholders is also prevalent throughout these models. The term stakeholder can refer to a wide range of groups, such as community and national organisations, those that are directly or indirectly affected by the operations, legislators, consumers, shareholders, etc. One term that frequently comes up in social licence literature is ‘community’ when referring to stakeholders. Even though this term remains generic at times, it can generally be regarded as the location in which a company operates. In this sense, ‘community’ becomes a catch-all term for stakeholders. Using this general term, however, still lacks a sense of scope in determining who is a part of a ‘community’. Despite this, ‘community’ may be the most useful definition as it can be customised based on the context in which the company operates. The lack of stakeholder definition can also make determining which stakeholders have greater influence in the decision making. For example, can the social licence to operate be given by one group of stakeholders while there is opposition from another, or are both required to obtain the licence? If there is a lack of consensus among stakeholders, how is this resolved and is it the company’s responsibility for resolving the opposition or is this the responsibility of the groups involved?

The social licence to operate provides an interesting means to examine stakeholder engagement. Despite the various ambiguities, there remains a goal of mitigating resistance to a company’s activities and gaining support from their stakeholders. As the social licence continues to develop in the literature, new applications of the concept in a more diverse set of

industries will help unlock further potential uses of the social licence. Hopefully in doing so, a clearer definition and understanding of specifics required to achieve the social licence will emerge. Even with the lack of clarity, the concept remains a useful tool in examining stakeholder engagement.

## **2.2 Alternative theories and concepts to the social licence to operate**

In this section, a discussion of alternative theoretical applications for this thesis is offered. The concepts reviewed in this section could be considered as social licence to operate legitimacy proxies. As Twitter is a platform for communication and engagement between users, concepts related to communication and engagement were examined in the consideration of potential theoretical foundations for this thesis. Four concepts were reviewed including functions of social media, public participation, consumer relationships, and corporate social responsibility. The presentation of this section is offered showing the order of progression of the consideration of the alternative theoretical concepts. Finally, this section will provide an understanding of the selection for the social licence to operate and how this relates to these alternative theories.

### *2.2.1 Social media theories in review*

With Twitter at the centre of this thesis, social media theories were central to understanding how this platform plays a role as an engagement tool and were the first concepts considered. There were two main theories regarding social media functions, Kietzmann et al. (2011) and Bregman (2012), considered within the context of general social media and social media use by public transport operators. These two theories informed additional theoretical considerations as they provided the understanding of the functions Twitter, in particular with

engagement. Based upon these two theories, additional concepts were explored in line with the key functions listed in the social media theories.

The first of the social media theories is Kietzmann et al.'s (2011) framework of seven functional categories of social media (Table 2.5). According to Kietzmann et al. (2011) social media functions are made up of 'conversations', 'sharing', 'relationships', 'presence', 'reputation', 'groups', and 'identity'. As they noted, not all functions are needed to be present or strongly represented by each social media platform, with Twitter functions strong in all but 'groups' and 'identity'. However, it should be noted that this does not imply the absence of the latter two functions entirely (ibid., 2011).

**Table 2.5** Social media functions

<b>Function</b>	<b>Description</b>
Conversations	<ul style="list-style-type: none"> <li>• The extent to which users communicate with one another.</li> </ul>
Sharing	<ul style="list-style-type: none"> <li>• The extent to which users exchange, distribute, and receive information.</li> </ul>
Relationships	<ul style="list-style-type: none"> <li>• The extent to which users relate to each other.</li> </ul>
Presence	<ul style="list-style-type: none"> <li>• The extent to which users know if others are available.</li> </ul>
Reputation	<ul style="list-style-type: none"> <li>• The extent to which users know the social standing of others and content.</li> </ul>
Groups	<ul style="list-style-type: none"> <li>• The extent to which users are ordered or form communities.</li> </ul>
Identity	<ul style="list-style-type: none"> <li>• The extent to which users reveal themselves.</li> </ul>

*Kietzmann et al. (2011, p. 243).*

The second social media theory is Bregman (2012)'s study of social media use by public transport operators in the United States and Canada. In this study, Bregman (2012) identified five key functions of social media use by these operators: 'timely updates', 'public information', 'citizen engagement', 'employee recognition', and 'entertainment' (Table 2.6). This study has been widely cited within literature on social media use by transport operators.

When compared to Kietzmann et al. (2011), the public transport Twitter functions fall within those functional blocks, in particular ‘conversations’, ‘sharing’, and ‘relationships’.

**Table 2.6** Social media functions of public transport operators

<b>Function</b>	<b>Description</b>
Timely Updates	<ul style="list-style-type: none"> <li>• Real-time information and service advisories.</li> </ul>
Public Information	<ul style="list-style-type: none"> <li>• General information about services and schemes.</li> </ul>
Citizen Engagement	<ul style="list-style-type: none"> <li>• Informal interaction with stakeholders and customers.</li> </ul>
Employee Recognition	<ul style="list-style-type: none"> <li>• Employee recognition and recruitment.</li> </ul>
Entertainment	<ul style="list-style-type: none"> <li>• Songs, videos, contests, and other functions used to entertain riders and personalise transport operators.</li> </ul>

*Bregman (2012).*

Bregman (2012) and Kietzmann et al. (2011) are useful in understanding the functions of social media, however they do not explain why these functions are being undertaken. Both theories were incorporated into the initial stage of this research. Their theories were important in categorising the functions Twitter was used by train operating companies. These categorisations, in turn, were useful in linking the social licence to operate theory to the use of Twitter by train operators.

### *2.2.2 Public participation in review*

With an understanding of the functions of social media and that engagement is occurring within the public realm (Bregman, 2012), public participation concepts were reviewed as public participation in the planning process was not evident in the social media functional theories. Public participation represents a possible proxy for legitimacy and demonstrates how active and meaningful stakeholder engagement can deliver benefits such as community empowerment, greater social equity, and improved resource management outcomes (Poncian

and Jose, 2019). Concepts related to public participation, particularly in the transport planning process, were considered as a potential theoretical foundation. Overall, the literature (Table 2.7) explores broad themes such as the use of public participation to increase public support, public participation as a method of keeping the public informed, and consulting and including the public in decision making. Arguably, engagement alone is therefore insufficient for SLO issuance (Hall et al., 2015).

**Table 2.7** Key concepts for public participation in transport planning

Bickerstaff and Walker (2001)	<ul style="list-style-type: none"> <li>• Transport authorities use public participation to meet requirements set by governments.</li> <li>• Transport authorities use public participation as a means to increase public support for policies and projects.</li> <li>• Goal of public involvement in the decision-making process is influencing the decisions being made.</li> <li>• On regional and corridor levels, public consultation is largely made up of informing the public.</li> </ul>
Booth and Richardson (2001)	<ul style="list-style-type: none"> <li>• More traditional methods of transport planning focus on a top-down approach with informing the public, but with little consultation and opportunities for debate.</li> <li>• Small projects have more opportunities for public input on schemes that impact them.</li> <li>• Small projects allow for more public collaboration with authorities over identifying problems and solutions.</li> </ul>
Bickerstaff et al. (2002)	<ul style="list-style-type: none"> <li>• Building on the conversations and discussing the findings and any actions as a result is important in keeping the participants informed of the progress, as well as providing ongoing participation towards reaching the final plans.</li> <li>• Inclusion of a wide range of citizens, including the disadvantaged or difficult to reach, in meaningful information sharing and two-way conversations and debates are key to successful participation.</li> </ul>
Banister (2008)	<ul style="list-style-type: none"> <li>• Transport planners, through public consultation, may need to make concessions in order to move a scheme forward and strike a balance between the desired and acceptable schemes.</li> </ul>
Cascetta and Pagliara (2013)	<ul style="list-style-type: none"> <li>• Stakeholders are placed into two categories:             <ul style="list-style-type: none"> <li>○ Primary stakeholders are those who are directly affected by a project.</li> <li>○ Secondary stakeholders are those who are indirectly affected by a project.</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>• Seven broad categories of public engagement tools: <ul style="list-style-type: none"> <li>○ Printed materials,</li> <li>○ Telephone and media,</li> <li>○ Internet,</li> <li>○ Surveys,</li> <li>○ Informational events,</li> <li>○ Stakeholder group events, and</li> <li>○ Engagement with a wider stakeholder group.</li> </ul> </li> </ul>
De Luca (2014)	<ul style="list-style-type: none"> <li>• Involving the public in earlier stages of a project provides several benefits: <ul style="list-style-type: none"> <li>○ Identify problems and solutions.</li> <li>○ Increased credibility for initial planning process.</li> <li>○ Conflicts in the later stages of the planning process may be alleviated.</li> </ul> </li> </ul>

Although Cascetta and Pagliara (2013) identified the internet as a public engagement tool, the literature did not explore this further. As most train operating companies in the United Kingdom provide services run by public agencies, are contracted by public agencies, or franchised by the government, governmental use of social media as a public engagement tool was considered. This is related to public participation concepts previously mentioned, but within the context of social media. These concepts (Table 2.8) focus on social media as a method of increasing transparency and trust, informing the public, and engaging with the public. In these concepts, again, is the idea that Twitter is a tool for engagement, which reflects Kietzmann et al. and Bregman's social media theories.

**Table 2.8** Key concepts for public engagement through government social media use

Lee and Kwak (2012)	<ul style="list-style-type: none"><li>• Social media can be used by governments to share their activities through transparency, participation, collaboration, and other online platform(s) integration.</li><li>• Government social media use creates an accessible and simple means for engaging with citizens.</li></ul>
Picazo-Vela et al. (2012)	<ul style="list-style-type: none"><li>• Sharing information on social media to promote transparency can earn trust.</li><li>• Sharing information may also damage trust if the information is not well-received by the public.</li></ul>
Mergel (2013)	<ul style="list-style-type: none"><li>• Citizens using social media is one factor that created demand which led to the adoption of social media by governments.</li></ul>
Ellison and Hardey (2014)	<ul style="list-style-type: none"><li>• English local authorities primarily use social media to share information rather than to facilitate conversations.</li></ul>
Warren et al. (2014)	<ul style="list-style-type: none"><li>• Using social media for civic engagement has a significant impact on trust and increases trust towards institutions.</li></ul>

While the group of theories regarding public participation focuses on stakeholder engagement, they are typically concerned with government or, in the public transport context, transport operators that are public agencies. The private nature of the railways means train operating companies are not engaged in infrastructure planning, which is the responsibility of the government. As private companies, they are not bound to the same freedom of information requests and face less accountability to the public for their actions as their decisions are made in private. Due to the privatisation of the railway, public participation theories were not selected.

### *2.2.3 Consumer relationships in review*

Relationship building is one of the functions of Twitter, as indicated by Kietzmann et al. (2011), as well informal interaction with customers as noted by Bregman (2012). While public participation concepts focus on the engagement aspect, they do not explore developing a meaningful, ongoing relationship with the public. Given this lack of relationship building,

particularly with building relationships through social media, concepts related to social media and its effects on consumer relationships were considered as a theoretical foundation. Several key concepts (Table 2.9) indicate that Twitter has the ability to build and strengthen relationships between customers and companies. Customer engagement with companies on social media builds customer trust and loyalty and positively affects a company's reputation. This engagement, however, does not translate to participating in a company's decision-making processes. Instead, relationships are intended to build affinity for the company, driving customers to purchase their products and services. There is also a recognition in consumer relationships that companies are unable to control conversations on social media, and crisis situations can damage a company's reputation based on how they respond on social media. Although there are risks associated with using social media, there is a largely positive effect on the relationship and even times of crisis can be managed through personal engagement.

**Table 2.9** Key concepts on social media and consumer relationships

Aula (2010)	<ul style="list-style-type: none"> <li>Organisations are unable to control the conversations relating to their organisations on social media, which may result in reputational damage.</li> </ul>
Comm (2010)	<ul style="list-style-type: none"> <li>The informality of tweets strengthens a company's relationship with customers as it humanises the relationship.</li> <li>Twitter allows companies to communicate directly with customers, building trust and developing relationships.</li> </ul>
Corstjens and Umblijs (2012)	<ul style="list-style-type: none"> <li>Negative comments on social media were a stronger influence on sales than positive or neutral ones.</li> </ul>
Laroche et al. (2013)	<ul style="list-style-type: none"> <li>Companies can increase the loyalty and trust in brands by improving the customer relationship using social media engagement.</li> </ul>
Dijkmans et al. (2015)	<ul style="list-style-type: none"> <li>A customer's level of social media engagement with a company positively affects the perception of its reputation.</li> </ul>
Ott and Theunissen (2015)	<ul style="list-style-type: none"> <li>Along with customer engagement, companies should provide status updates which can demonstrate a commitment to their customers and transparency.</li> </ul>



	<ul style="list-style-type: none"> <li>• Companies should demonstrate that they are listening to customer concerns during a crisis by engaging with those affected through interpersonal messages.</li> <li>• Angry users can respond negatively to official statements from companies during a crisis, where users can perceive this as talking down to them.</li> <li>• Companies that delete posts critical of them or block critics in an effort to manage their reputations may instead damage trust and anger users as these actions can be seen as a form of censorship, creating suspicion about a company's activities.</li> </ul>
Hudson et al. (2016)	<ul style="list-style-type: none"> <li>• Interaction between customers and brands has a positive effect on the quality of their relationship.</li> <li>• Customers that engage with their favourite brands on social media have a stronger relationship with that brand than those that do not interact with their favourite brands.</li> </ul>

Consumer relation and social media concepts were not chosen to serve as a theoretical foundation. These models are focused on building brand affinity and managing crisis situations. Although there is discussion on building relationships with customers, these relationships are more about brand loyalty than they are about partnering with communities. Further, this set of theories is focused on their customers rather than wider stakeholder groups. This, then, begins to move away from the type of engagement with stakeholders that this thesis seeks to examine.

#### *2.2.4 Corporate social responsibility in review*

The last of the theoretical concepts that was considered as a proxy for SLO is corporate social responsibility. While public participation concepts focus on garnering support for activities of organisations and consumer relation concepts focus on building relationships with customers and the effect of the relationship on a company's reputation, these two concepts are separate from each other. Corporate social responsibility, however, takes into account both public support for a company's activities and the relationship with stakeholders in relation to its reputation, which led to its consideration as a potential theoretical concept. This concept, as

defined by Batty et al. (2016) in Table 2.10, discusses how corporate social responsibility benefits companies through building trustworthiness and reputation and having a positive effect on stakeholder relationships. Although this is not specific to social media, as previously mentioned in social media models, Twitter has the function build relationships. Due to this, corporate social responsibility was reviewed.

**Table 2.10** Key concepts on corporate social responsibility

McWilliams and Siegel (2001)	<ul style="list-style-type: none"> <li>• Corporate social responsibility can contribute to building or maintaining a company’s reputation for quality, reliability, honesty, and trustworthiness.</li> </ul>
Kurucz et al. (2008)	<ul style="list-style-type: none"> <li>• Companies benefit from corporate social responsibility through developing their reputation and legitimacy.</li> </ul>
Carroll and Shabana (2010)	<ul style="list-style-type: none"> <li>• Integrating corporate social responsibility into business strategies allows companies to distinguish themselves from competitors, improve their competitive advantage, and develop strong relationships with stakeholders.</li> </ul>
Batty et al. (2016)	<ul style="list-style-type: none"> <li>• Corporate social responsibility can be defined as voluntarily using company resources to improve social welfare, resulting in an enhanced relationship with stakeholders.</li> </ul>

Corporate social responsibility offers a model that focuses largely on the actions of the company to gain stakeholder support for a company. This concept, however, does not approach stakeholder support as something that needs to be achieved but as an added benefit to improving the reputation of the company and, ultimately, increase their profits. Further, corporate social responsibility is focused on a company’s reputation rather than stakeholder engagement, with relationships similar to those seen with consumer relationships rather than giving stakeholders a place in the decision-making process. Despite this, these models do reflect the importance of being viewed as legitimate and trustworthy by stakeholders. Due to the lack of focus on engagement with stakeholders, corporate social responsibility was not selected as an appropriate theoretical foundation.

### **2.3 Justification of selecting the Social Licence to Operate as the main theoretical foundation**

The social licence to operate was chosen as the theoretical foundation for this thesis. Specifically, Thomson and Boutilier's (2011) Pyramid Model was selected. As mentioned previously, this model is useful in that it is generalised and can be easily transferred to other industries when trying to understand how a company obtains the SLO. The SLO has yet to be examined within the transportation industry, let alone regarding social media. This creates an opportunity to bring a fresh perspective to stakeholder engagement within public transport, and specifically private rail operators, and contribute to transportation literature.

The key reasons the social licence to operate was selected for the theoretical foundation is it examines stakeholder engagement from the perspective of private industries. This is particularly relevant to the railway industry in the United Kingdom, which has been privatised. In the UK, public participation in transport planning promotes a more open and participatory process and is a requirement by the government (Bickerstaff et al., 2002). While transport planning has traditionally been the responsibility of public authorities, the introduction of transport deregulation in the UK has created additional complexities (Booth and Richardson, 2001). Rail privatisation has led to a prioritisation of profitability where decisions are not occurring within the public arena (Booth and Richardson, 2001). Whereas citizen participation theories in transport focus on public agencies, the social licence focuses on private industry. The social licence to operate theory was established and developed within private industry, which makes it an ideal theoretical foundation for examining private train operating companies.

Thomson and Boutilier's theory was selected as it focuses solely on obtaining the social licence to operate from stakeholders. Although related, political and economic factors included in other social licence to operate models are not the focus of this thesis. Legal and regulatory approval has been given to current train operating companies by the government. This is not to say that legal or political issues are not acknowledged, but this thesis focuses on stakeholder engagement in relation to operations rather than the political and legal process of gaining permission to run services. A second factor in selecting Thomson and Boutilier's theory is that the theory is not specific to approval of infrastructure-related activities. As Network Rail is responsible for maintaining railway infrastructure and capital improvement programmes, train operating companies primarily focus on running their services.

The alternative theoretical concepts considered for this thesis share several themes that overlap with Thomson and Boutilier's model. The key SLO concepts of building relationships with stakeholders, legitimacy, credibility, trust, and reputation were evident in various concepts. Each of these theories relate to engagement, whether they are in relation to customers, stakeholders, or other users of social media. Building relationships with stakeholders is a recurring theme in social media and corporate responsibility models; however, it is strongest in consumer relationship models. Public participation is less about relationship building but more focused on engagement to gain acceptance of a company's activities, related to legitimacy, which is central to the social licence. Credibility, which is also related to reputation, also feature in each of the four theoretical concepts. Finally, trust was acknowledged as an important factor in public participation, consumer relationships, and corporate social responsibility. Although no set of theories cover each aspect of the social licence to operate, they each represent different components seen in the social licence. The social licence, then, can be seen as a model that encompasses the alternative theoretical considerations.

## **Part 2: Underpinning research philosophy and ontological and epistemological considerations**

This section sets out the research paradigm of this thesis. A discussion of the pragmatic research paradigm is offered within the context of the topic of this thesis. An overview of the selected mixed-methods approach, based on the pragmatic paradigm, is also presented.

### **2.4 Research paradigm**

Following the “communicative turn” (Healey, 1997), planning scholars have, since the 1980s, been more concerned with the planning processes instead of planning outcomes (Næss, 2015). This has not been true, however, for transport planning scholars, among whom positivist approaches still dominate (Davoudi, 2012). Communicative planning theories together with post-structuralism theories have increasingly been criticised. (Fainstein, 2010). This research adopted a pragmatic philosophical approach to the research as an alternative to positivism, neoclassical economics and post-structuralism. The origins of pragmatism are attributed to the works of John Dewey (1929, 1938, 1989 [1931], 2008 [1910], 2008 [1922], 2011 [1917]), William James (1981 [1907], 2010 [1907], 2011 [1898]), and Charles S. Peirce (1878, 2011 [1868], 2011 [1877], 2014). This approach was formed out of academic scepticism regarding the possibility of achieving perfect knowledge or truth using positivist scientific practice (Ormerod, 2006). “Pragmatism developed ... as a philosophical movement focused on the practical consequences of social reality” (Kelly and Cordeiro, 2020). A general definition of pragmatism is a perspective where diversity and complexity are acknowledged and, rather than philosophical debates, approach research by using what works in a particular setting or set of

research questions, leading to flexibility in the choice of research methods and decisions of how the research is designed and conducted (Creamer, 2018).

The pragmatic paradigm is not aligned with any one philosophical stance and reality (Creswell and Creswell, 2018). Instead, pragmatism places the research problem and question at the centre of the research (Wilson, 2014). In this paradigm, research occurs within contexts including social, historical, political, or others (Creswell and Creswell, 2018). It is believed that questions about reality and the laws of nature should be discontinued (Cherryholmes, 1992). A pragmatic ontology rejects traditional dualisms such as objectivity-subjectivity and acknowledges that multiple realities exist; places high value on the reality and influence of the human experience; and acknowledges that truth, meaning, and knowledge change and are not fixed (Onwuegbuzie et al., 2009). Lincoln et al. (2011) identified the ontological belief of pragmatism as reality being is what is useful, practical, and works. In terms of epistemology, pragmatism is more universalist, suggesting that some basic truths exist, but these truths can be influenced by their contexts (Zusho and Clayton, 2011). The epistemological focus is on practicality and the inquiry process (Kelly and Cordeiro, 2020). Further, Onwuegbuzie et al. (2009) note that knowledge is based and constructed on the reality of our experiences and living in the world. Lincoln et al. (2011) further identified the epistemological beliefs as knowing reality using research tools that reflect both objective/deductive and subjective/inductive evidence.

It has been suggested that the pragmatism paradigm is a means to avoid traditional philosophical disputes (Johnson and Onwuegbuzie, 2004), or that it is simply a catch-all. Johnson and Onwuegbuzie (2004) noted the “paradigm wars” (Gage, 1989, p. 4) with a dualistic approach which views quantitative research as a purely objective ontological and

positivist epistemological position, while qualitative research rejects this and views research from an ontological subjective and epistemological constructionist and interpretivist position. From a pragmatist point of view, there are dangers in polarised positions and reductive simplification and dualism in argumentation in the public domain (Healey, 2009). As Healey (2009, p. 288) noted, “the great value of the pragmatist tradition lies in its focus on acting in the world and in the methods it suggests for thinking through complex claims as these arise in specific situations”. By rejecting dualism, pragmatism provides a means to blend qualitative and quantitative ontologies and epistemologies in focusing on the research problem and question.

One of the strengths of pragmatism is that it allows researchers to make decisions on their methods and methodology that move practice to theory and theory to practice (Kelemen and Rumens, 2012). In the context of planning, Healy (2009) argues that pragmatist views focus on planning as a practical and social learning activity and, as such, uses the complete range of human capacities and allows for the promotion of critical, transformative systemic framing of work in the public realm. Pragmatism takes the philosophy of knowledge position that knowledge can be useful for practice (Corbin and Strauss, 2008). The use of social media is a practical tool used by companies for engagement. In examining its policies and functions along with interviews from train operator Twitter staff, this research provides practical lessons to be learned from Twitter’s use with the possibility of these practices informing theory. Further, in using the social licence to operate as a theoretical foundation, examining train operator use of Twitter to obtain a SLO provides an opportunity to move theory to practice. The hope is that this will be used in in both future research and practice.

Pragmatism is well suited for a mixed methods approach to research (Creswell and Creswell, 2018). Indeed, pragmatism is usually associated with a mixed methods approach (Creamer, 2018). This research paradigm focuses on the ‘what’ and ‘how’ of the research problem (Creswell and Creswell, 2018). As Creswell and Poth (2018) summarised:

*“The individual using this worldview will use multiple methods of data collection to best answer the research question, will employ multiple sources of data collection, will focus on the practical implications of the research, and will emphasize the importance of conducting research that best addresses the research problem”* (p. 26).

This thesis examines the use of Twitter as a stakeholder engagement tool for train operating companies to earn a social licence to operate. The ‘what’ in this research is to understand and analyse what the goals of these train operating companies are in using Twitter and what is being done to achieve these goals. The ‘how’ in this research is to understand and analyse how train operating company Twitter policies were developed and how they use Twitter in a manner that can achieve the social licence. The nature of this research is viewed as practical as it partially focuses on the functionality of Twitter use and the development and use of policy in doing so, which can be useful in developing future policies and practices. Further, this examination occurs within a specific context of private train operating companies in the United Kingdom and the experiences of train operator staff can further enhance the understanding of what and how Twitter is being used to gain the social licence. In doing so, this thesis examines the reality of using Twitter.

As is often used with a pragmatic paradigm, a mixed-method approach to the thesis was adopted. As suggested previously, having a mixed method approach draws on the strengths of both qualitative and quantitative research while minimising the limitations of both approaches,



as well as providing a more complete understanding of the findings (Creswell and Creswell, 2018). Quantitative data is collected through the tweets of train operating companies, while the qualitative data is collected through semi-structured interviews with train operating staff with responsibilities for managing their Twitter accounts.

As noted in Chapter 1, most of the current research focuses on extraction and analysis of tweets, and studies have yet to be conducted through interviews. Under this mixed-methods approach, quantitative data was collected and analysed in the first phase, with the results from the analysis used to plan and build on the qualitative phase of the research (Creswell and Creswell, 2018). In this thesis, the first phase of the research involved a content analysis of tweets from all open access, concession, and franchise train operating companies. The results of this content analysis were then used in the development of the questions for the semi-structured interviews in phase two of the research. A further detailed methodology for each phase of this research is presented in the following chapters.

## **CHAPTER 3**

# **Trains, Twitter, and the social licence to operate: An analysis of Twitter use by private train operating companies in the United Kingdom**

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## **Abstract**

Social media has become a platform for passenger train operating companies to share information and engage with the public. Twitter, in particular, is used by operators to provide live service updates and engage with their customers. A gap in transportation literature exists regarding the concept of the social licence to operate, where organisations engage with stakeholders to gain legitimacy of their operations. Further, there is a lack of literature on the use of social media by private train operating companies. This study fills a gap in the literature regarding the use of Twitter by private passenger train operating companies and their use of this social media platform for obtaining a social licence to operate. Therefore, the aim of this research is to understand how the functions of Twitter use by private train operating companies in the United Kingdom can serve as a means to obtain a social licence to operate through an analysis of their Twitter accounts, tweets, and policies. The findings indicate 1) that Twitter is primarily a tool for communication and engagement with train operating company customers; 2) as Twitter functions evolved, providing customer service has become a key function; and 3) the key elements of the social licence to operate: legitimacy, credibility, and trust can be obtained through customer engagement using Twitter.

## **Keywords**

Social media, Twitter, Rail transport, Transport planning, Social licence to operate, Customer engagement

## **Highlights**

- Train operator Twitter reflects key components of the social licence to operate.
- Information sharing and customer engagement are key uses of train operator Twitter.
- Twitter policies for train operators reflect the importance of customer engagement.
- Twitter has evolved to take on customer service functions for train operators.

### **3.1 Introduction: The social licence to operate and train operating company Twitter**

Social media, defined as internet applications where “individuals and communities share, create, discuss, and modify user-generated content” (Kietzmann et al., 2011, p. 241), has become an important part of a company’s organisation (Meijer and Thaens, 2010). The use of internet technologies can aid in organisational and policy transparency, organisational and policy sector interactions, and the creation of innovative policies and processes. The use of social media is a means to establish trust and build a reputation (Kietzmann et al., 2011).

This is also true for companies operating in the transport field, where social media can serve as a tool for transport operators to engage with stakeholders. In the last decade, this specific topic is attracting attention of academia as researchers analysed the uses of social media in public transport, such as Bregman’s (2012) report on social media practices of public transport operators; and how information received from social media users can be extracted and analysed for use in transport planning (Gal-Tzur et al., 2014; Grant-Muller et al., 2015; Kuflik et al., 2017).

In some contexts, the use of social media by public transport operators is wider, particularly in the United Kingdom who has pioneered privatisation of railway systems. Privatisation of the UK’s rail network has provided investors and companies with a far more open and competitive market than other European counterparts. More specifically, the rail system in the UK is comprised of four main actors: private train operating companies (TOC) and the government agencies of Network Rail, Department for Transport, and Office of Rail and Road. Funding and management of infrastructure is the responsibility of the government, who awards franchises and licences, and grants TOC access to infrastructure to provide passenger rail

services (Abrams, 2015). Without the need to incorporate infrastructure in their planning, private TOCs are able to focus on serving the needs of customers and are responsible for operating train services, creating timetables, setting unregulated fares, determining service levels, and operating most stations (ibid., 2015).

With the privatisation of rail services, it becomes increasingly important for TOCs to gain or maintain legitimacy from their customers. The concept of the social licence to operate (SLO) occurs when organisations engage their stakeholders to explain or justify its activities, confirm general agreement on those activities, and obtain the 'licence' to operate from their stakeholders (Demuijnck and Festerling, 2016). While TOCs are subject to licensing and regulations from the government, the SLO allows them to gain legitimacy of their activities from their stakeholders. Although stakeholders are a wide range of individuals, groups, and businesses affected by policies and activities of a company, this study focuses on only one of the TOC's stakeholder groups: their customers.

Despite the range of literature on the use of social media by transport operators, a gap exists when examining social media and customer engagement within the context of private passenger TOCs. An examination of the SLO has not been examined in the context of public transport operators nor in the use of social media platforms. Further, Mogaji and Erkan (2019) identified train transportation social media use as an unexplored topic in the literature. In the UK context, there is limited literature on passenger TOC use of Twitter despite it being the only social media platform used by all UK TOCs. A Passenger Focus (2012) study of social media use in England highlights the value of Twitter use by TOCs as it indicated that passengers preferred Twitter as the social media platform to receive information from rail operators.

This study contributes to existing literature by moving beyond basic social media use of public transport operators by examining Twitter as a means to obtain a social licence to operate by private passenger rail operators. In order to address the gap in the research, this chapter provides a comparative case study of Twitter use within the context of TOCs in the UK. An analysis of Twitter accounts, tweets, and policies of all private passenger TOCs in the UK was conducted to understand the functions and extent to which they use Twitter. Using this analysis, the ways in which Twitter may be used as a tool to obtain a social licence to operate was examined.

This chapter is presented in the following four sections: Section 3.2 presents a literature review. Section 3.3 provides the research methodology. The results are presented in Section 3.4, providing a critical analysis of the Twitter accounts of all private passenger rail operators in the UK. Section 3.5 offers a conclusion of the research.

### **3.2 Literature review: The social licence to operate and the functions of Twitter in transport**

The SLO occurs when companies consult stakeholders to explain or justify an organisation's activities, come to an agreement, and obtain the 'licence' to operate from their stakeholders (Demuijnck and FASTERLING, 2016). The SLO is not permanent, however, and is in a state of continual evaluation by stakeholders (Joyce and Thomson, 2000). Despite the legal right to operate, opposition from the community or other stakeholders can have a negative effect on an organisation's operations (Boutillier and Zdzarski, 2017). As a result, the SLO is verified through stakeholder actions to allow companies to continue operating.

Thomson and Boutilier (2011) further break the SLO into three key pieces: legitimacy, credibility, and trust. Legitimacy is considered to be the minimum requirement for a basic SLO, and that organisations must earn credibility and complete trust from stakeholders to achieve higher levels of a SLO (ibid., 2011). The first of these key pieces, legitimacy, can be gained through communication of an organisation's activities and engagement with stakeholders (ibid., 2011). Legitimacy can be explained from a normative perspective as having general approval for the practices of the organisation due to all groups being properly informed of an organisation's activities and the rationale for those activities (Demuijnck and Festerling, 2016). From an empirical approach, an organisation can also be perceived as being legitimate to conform to social norms despite an understanding of the actual actions of the organisation (ibid., 2016). Credibility occurs when organisations demonstrate openness and transparency in providing information and in their decision making (Thomson and Boutilier, 2011). Further, organisations must also keep their promises and be honest about their activities in order to earn and maintain credibility (ibid., 2011). Finally, trust must be established between organisations, communities, and governments in order for a SLO to be earned (Warhurst, 2001). In order to earn trust, organisations must earn a reputation for credibility (Thomson and Boutilier, 2011). Indeed, reputation can be affected by how organisations are perceived by their communities (Gunningham et al., 2004; Joyce and Thomson, 2000).

Criticisms of the SLO relate to the varying interpretations of it, as discussed in a review of SLO literature by Brueckner and Eabrasu (2018). One criticism of the SLO is the lack of a clear definition and scope (ibid., 2018). Questions arise if the SLO applies to specific actions of an organisation or an entire organisation and all its operations (ibid., 2018). There are also problems defining the stakeholders, with a range from local stakeholders to broader society (ibid., 2018). Despite the lack of a clear definition of the SLO, there is an agreement in the

literature that the SLO represents the relationship between an organisation and its stakeholders (ibid., 2018).

The overall discussion on SLO suggests that the three key SLO components of legitimacy, credibility, and trust, are central for SLO analysis. Each of these requires an examination of the stakeholder and how companies engage with them in obtaining the SLO. Indeed, the engagement with stakeholders and building relationships with them is crucial to obtaining the three key SLO components and ultimately earning the social licence to operate. As TOCs in the UK are granted operational licences by the government to operate, there is the risk of losing this licence due to stakeholder resistance. As such, obtaining the SLO is important in legitimising their operations and avoiding resistance to their operations.

Literature on social media has shown that it has become a public engagement tool for transport operators, used to promote their services and solicit customer feedback (Manetti et al., 2016). The use of social media can be used as a means to establish trust and build a reputation (Kietzmann et al., 2011). Social media is seen as a bottom-up platform where information is voluntarily contributed by the public and can help transport agencies determine the needs of its users, allowing customers and operators to communicate directly with one another (Gal-Tzur et al., 2014). Twitter strongly favours these conversations with the exchange of information between users (Kietzmann et al., 2011). The use of social media as a tool for engaging customers in informal ways is one reason transport providers are adopting these applications to open up a new channel of engagement with their customers (Bregman, 2012). Reaching those who are more difficult or who are unwilling to reach out via conventional methods is also possible with social media, giving transport operators an additional engagement tool (Gal-Tzur et al., 2014; Grant-Muller et al., 2015). A study by Manetti et al. (2016) indicated that while



both Facebook and Twitter are used for customer engagement, Facebook is more likely to be used to purposely engage with customers, while Twitter focuses on messages that share public information (Manetti et al., 2016).

Literature on transport use of Twitter, and social media in general, has focused on the uses and benefits. The widely cited Transit Cooperative Research Program (TCRP) study of American and Canadian transport agencies determined five main functions of social media: providing timely updates, sharing public information, public engagement, employee recognition, and entertainment (Bregman, 2012). Using social media to understand public sentiment has also been a focus of literature through the content analysis of public transport user's posts (Casas and Delmelle, 2017; Collins et al., 2013; Schweitzer, 2014). Transport agencies benefit from social media through real-time data collection directly from users at minimal cost, giving agencies the ability to determine needs of specific users, and offering insight into riders' sentiments (Collins et al., 2013; Gal-Tzur et al., 2014). Further, Mogaji and Erkan (2019) found that Twitter served as a means for rail users to communicate with TOCs to share feedback on services. Collecting data directly from users is beneficial as it can be a quick source of data with minimised data acquisition costs (Rashidi et al., 2017). Information shared can be used in the development and implementation of user-led transport services (Gal-Tzur et al., 2014).

A common theme in the literature is the use of Twitter in sharing information. Twitter is the social media platform that is most often used for users to receive updated, current information from transport providers (Mellon and Prosser, 2017; Pender et al., 2014). The sharing of information in a timely manner is especially important for passenger railways, as they operate high-capacity networks that are reliant on technology where failures result in major service disruptions (Pender et al., 2014). A study by Gault et al. (2019) found that customers responded

favourably to automated response systems in social media that created a dialogue, allowing them to message a transport operator to both receive travel information as well as to report service disruptions, creating a system beneficial to both operators and their customers. The ability of users of Twitter to share information in real-time, particularly during service disruptions and other incidents, is an important tool for transport agencies in managing their networks more efficiently and with a holistic view of situations (Rashidi et al., 2017). A study of Chiltern Railways' response to system disruptions indicated that in order to provide acceptable customer service levels, speed and accuracy of information were critical for effective response and recovery (Clegg et al., 2018). Further, Nisar and Prabhakar (2018) found that TOCs that positively frame tweets can mitigate negative impacts of delays and cancellations on a commuter's travel experience.

Transport operators face several barriers when using social media, including allocation of resources to provide and maintain accounts, record retention requirements, security and privacy concerns, staff training, managing criticisms, and development and implementation of social media policies (Bregman, 2012; Manetti et al., 2016). The lack of understanding of the use of technology by staff can also serve as a barrier (Majumdar, 2017; Slotterback, 2011). Questions also remain on whether technology, including social media, can be successfully used as a participation tool (Slotterback, 2011). The provision of resources to implement and maintain technologies is also raised, as these might not be available (Bregman, 2012; Gal-Tzur et al., 2014; Majumdar, 2017; Slotterback, 2011). In an increasingly digital world, transport agencies should embrace modern technology or risk losing useful data. These criticisms, however, may be alleviated through the investment in proper resources and training.

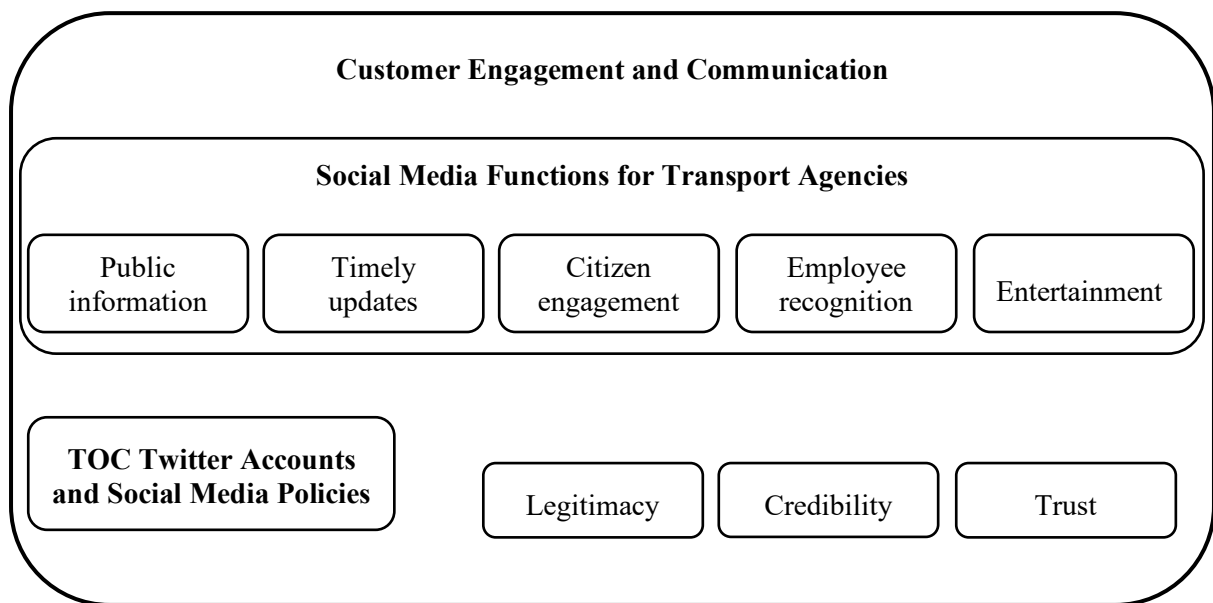
Literature on social media also raises criticisms that these applications do not reflect the general population, favouring a younger, more affluent and educated population (Collins et al., 2013; Efthymiou and Antoniou, 2012; Schweitzer, 2014; Slotterback, 2011). A study of demographics of social media users in the UK, included as part of the 2015 British Election Study, reflects the literature and indicates that social media users were not reflective of the overall British population, particularly in age and level of education, with users being younger and more educated than the overall population (Mellon and Prosser, 2017). Populations with lower income are often under-represented as they may not be able to afford technology or resources to use social media applications (Collins et al., 2013; Slotterback, 2011). Slotterback (2011) indicated that people with lower incomes, those less highly educated, and racial minorities are the least likely to participate in traditional engagement methods where internet-based engagement may create a further disadvantage against participation by these communities. For transport operators in the UK, this presents a potential disadvantage in the use of Twitter as the social media platform does not reach all current and potential customers. Despite this, transport operators can use Twitter as an additional tool for engagement with customers.

### **3.3 Methodology: Analysis of Twitter accounts and policies of train operating companies**

#### *3.3.1 Research framework*

The research framework (Figure 3.1) was adapted from the theories of Bregman's (2012) functional uses of social media by transport operators, and of the social licence to operate (Thomson and Boutilier, 2011). In order to assess the content of TOC Twitter activity, the

functions from the TCRP study of social media were used (Table 3.1) to understand how TOCs use their Twitter accounts through a thematic analysis of their tweets and retweets (Bregman, 2012). The TCRP functions of social media, widely cited in the literature, were chosen for the analysis as they are a tested and proven means to analyse social media within the transport context. The analysis of Twitter use by TOCs was conducted in the context of obtaining the SLO through the three key components: legitimacy, credibility, and trust (Table 3.1).



*Developed by author, drawing from Bregman (2012) and Thomson and Boutilier (2011).*

**Figure 3.1** Research framework: The social licence to operate and train operating company Twitter activities and policies

**Table 3.1** Social media functions for public transport agencies and social licence to operate key components

<b>Social Media Function</b>	<b>Social Media Function Definition</b>
Timely updates	<ul style="list-style-type: none"> <li>• Real-time information and service advisories.</li> </ul>
Public information	<ul style="list-style-type: none"> <li>• General information about services and schemes.</li> </ul>
Citizen engagement	<ul style="list-style-type: none"> <li>• Informal interaction with stakeholders and customers.</li> </ul>
Employee recognition	<ul style="list-style-type: none"> <li>• Employee recognition and recruitment.</li> </ul>
Entertainment	<ul style="list-style-type: none"> <li>• Songs, videos, contests, and other functions used to entertain riders and personalise transport operators.</li> </ul>
Miscellaneous	<ul style="list-style-type: none"> <li>• Functions that do not fit the five categories above.</li> </ul>
<b>SLO Key Component</b>	<b>SLO Key Component Description</b>
Legitimacy	<ul style="list-style-type: none"> <li>• Gained through communication of activities and engagement with stakeholders.</li> <li>• Legitimacy can be gained by listening to stakeholders.</li> </ul>
Credibility	<ul style="list-style-type: none"> <li>• Gained through demonstrating openness and transparency in providing information and decision making.</li> <li>• Companies must be reliable, honest, and keep promises.</li> <li>• Reliability is earned through listening to stakeholders and responding to their feedback.</li> </ul>
Trust	<ul style="list-style-type: none"> <li>• Honesty and reliability are the basic level of trust.</li> <li>• Full trust is created when the community believes companies are operating in the community's best interests.</li> </ul>

*Sources: Bregman (2012) and Thomson and Boutilier (2011).*

Customer engagement and communication are where the three SLO components and Twitter come together. As communication and consultation with stakeholders are key to obtaining the SLO (Thomson and Boutilier, 2011) and Bregman (2012) identified the functions of social media as a tool for transport agencies to engage with customers, Twitter use by TOCs was examined in order to understand if it can be used as a tool for this purpose. The author adapted these two theories, using Bregman's social media categories to analyse Twitter functions and

determine if these functions can serve as a means to obtain the SLO. An examination of TOC Twitter account followers, accounts followed, follower ratio (number of followers a Twitter account has for every account it follows), mentions, and likes and shares of TOC posts by customers served as a measurement of engagement with customers. Finally, an analysis of TOC Twitter policies was conducted in order to determine key themes. Once the analysis of key Twitter policy themes and the functional analysis of Twitter accounts had been completed, these policies and functions were examined in the context of the key SLO components.

### *3.3.2 Participants*

All TOCs in the UK, with the exception of the publicly operated NI Railways, were included in the case study and consisted of private franchise, open access, and concession operators. The Campaign for Better Transport and Department for Transport Rail Executive (Abrams, 2015) explains the differences in private TOCs as (i) franchises where TOCs operate a rail service under contract and licence from the government; (ii) open access operators who operate their own rail services and are regulated by the Office of Rail and Road; and (iii) concessions where services are contracted to private operators and managed by local transport authorities (ibid., 2015). Including these three types of operators allowed for a complete analysis of all private TOCs in the UK.

### *3.3.3 Data collection and analysis*

Twitter data consists of TOC followers, accounts followed, tweets, retweets, replies, mentions, likes, and shares. The data used in this case study analysis was collected from TOC Twitter accounts and social media policies from TOC websites. This data was analysed to determine

tweet reach, levels of activity, and customer engagement through Twitter. A Twitter crawler was used to search TOC Twitter accounts and download data into spreadsheets for each TOC. In order to verify accuracy of the data, every 100 tweets from each TOC account was reviewed on their individual Twitter pages using each tweet's identification number, which resulted in no inaccuracies.

Twitter data for the week of 29 July 2019 (Monday through Sunday) was downloaded for each TOC on 6 August 2019 and included tweets, retweets, replies, and mentions created by TOCs; and likes and shares of TOC posts from Twitter users. This week was specifically chosen as it was representative of a standard working week without holidays or other periods where services may be altered due to changes in demand. Northern's data, however, is an exception to the time frame and was analysed for 31 July through 5 August 2019 (Wednesday through Monday) due to the amount of Northern's tweets reaching Twitter's download limit of the 3,200 most recent tweets and retweets. Despite this, Northern's Twitter activity represents both weekday and weekend days. For operators that had a combination of tweets, retweets, and replies of less than 200 during the week of 29 July, the entire month of July 2019 was analysed to increase those sample sizes for the content analysis. Data on the followers and accounts followed was captured on 12 November 2019. Followers fluctuate on a daily basis and are not required for Twitter activity to occur. As such, followers and accounts followed are a separate analysis from Twitter activity and were captured once the content and policy analyses had been conducted in order to offer the most updated data possible.

The tweets and retweets were analysed based on the five categories indicated in the TCRP study (Bregman, 2012): 'Real-time Information', 'Public Information', 'Citizen Engagement', 'Employee Recognition', and 'Entertainment'. One additional category, 'Miscellaneous', was

created by the author for tweets that do not fall within the TCRP categories. The tweet and retweet content were analysed and hand coded into these six categories by an individual researcher. Hand coding was chosen as it is considered to produce the highest quality of tweet analysis (Murthy, 2017). The definitions from each category (Table 3.1) were used in the categorisation. Tweets were analysed for their content and categorised twice, with the initial and second categorisations conducted independently of one another. A comparison of the two tweet/retweet categorisations was conducted to identify any discrepancies. Where discrepancies occurred, the content was compared to similar tweets and retweets, using their categorisation to ensure the same definition of each category was applied in the analysis. In some instances, multiple categories were applied to tweets and retweets, e.g. a single tweet being categorised as both 'Public Information' and 'Entertainment'. While user tweets are not available in the data set, the content of replies to user tweets were analysed to understand types of interactions and functions being performed by TOCs.

TOC Twitter policies were analysed to determine key policy areas. As categorisation of tweets and key policy areas is subjective, the inclusion of a TOC Twitter policy analysis provides a means of analysing Twitter functions and validating the findings from the Twitter activity. Policies from 18 TOCs were analysed from publicly available policies on their websites as of 9 September 2019. TOC policies analysed include: c2c, 2019; Cross Country, 2019; Grand Central, 2018; Greater Anglia, 2019; Great Northern, 2019; Hull Trains, 2016; London Northwestern Railway, 2019; Merseyrail, 2019; Northern, 2019; ScotRail, 2019; Southeastern, 2019; Southern Railway, 2019; South Western Railway, 2019; Thameslink, 2019; TransPennine Express, 2019; Transport for London, 2019; Transport for Wales Rail, 2019; and West Midlands Railway, 2019.



### 3.4 Results: Train operating company Twitter account, policy analysis and the social licence to operate

#### 3.4.1 Train operating companies' Twitter activity analysis

Engagement with customers was examined through several measurements of interaction with followers (Table 3.2). The number of followers of an account indicates the potential direct reach of each tweet. Interactions between TOCs and Twitter users suggest a level of engagement through operators responding to mentions of the TOC by users, indicating TOCs are proactively reading the tweets of others. Mentions from TOCs also provide an indicator that they are engaging with Twitter users by directly mentioning them in their tweets and show two-way communication between the rail operator and users. These replies and mentions are closely tied together and, in these instances, are similar in number as replies will include a mention of the original tweet's author. Further, when considering the number of Twitter followers for each TOC, the number of replies to customers indicates that a small proportion of those followers are engaging with the TOC. The news accounts for TOCs, however, showed very little customer engagement through replies, with the exception of South Western Railway which only posted one Tweet but replied to 195 tweets of users.

**Table 3.2** Train operating company Twitter account interactions (week of 29 July 2019)

<b>Train Operating Company Twitter Account</b>	<b>Tweets</b>	<b>Retweets</b>	<b>Replies</b>	<b>Mentions</b>	<b>Likes</b>	<b>Shares</b>
<i>Train Operating Company Interactions</i>					<i>Customer Response</i>	
<b>Open Access Operators</b>						
Grand Central	19	0	213	236	65	16
Heathrow Express	33	0	45	51	19	8
Hull Trains	51	0	335	353	325	231

<b>Concession Operators</b>						
London Overground	29	8	63	96	131	142
Merseyrail	122	7	109	153	317	283
Transport for London Rail	34	0	69	88	49	20
<b>Franchise Operator: Single Twitter Accounts</b>						
c2c Rail	39	2	411	444	126	41
Caledonian Sleeper	8	0	20	23	77	31
Chiltern Railways	57	2	262	336	91	66
CrossCountry	27	2	904	1,042	257	192
East Midlands Railway	14	9	450	496	204	196
Gatwick Express	8	2	39	54	28	19
Great Northern	25	0	490	517	122	92
Great Western Railway	3	9	1,481	1,679	605	175
London North Eastern Railway	68	60	1,774	2,094	3,482	1,852
ScotRail	163	55	1,527	2,010	3,868	1,709
Southeastern	86	5	1,398	1,664	300	187
Southern	46	17	705	904	409	389
Stansted Express	182	0	55	55	43	1
Thameslink	38	10	746	858	318	256
Transport for Wales Rail	59	10	772	1,044	278	206
Virgin Trains	7	0	2,120	2,572	902	89
<b>Franchise Operator: Multiple Twitter Accounts</b>						
Greater Anglia News	15	33	16	85	531	507
Greater Anglia (Help)	552	7	1,125	1,206	644	285
London Northwestern Railway News	1	2	0	3	3	13
London Northwestern Railway (Help)	22	5	280	303	66	22
Northern News	1	5	1	2	2	14
Northern (Help)	258	40	2,263	2,644	851	967
TransPennine Express (News)	5	2	0	2	113	20
TransPennine Express (Help)	44	13	597	721	212	203
South Western Railway (News)	1	0	195	274	39	13
South Western Railway (Help)	69	0	1,116	1,401	273	141
West Midlands Railway News	3	4	0	14	8	30
West Midlands Railway (Help)	25	3	271	299	113	59

All figures are actual numbers.

*Source: Twitter.*

TOC Twitter functions primarily consisted of tweets and retweets, when excluding the ‘Miscellaneous’ function, for the sharing of information through ‘Timely Updates’ and ‘Public Information’. Table 3.3 offers an overview of the number of tweets in each functional category. In all but four of the rail operator accounts examined, the sharing of real-time information played the primary role. The franchise news accounts were less likely, however, to share timely updates. As the majority of TOCs use one Twitter account, the tweets and retweets of TOCs with separate accounts were combined in the analysis of these functions. Variability in the ‘Timely Updates’ category should be noted, as updates were largely based on service disruptions. During disruptions, the number of timely updates would increase to reflect this. Given this fluctuation, it is helpful to look at both ‘Timely Updates’ and ‘Public Information’ together. Looking at ‘Public Information’ separately would represent the largest number of tweets across the remaining functions in all but eight of the TOCs. Overall, ‘Citizen Engagement’ was the third highest use of Twitter for TOCs.

In comparing the types of rail operators, there were a few differences in the functions of Twitter. Open access operators differed from other operators as ‘Citizen Engagement’ was their second highest function. Concession and open access operators differed from franchises with limited or no ‘Employee Recognition’ and ‘Entertainment’ tweets. These two categories, however, do not contribute to obtaining a SLO as they are not focused on stakeholder engagement. Despite not sharing timely updates, news accounts still reflected a means to obtain the SLO as public information and citizen engagement were their highest functions.

**Table 3.3** Tweet analysis of train operating companies (week of 29 July 2019, italics indicates figures from the month of July 2019)

<b>Train Operating Company</b>	<b>Tweets &amp; Retweets</b>	<b>Timely Updates</b>	<b>Public Information</b>	<b>Citizen Engagement</b>	<b>Employee Recognition</b>	<b>Entertainment</b>	<b>Miscellaneous</b>
<b>Open Access Operators</b>							
Grand Central	19	<b>26.3%</b> (5)	<b>5.3%</b> (1)	<b>42.1%</b> (8)	<b>0.0%</b> (0)	<b>0.0%</b> (0)	<b>68.4%</b> (13)
Heathrow Express	33	<b>93.9%</b> (31)	<b>3.0%</b> (1)	<b>45.5%</b> (15)	<b>0.0%</b> (0)	<b>0.0%</b> (0)	<b>72.7%</b> (24)
	<i>126</i>	<i>95.2%</i> (120)	<i>4.8%</i> (6)	<i>66.7%</i> (84)	<i>0.0%</i> (0)	<i>3.2%</i> (4)	<i>73.8%</i> (93)
Hull Trains	51	<b>90.2%</b> (46)	<b>3.9%</b> (2)	<b>5.9%</b> (3)	<b>2.0%</b> (1)	<b>0.0%</b> (0)	<b>2.0%</b> (1)
<b>Concession Operators</b>							
London Overground	37	<b>91.9%</b> (34)	<b>24.3%</b> (9)	<b>10.8%</b> (4)	<b>2.7%</b> (1)	<b>2.7%</b> (1)	<b>16.2%</b> (6)
	<i>265</i>	<i>97.4%</i> (258)	<i>1.5%</i> (4)	<i>6.8%</i> (18)	<i>0.4%</i> (1)	<i>1.1%</i> (3)	<i>6.8%</i> (18)
Merseyrail	129	<b>62.0%</b> (80)	<b>34.1%</b> (44)	<b>7.0%</b> (9)	<b>0.0%</b> (0)	<b>1.6%</b> (2)	<b>10.9%</b> (14)
Transport for London Rail	34	<b>100.0%</b> (34)	<b>5.9%</b> (2)	<b>0.0%</b> (0)	<b>0.0%</b> (0)	<b>0.0%</b> (0)	<b>29.4%</b> (10)
	<i>259</i>	<i>99.2%</i> (257)	<i>0.0%</i> (0)	<i>0.8%</i> (2)	<i>0.0%</i> (0)	<i>0.4%</i> (1)	<i>13.9%</i> (36)
<b>Franchise Operators: Single Twitter Accounts</b>							
c2c Rail	41	<b>92.7%</b> (38)	<b>4.6%</b> (2)	<b>17.1%</b> (7)	<b>2.4%</b> (1)	<b>0.0%</b> (0)	<b>17.1%</b> (7)
Caledonian Sleeper	9	<b>88.6%</b> (8)	<b>11.1%</b> (1)	<b>0.0%</b> (0)	<b>0.0%</b> (0)	<b>11.1%</b> (1)	<b>0.0%</b> (0)
	<i>55</i>	<i>69.1%</i> (38)	<i>30.9%</i> (17)	<i>29.1%</i> (16)	<i>3.6%</i> (2)	<i>1.8%</i> (1)	<i>0.0%</i> (0)
Chiltern Railways	59	<b>64.0%</b> (38)	<b>36.0%</b> (21)	<b>7.0%</b> (4)	<b>0.0%</b> (0)	<b>2.0%</b> (1)	<b>17.0%</b> (10)
CrossCountry	29	<b>79.3%</b> (23)	<b>13.8%</b> (4)	<b>3.4%</b> (1)	<b>10.3%</b> (3)	<b>0.0%</b> (0)	<b>0.0%</b> (0)
East Midlands Railway	23	<b>69.6%</b> (16)	<b>1.5%</b> (1)	<b>21.7%</b> (5)	<b>4.3%</b> (1)	<b>8.7%</b> (2)	<b>4.3%</b> (1)

Gatwick Express	10	<b>70.0%</b> (7)	<b>60.0%</b> (6)	<b>30.0%</b> (3)	<b>0.0%</b> (0)	<b>10.0%</b> (1)	<b>10.0%</b> (1)
	51	<b>82.4%</b> (42)	<b>27.5%</b> (14)	<b>5.9%</b> (3)	<b>3.9%</b> (2)	<b>13.7%</b> (7)	<b>3.9%</b> (2)
Great Northern	25	<b>84.0%</b> (21)	<b>8.0%</b> (2)	<b>8.0%</b> (2)	<b>0.0%</b> (0)	<b>4.0%</b> (1)	<b>4.0%</b> (1)
Great Western Railway	12	<b>9.1%</b> (1)	<b>18.2%</b> (2)	<b>18.2%</b> (2)	<b>0.0%</b> (0)	<b>45.5%</b> (5)	<b>45.5%</b> (5)
London North Eastern Railway	128	<b>41.4%</b> (53)	<b>57.0%</b> (73)	<b>49.2%</b> (63)	<b>4.7%</b> (6)	<b>18.0%</b> (23)	<b>4.7%</b> (6)
ScotRail	218	<b>38.1%</b> (83)	<b>55.5%</b> (121)	<b>21.6%</b> (47)	<b>0.9%</b> (2)	<b>25.2%</b> (55)	<b>10.1%</b> (22)
Southeastern	85	<b>98.8%</b> (84)	<b>20.0%</b> (17)	<b>1.2%</b> (1)	<b>0.0%</b> (0)	<b>2.4%</b> (2)	<b>0.0%</b> (0)
Southern	62	<b>80.6%</b> (50)	<b>62.9%</b> (39)	<b>24.2%</b> (15)	<b>4.8%</b> (3)	<b>16.1%</b> (10)	<b>0.0%</b> (0)
Stansted Express	182	<b>89.6%</b> (163)	<b>0.0%</b> (0)	<b>1.1%</b> (2)	<b>0.0%</b> (0)	<b>0.0%</b> (0)	<b>10.4%</b> (19)
Thameslink	48	<b>81.3%</b> (39)	<b>50.0%</b> (24)	<b>18.8%</b> (9)	<b>0.0%</b> (0)	<b>12.5%</b> (6)	<b>2.1%</b> (1)
Transport for Wales Rail	50	<b>27.5%</b> (19)	<b>37.7%</b> (26)	<b>17.4%</b> (12)	<b>1.4%</b> (1)	<b>13.0%</b> (9)	<b>20.3%</b> (14)
Virgin Trains	6	<b>28.6%</b> (2)	<b>0.0%</b> (0)	<b>28.6%</b> (2)	<b>14.3%</b> (1)	<b>57.1%</b> (4)	<b>0.0%</b> (0)

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**Franchise Operators: Multiple Twitter Accounts**

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Greater Anglia News	48	<b>0.0%</b> (0)	<b>100.0%</b> (48)	<b>70.8%</b> (34)	<b>2.1%</b> (1)	<b>22.9%</b> (11)	<b>0.0%</b> (0)
	213	<b>12.7%</b> (27)	<b>93.0%</b> (198)	<b>42.7%</b> (91)	<b>7.0%</b> (15)	<b>27.7%</b> (59)	<b>1.4%</b> (3)
Greater Anglia (Help)	527	<b>96.8%</b> (510)	<b>1.3%</b> (7)	<b>0.4%</b> (2)	<b>0.0%</b> (0)	<b>0.6%</b> (3)	<b>4.2%</b> (22)
London Northwestern Railway News	3	<b>0.0%</b> (0)	<b>100.0%</b> (3)	<b>100.0%</b> (3)	<b>66.7%</b> (2)	<b>0.0%</b> (0)	<b>0.0%</b> (0)
	30	<b>26.7%</b> (8)	<b>76.7%</b> (23)	<b>53.3%</b> (16)	<b>20.0%</b> (6)	<b>10.0%</b> (3)	<b>0.0%</b> (0)
London Northwestern Railway (Help)	23	<b>78.3%</b> (18)	<b>17.4%</b> (4)	<b>21.7%</b> (5)	<b>21.7%</b> (5)	<b>4.3%</b> (1)	<b>0.0%</b> (0)
Northern News	6	<b>16.7%</b> (1)	<b>83.3%</b> (5)	<b>0.0%</b> (0)	<b>16.7%</b> (1)	<b>83.3%</b> (5)	<b>0.0%</b> (0)
	11	<b>16.7%</b> (1)	<b>83.3%</b> (5)	<b>0.0%</b> (0)	<b>16.7%</b> (1)	<b>83.3%</b> (5)	<b>0.0%</b> (0)

Northern (Help)	298	<b>55.0%</b> (164)	<b>33.6%</b> (100)	<b>11.4%</b> (34)	<b>1.0%</b> (3)	<b>21.8%</b> (65)	<b>10.4%</b> (31)
South Western Railway (News)	1	<b>0.0%</b> (0)	<b>0.0%</b> (0)	<b>100.0 %</b> (1)	<b>0.0%</b> (0)	<b>100.0%</b> (1)	<b>0.0%</b> (0)
	29	<b>6.9%</b> (2)	<b>86.2%</b> (25)	<b>44.8%</b> (13)	<b>10.3%</b> (3)	<b>24.1%</b> (7)	<b>0.0%</b> (0)
South Western Railway (Help)	69	<b>98.6%</b> (68)	<b>18.8%</b> (13)	<b>1.4%</b> (1)	<b>0.0%</b> (0)	<b>1.4%</b> (1)	<b>0.0%</b> (0)
TransPennine Express (News)	7	<b>0.0%</b> (0)	<b>85.7%</b> (6)	<b>57.1%</b> (4)	<b>14.3%</b> (1)	<b>57.1%</b> (4)	<b>0.0%</b> (0)
	45	<b>4.4%</b> (2)	<b>97.8%</b> (44)	<b>46.7%</b> (21)	<b>15.6%</b> (7)	<b>4.4%</b> (2)	<b>0.0%</b> (0)
TransPennine Express (Help)	47	<b>95.7%</b> (45)	<b>2.1%</b> (1)	<b>0.0%</b> (0)	<b>0.0%</b> (0)	<b>4.3%</b> (2)	<b>2.1%</b> (1)
West Midlands Railway News	9	<b>14.3%</b> (1)	<b>85.7%</b> (6)	<b>57.1%</b> (4)	<b>14.3%</b> (1)	<b>0.0%</b> (0)	<b>0.0%</b> (0)
	30	<b>16.7%</b> (5)	<b>86.7%</b> (26)	<b>40.0%</b> (12)	<b>6.7%</b> (2)	<b>0.0%</b> (0)	<b>0.0%</b> (0)
West Midlands Railway (Help)	22	<b>86.4%</b> (19)	<b>13.6%</b> (3)	<b>18.2%</b> (4)	<b>9.1%</b> (2)	<b>0.0%</b> (0)	<b>0.0%</b> (0)

Figures listed in parenthesis are actual numbers

*Source: Twitter.*

Analysing the tweets and retweets of the TOCs also provides an indication of the functions from Bregman’s (2012) categories. While nearly all tweets and retweets fit into one of these functions, a number of them contained content that did not reflect the functions. In response to this, an additional category, ‘Miscellaneous’, was used to note these tweets. These ‘Miscellaneous’ tweets consisted of staff publicly signing in and out, as well as mentions of lost and found items. Tweets and retweets also could be considered a part of multiple categories, which is reflected in the analysis. Examples of tweets included in these categories are shown in Table 3.4.

**Table 3.4** Tweet function examples

<p><b>Timely Updates</b></p> <hr/> <p>@CalSleeper (Caledonian Sleeper): 30 July 2019  <i>London Euston to Glasgow/Edinburgh: Boarding will be delayed by approximately 30 minutes due to the train being late leaving Wembley depot. The train is on its way to London Euston now, and should depart London Euston on time. We apologise to guests for any inconvenience caused.</i></p>
<p><b>Public Information</b></p> <hr/> <p>@Iner (London North Eastern Railway): 31 July 2019  <i>Let’s eat and avocuddle – it’s officially #NationalAvocadoDay [avocado emoji] Have you tried our delicious @HolyMolyDips breakfast avocado on sourdough muffin with fresh sliced tomato and a free range egg yet? You can check out our first class menu here: [link to first class menus website] [image of breakfast food]</i></p>
<p><b>Citizen Engagement</b></p> <hr/> <p>@ScotRail (ScotRail): 29 July 2019  <i>The votes are in! Our inter-city high-speed train's engine is going to be... *drumroll please* PINK! Thanks to everyone who voted, the engine will be fitted later in the year and we'll have plenty of pictures when it arrives! [link to original survey] [photo of pink train engine]</i></p>
<p><b>Employee Recognition</b></p> <hr/> <p>@GC_Rail (Grand Central): 1 July 2019  <i>VACANCY: Roster Assistant We have an exciting opportunity to join our Rostering Department to help with the day to day operational running of our trains. With fantastic employee benefits including free train travel, this is the perfect time to join. Visit: [link to job application] [image of train with heading “Careers at Grand Central”]</i></p>

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## Entertainment

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@northernassist (Northern): 5 August 2019

*This week, ^LH has put together a game of #SummerScrabble! Can you join on a summer-related word using some of the letters below? [finger pointing down emoji] HINT: You can swim here.*

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## Miscellaneous

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@GWRHelp (Great Western Railway): 30 July 2019

*A very important microwaveable soup container has been lost! [sad emoji] The very kind Ticket Examiners at Hanborough will hold onto it for the week [thumbs up emoji] [picture of container]*

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*Source: Caledonian Sleeper (2019); Grand Central (2019); Great Western Railway (2019); London North Eastern Railway (2019); Northern (2019a); ScotRail (2019a).*

### 3.4.2 Train operating companies' Twitter policies

The majority of TOCs in the UK publish their Twitter policies on their websites. These policies are often grouped with other social media policies, however the emphasis of these policies is Twitter. Within these Twitter policies, four main policy areas emerged: Twitter functions, customer engagement, customer etiquette, and responses to customers (Table 3.5). These policies offer a transparent guide for customers and may help manage their expectations regarding how TOCs use Twitter.

**Table 3.5** Train operating companies' Twitter policy overview

Twitter policy area	Key points
Twitter Functions	<ul style="list-style-type: none"><li>• Differentiate Twitter functions from other social media.</li><li>• Hours Twitter feed is monitored.</li><li>• Types of information shared and services provided on Twitter.</li></ul>
Customer Engagement	<ul style="list-style-type: none"><li>• Types of customer service functions provided.</li><li>• Encouraging customers to provide feedback.</li><li>• Formal complaints not accepted via Twitter.</li></ul>
Customer Etiquette	<ul style="list-style-type: none"><li>• Ways customers can engage in conversations.</li><li>• Guidelines for respectful dialogue.</li><li>• Response to abusive or inappropriate comments.</li></ul>
Responses to Customers	<ul style="list-style-type: none"><li>• What is done with feedback shared by customers.</li><li>• Limited or no responses to customers during service disruptions.</li><li>• Ability and timeframe of responding to all customers.</li></ul>



### 3.4.3 *Legitimacy*

Legitimacy can be gained by companies through engaging with and listening to stakeholders and communicating their activities to them (Thomson and Boutilier, 2011). When analysing the tweets and retweets of TOCs, the most prominent categories of ‘Citizen Engagement’, ‘Timely Updates’, and ‘Public Information’ lend themselves to obtaining legitimacy. Engaging with customers is represented in ‘Citizen Engagement’, which is the most prominent use of Twitter and is the second highest category of TOC-initiated tweets after information sharing. Stakeholder engagement was evident in the use of Twitter to inform customers of their functions, as seen through the sharing of public information such as service changes or the creation of separate Twitter news accounts that focus on the activities of TOCs. While ‘Timely Updates’ can share information on activities, ‘Public Information’ tends to focus on the company’s activities rather than service updates. Several TOCs have created separate news accounts, providing a dedicated space for communication of a TOC’s activities.

An examination of Twitter accounts also suggests legitimacy is being earned through Twitter. The high number of customers sharing and liking TOC tweets suggests legitimate communication and engagement with customers. The low number of customers tweeting to TOCs in comparison to the large number of followers also suggests there is less opposition to the TOC's operations. There is little evidence in challenges to TOCs via Twitter, which may represent less pushback from customers, suggesting a constructive engagement between the TOC and their customers and gaining legitimacy of their operations.

Gaining legitimacy is also reflected in TOC Twitter policies. The policy area, ‘Twitter Functions’, defines the use of the social media platform by the TOC. This area describes the functional differences between Twitter and other social media platforms such as Facebook,

Instagram, or LinkedIn. For example, South Western Railway's (2019) social media guide differentiates between the social media platforms, as well as the managing department for each. The policy area sets out the hours the account is staffed and monitored, as well as the information shared, and services provided through Twitter. The importance of sharing information with customers is the prominent function of TOC Twitter as indicated in policies. In clearly defining these functions, TOCs may be able to manage customer expectations and define the context in which they can engage with the TOC through Twitter. This policy area's focus on sharing information and customer engagement are the two main pieces necessary to gain legitimacy.

#### *3.4.4 Credibility*

Companies need to be reliable, honest, and demonstrate transparency in providing information and decision making in order to gain credibility (Thomson and Boutilier, 2011). This is especially evident in the 'Timely Updates' category, where the sharing of real-time updates for service disruptions may reflect negatively on TOCs. TOC tweets, however, often disclose the cause of the delays, which may help mitigate negative reactions to the delay. Also important is that information is shared in a timely matter in order for customers to plan their journeys. Service delays risk portraying TOC services as unreliable, which may threaten the credibility of TOCs. Despite the potential loss of credibility in providing services, there is opportunity to be seen as reliable through the consistent provision of updates in a timely manner. Further, acknowledging service delays and their causes can be seen as being transparent and honest about the causes of delays, efforts being taken to correct delays, and accepting responsibility for the effects on customers.

The sharing of information in the 'Public Information' category also provides TOCs an opportunity to share schemes and long-term plans to customers. This sharing of information can provide openness and transparency in a company's activities. Given the high volume of 'Timely Updates', it is possible for 'Public Information' tweets to be lost in the large number of tweets. While most TOCs use one Twitter account to share information, a few TOCs separate news and assistance functions into two separate Twitter accounts. Providing separate accounts gives these TOCs the ability to share information without it becoming overlooked in numerous real-time updates. The danger in this approach, however, is that having multiple accounts may confuse customers looking for information. Despite this, providing separate accounts can assist in providing transparency in their activities. This openness and transparency assists in gaining credibility (Thomson and Boutilier, 2011).

In order to gain credibility, companies must earn reliability through listening and responding to stakeholders. (Thomson and Boutilier, 2011). This engagement with customers was reflected in all TOC Twitter accounts. 'Citizen Engagement' reflected tweets that invited their followers to interact with them. This could take the form of proactively inviting customers to ask questions, providing customer surveys, by responding to tweets or retweeting, other forms of inviting the public to engage with them, or acknowledging the tweets of others. While this category was analysed through the tweets and retweets of the Twitter accounts, any reply could be considered a form of citizen engagement. Considering the aggregate of all of TOC tweets, retweets, and replies, 'Citizen Engagement' would surpass all other Twitter functions. Similar engagement by customers would further add to this category as engagement is derived from both TOCs and customers. While the sharing of information is prominent in the TOC tweets and retweets, it is the engagement with customers that forms the primary function of Twitter as observed through this Twitter data.

The replies to other Twitter users give an indication of additional functions of Twitter. In keeping with the sharing of information, many replies shared real-time service information or assistance with journeys. TOCs also responded to messages that were not enquiries, such as tweets mentioning a train journey or photos of trains. An additional function of customer service has also been observed in the replies. These customer service functions involved replies regarding information on seat reservations or compensation for delayed services. As the nature of social media constantly evolves, a new category of 'Customer Service', which was not included in Bregman's (2012) study, may be incorporated to encompass past and current functions. Further, 'Miscellaneous' functions reflect aspects of customer service and could be included in the 'Customer Service' function to create a more wholistic view of social media functions and customer engagement.

TOC Twitter policies reflected Twitter as a form to not only listen to customer feedback, but to respond to feedback. Twitter lends itself to social media's bottom-up approach to engagement (Gal-Tzur et al., 2014), and this was reflected in the Twitter 'Customer Engagement' policy area. TOCs specifically focused on how Twitter was used as a customer service function, encouraging feedback from customers, and clarifying processes for formal complaints. The policies suggest that most of the engagement comes in the form of customer services, with operators responding to enquiries on service information. While formal complaints are not logged through Twitter, TOCs clarified that any feedback offered, positive or negative, would be shared appropriately and acted upon. Despite the welcoming of feedback, the venting of customer frustrations, presence of sarcasm, and lack of context in customer tweets can present a challenge to TOCs and make analysing sentiment difficult. This may explain why TOCs clearly stated that formal complaints are not accepted via Twitter, as accurately assessing the intended meaning behind these tweets could be difficult. These rules

suggest there is a desire for TOCs to engage in a genuine and constructive dialogue with their customers.

Earning credibility was also reflected in the ‘Customer Etiquette’ and ‘Responses to Customers’ policy areas. Customer etiquette, how TOCs expect customers to behave and engage on Twitter, is related to customer engagement and received specific attention in each TOC Twitter policy. All TOCs refused to respond to abusive comments and, in serious cases, would block accounts they deemed excessively breaching this policy. TOC Twitter policies further clarified which enquiries they would provide responses to, as well as response times to customers. Further, each rail operator set its own parameters for responding to questions through tweets and direct messages. These policies vary, however, in terms of how they responded to each customer tweet and message, such as answering questions that are most relevant or useful to other customers, or how TOCs responded to customers during disruptions. These policies demonstrate openness and transparency in providing information and communicating decisions on their use of Twitter, as well as indicating their commitment to responding to customers rather than simply listening to them. This is especially important as they are key actions to gaining credibility (Thomson and Boutilier, 2011).

#### *3.4.5 Trust*

Trust is closely related to credibility as they both involve honesty and reliability, which form the basic level of trust (Thomson and Boutilier, 2011). These pieces are factors in how TOCs gain credibility, and ultimately earn customers’ trust if successful. It is difficult, however, to discern from Twitter activity if customers believe that TOCs are acting with their best intentions. Despite this difficulty, examining the number of TOC Twitter followers and the

number of accounts followed by TOCs (Table 3.6) may suggest a level of trust in TOCs. Examining the follower ratio suggests that followers were not simply following an operator's Twitter account out of courtesy for being followed by the train operator, which may indicate genuine interest in the TOC and the content of its tweets. Followers may have followed a TOC as they view the Twitter account as a source of reliable information, which forms part of the basic level of trust. The low levels of customers tweeting to TOCs in comparison to the number of followers, as discussed previously as a form of measuring legitimacy, may also represent not just the legitimacy of their operations, but could indicate that followers trust the messages shared on Twitter by TOCs.

**Table 3.6** Train operating company Twitter follower ratio

<b>Train Operating Company Twitter Account</b>	<b>TOC Followers (Thousands)</b>	<b>TOC Following (Actual)</b>	<b>Followers Ratio</b>
<i>Train Operating Company Interactions</i>			
<b>Open Access Operators</b>			
Grand Central	14.2	155	92
Heathrow Express	17	1,869	9
Hull Trains	9.8	877	11
<b>Concession Operators</b>			
London Overground	472.3	1	472,300
Merseyrail	53.6	910	59
Transport for London Rail	77.9	1	77,900
<b>Franchise Operator: Single Twitter Accounts</b>			
c2c Rail	82.8	221	375
Caledonian Sleeper	15.2	433	35
Chiltern Railways	94.5	2,197	43
CrossCountry	92.3	354	261
East Midlands Railway	67.2	99	679
Gatwick Express	67.6	766	88
Great Northern	53.3	150	355
Great Western Railway	779.4	393	1,983
London North Eastern Railway	177.6	56	3,171
ScotRail	221.6	2,033	109
Southeastern	235.2	180	1,307
Southern	193.9	1,923	101
Stansted Express	10.1	183	55
Thameslink	81.2	261	311
Transport for Wales Rail	15.7	142	111

Virgin Trains	466	7,120	65
<b>Franchise Operator: Multiple Twitter Accounts</b>			
Greater Anglia News	3.7	342	11
Greater Anglia (Help)	113.4	142	799
London Northwestern Railway News	.6	137	4
London Northwestern Railway (Help)	18.9	303	62
Northern News	2.8	374	7
Northern (Help)	111.8	5,567	20
TransPennine Express (News)	58.5	1,595	37
TransPennine Express (Help)	21.4	268	80
South Western Railway (News)	31.6	180	176
South Western Railway (Help)	432.3	94	4,599
West Midlands Railway News	.7	131	5
West Midlands Railway (Help)	23.6	297	79

Followers, following, and follower ratios were captured on 12 November 2019.  
All figures are actual numbers except 'Followers' which is indicated in thousands.

*Source: Twitter.*

### **3.5 Conclusions: Contributions, policy recommendations, and future research from the analysis of train operating company Twitter usage and policies**

This study contributes to the existing literature by providing an analysis of Twitter as a means for private train operating companies to obtain a social licence to operate. Examination of the Twitter accounts, activity, and policies of private TOCs in the UK concluded that Twitter can be used as a tool to gain a SLO as the key components of legitimacy, credibility, and trust were evident in the analysis. The findings indicated that legitimacy and credibility are reflected in the TOC Twitter activities and policies as these are focused on informing, listening to, and responding to customers. Trust is based on legitimacy and credibility, however, it is difficult to determine if trust is genuinely earned by customers. Despite this, the lack of challenges by customers and the interactions suggest that TOCs have earned legitimacy and credibility, which may also indicate a level of trust in the TOC.

Bregman's (2012) classifications of social media functions were a useful tool in categorising the tweets and retweets. Although social media use is dynamic and the literature advances quickly, Bregman's study still proves relevant as the Twitter activity largely falls within these categories. Despite this, an additional Twitter function, 'Customer Service', was prevalent in this study. This may reflect the advancement of social media use, with TOCs moving away from simply providing information to engaging customers in a genuine two-way dialogue. This is particularly important for moving beyond legitimacy into gaining credibility. Bregman's functions along with the 'Customer Service' category discovered in this study offer an updated classification of social media functions that may be useful in future studies.

Tweets and Twitter policies provide organisational lessons for TOCs. Having a presence on Twitter can be an important part of stakeholder engagement. The prominence of real-time information and customer services suggests Twitter is positioned to provide these functions for TOCs and their stakeholders. Operators should be prepared to engage with their customers as TOCs have moved beyond simply sharing information to responding and providing new functions such as customer services. The results of the functional analysis of tweets reflected the findings of Bregman's (2012) study of public transport agencies' social media functions in the United States and Canada. As the findings were consistent in private, public, and international contexts, this study may be applicable in multiple geographic and institutional settings. Future research should include a comparison of UK TOC policies with those of international TOCs.

A potential issue to note is that sharing information through real-time updates and public information may create challenging situations. Information shared is often the result of events out of the TOC's control, particularly when infrastructure related. In these instances, it is the



TOC's responsibility to communicate these delays to customers despite their lack of ability to remedy these delays. Planning responsibilities are also a challenge for TOCs as these are the responsibility of government agencies. In these situations, customers may not make the distinction between the responsibility of TOCs and other transport agencies. Further complicating this is social media platforms maintained by these agencies. In some instances, TOCs retweet the relevant authority's tweets, but this does not appear to be standardised across all TOCs. In order to clarify roles, better coordination on sharing of information on Twitter would be needed.

A qualitative research approach may broaden the understanding of social media use by TOCs. Interviews with TOC social media staff should be conducted to understand resources allocated to social media and to understand the goals for its use. These interviews may also offer an in-depth analysis of dialogue between customers and TOCs. Questions also remain on how TOCs develop social media policies. Further qualitative research may provide a deeper understanding of the decisions rail operators are making to manage their communications, giving insight into how they value the use of these platforms, and to understand if social media platforms are being used by franchise rail operators as a means to fulfil their franchise agreements. Examining these additional areas and contexts would assist in creating a broader picture of social media use and development of policies and strategies for customer engagement by TOCs.

Limitations should be acknowledged. One limitation of this study was the lack of tweets by TOC customers, with only the replies from TOCs available. Despite this, the tweets analysed in this study were felt to be representative of TOC Twitter activity. Although this study focused on the content generated by TOCs, having customer replies would add an additional layer to the analysis of TOC tweets. In order to address this, future research should analyse the customer

tweets to better understand the responses given by TOCs and the dialogue occurring between the two. Finally, only Twitter was examined in this study and additional research should explore the similarities and differences between various TOC social media platforms.

## **CHAPTER 4**

# **Social licence to operate, regulations, and policies for Twitter use by franchise and open access train operating companies in the United Kingdom**

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An abridged version of this chapter was presented as: Howard, J.M. (2020). Twitter, trains and regulations. Presented at the European Transport Conference online, 9-11 September.

## **Abstract**

This chapter examines regulatory requirements and policies for Twitter use by franchise and open access train operating companies in the United Kingdom. This study, in particular, seeks to examine how the presence or lack of regulations affect the use of Twitter by train operating companies and the extent to which the social licence to operate is reflected in the actions of the operators. The study provides answers to these questions through a detailed analysis of train operating company regulations, government guidance, licensing agreements, and in-depth interviews with 23 train operator Twitter staff. The chapter discusses how operators have developed their own policies and organisational structures for their use of Twitter in the context of a lack of industry standards, limited legislative requirements, and inadequate regulatory guidance for the use of Twitter by rail operators. The study also shows ways in which franchise agreements are being used to include committed obligations for Twitter that rail operators have agreed to fulfil in the awarding of the franchise by the government. The study found that the ways in which Twitter has been organised and used reflect the social licence to operate given Twitter has been designed to be a tool to engage with customers and build credibility and trust with them. The study finally discusses policy recommendations as a means to form a basic level of standards that operators can adopt in their use of Twitter.

## **Key words**

Railway, Railway regulations, Social licence to operate, Twitter, Social media

## **Highlights**

- Social media use by private train operating companies in the United Kingdom are not affected by railway regulations.
- British train operating companies have adopted policies to self-regulate their Twitter usage in the absence of regulations.

- British franchise train operating companies place committed obligations for Twitter in franchise agreements as a means to establish key performance indicators and accountability.
- British open access operators self-regulate their Twitter accounts without the need to make committed obligations to operate their services.

#### **4.1 Introduction: Railway regulations and train operating company Twitter**

Train operating companies (TOC) in the United Kingdom need to keep current and build relationships with target consumers and clients. Social media creates new and unprecedented opportunities for TOCs to expand their existing marketing strategies to improve customer relationships, increase their sales, and improve their reputation. The role of social media in TOC growth is important as social media helps to spread information exponentially very quickly at a relatively affordable cost (Bauman, 2020). However, TOCs are struggling with how to utilise the potential of social media in an efficient way. As TOCs attempt usage of social media, practices can become entrenched in traditional regulatory frameworks. Social media usage by TOCs tends to touch upon a broad range of regulatory elements, some of which are legal in character and others embedded in the technologies themselves as well as practices developed in connection with the technologies (Klang and Nolin, 2011). Problems might also arise because of the lack of industry standards, limited legislative requirements, and inadequate regulatory guidance for the use of Twitter by rail operators.

When legislation was enacted to privatise the railways in the United Kingdom, Twitter had not yet been established, having come into existence in 2006. The focus of railway franchising in the United Kingdom was established to maximise social benefits, reduce costs and increase revenue through private railway operations (Preston, 2008), and was a means to achieve better value for money for the government (Funnell and Jupe, 2017). The inclusion of open access operators created additional competition in the markets (Preston, 2018). With the focus on financial benefits, and legislation being enacted before Twitter was established, social media accounts for TOCs in the United Kingdom have not been subject to regulations set out in railway privatisation legislation. Railway regulatory and licensing responsibilities following

privatisation have fallen on the Office of Rail and Road (ORR) (Preston and Robins, 2013). A lack of regulations is evident in the social media industry, with Helberger et al. (2017) suggesting that social media responsibility and regulation should be shared between relevant stakeholders such as governments, users, and social media platforms. The lack of legislation forced the railway industry and its stakeholders to self-regulate their use of social media, as indicated by TOCs having developed their own social media policies (Howard, 2020). What is not clear is how TOCs have reacted to the lack of regulations, resulting in the emergence of research questions.

Research has not been conducted on the effects of a lack of regulation on UK TOCs', or the transportation industry's, use of social media. Currently, research on Twitter's use by TOCs focuses on message framing (Nisar and Prabhakar, 2018), content analysis of passenger sentiments (Mogaji and Erkan, 2019), and functions and policies of TOC Twitter (Howard, 2020). It is then fundamental to cover this gap and understand how TOCs have self-regulated and to identify potential opportunities and policies to help TOCs to develop their companies' dynamic capabilities.

This study offers new insights into how TOC Twitter is regulated, filling a gap in the literature regarding the regulation of social media in the transport industry. As better detailed in the methodology section, the study proposes an analysis of regulations, government guidance, licensing agreements, and interviews with Twitter staff at TOCs. The study, in details, examines TOC Twitter regulations within the context of the social licence to operate (SLO). The SLO provides an understanding into how companies engage with stakeholders in order to gain legitimacy, credibility, and trust from those stakeholders and obtain the informal social licence to operate (Thomson and Boutilier, 2011). Howard (2020) indicated that Twitter use

by TOCs can be used to earn a social licence. If social media use is self-regulated by stakeholders, then the SLO could provide a means to regulate the use of TOC Twitter by providing an unofficial operational licence.

This chapter is presented in the following five sections. Section 4.2 provides a literature review of social media policies and regulations and its use by governments. The methodology including semi-structured interviews and analysis of regulatory documents is presented in Section 4.3. Section 4.4 reports the findings from the analysis. Section 4.5 provides a discussion of the findings. Finally, Section 4.6 offers a conclusion and implications for policy and future research.

#### **4.2 Literature review: Social media and government agencies, platform regulations, and policy**

While passenger rail services in the United Kingdom are privatised, they still run designated services set by the government or on government-owned infrastructure. Funnell and Jupe (2017) explain that franchising is when the owner of an asset or services allows others to market those assets within a specific geographical area and for a set amount of time. In the UK, the government acts as the owner of the railway infrastructure and services and the train operating companies are the franchisee and, as such, are required to abide by the regulations established by the government (ibid., 2017). Further, open access operators are contractually allowed to run services on government owned infrastructure, requiring those operators to also abide by government regulations (Headicar, 2009). Without the responsibility of maintaining railway infrastructure, franchises and open access operators are then able to focus on their services and



passengers. For TOCs, this means marketing their services to and engaging with current and potential customers.

With the railways being owned and regulated by the government and, given the lack of literature on social media regulations by transport operators, it may be useful to examine government use of social media and any policy implications. The adoption of social media by governments was based on best practices from peers, public, and private sectors as well as demand based on citizens using social media (Mergel, 2013). How governments are using social media varies, with various organisational factors influencing their use of social media (Oliveira and Welch, 2013). An analysis of English local authorities indicated that social media was largely used to push out information rather than facilitate conversations (Ellison and Hardey, 2014). A study of Spanish local government social media indicated that despite Twitter having a higher level of communication, Facebook showed higher levels of citizen engagement (Haro-de-Rosario et al., 2018). Bonsón et al. (2012), however, found that Twitter was the most used platform for local governments in the EU and that governments without a social media presence were missing the opportunity to hear feedback from citizens on policy, services, and other aspects of living in those municipalities. Social media development and usage in government has been less strategic and more driven by a need to communicate with citizens.

Transparency is one of the main reasons for governmental use of social media (Bekkers et al., 2013; Bonsón et al., 2012; Ganapati and Reddick, 2014; Lee and Kwak, 2012; Meijer et al., 2012). Governments can use social media in order to be open about their activities through transparency, participation, collaboration, and integration with other online platforms in order to create accessibility and simplification for engaging with citizens (Lee and Kwak, 2012). Using social media for civic engagement was also shown to have significant impact on trust,

leading to an increase of trust towards institutions (Warren et al., 2014). Picazo-Vela et al.'s (2012) study of Mexican social media use by governments, however, indicated that although transparency through sharing information on social media can earn trust, it could also damage trust. Agencies using social media could be seen as trustworthy, which is critical to the highest level of the social licence to operate (Thomson and Boutilier, 2011).

Regulation and governance of social media typically falls within three areas: moderation (Grimmelmann, 2015), transparency (Wagner et al., 2020), and privacy (Flew et al., 2019). Grimmelmann (2015) explains that moderation can take the form of exclusion from the platforms, social media pricing, organising such as content deletion or editing, and the creation of shared norms for the users of a social media platform. When applied to Twitter, this could mean banning (exclusion) a user from the platform or deleting their tweets (organisation) for violating the community standards (shared norms). Fung et al. (2004, p. 10) suggested that transparency can be used as a tool for regulation and can be defined as “the fundamental feature of transparency systems is that they release information into the public domain by compelling corporations or other organizations to disclose information about their activities that they would not otherwise provide”. A study of the German Network Enforcement Act's requirements for transparency indicated that Facebook and Twitter's response to the regulations is to drive users to their terms of use or community standards (Wagner et al., 2020). In the United Kingdom, privacy for social media platforms is regulated by the General Data Protection Regulation (GDPR). Regulating social media platforms used internationally, however, is difficult due to conflicting national laws and a lack of a clear method of enforcement (Flew et al., 2019). While there are methods available for regulating social media, it is largely based on the platforms self-regulating themselves and open to interpretation of laws, such as privacy laws, for guidance. A challenge for social media companies is that

managing regulations falls on the company rather than users, which may make enforcement difficult and reliant on reports by community members.

While content moderation regulations relate to the social media companies, policies specific for organisations using social media have been developed. The rapid development of new technology use can result in an uncoordinated implementation, and policies that combine this technology with wider information policies (Bertot et al., 2012). Further, this study suggested five key policy areas: “social media use”, “access and social inclusion”, “privacy, security, accuracy, and archiving”, “governing and governance”, and “new democratic models” (ibid., 2012, p. 36). Similar policy recommendations for social media were identified by Lee and Kwak (2012, p. 502) in following their “*RESPECT* principle: Reply promptly to public comments, Enhance public value when posting messages, Simplify your message, Protect public privacy and agency reputation, Ensure validity of information sources, Correct problems immediately and effectively, [and] Tell the truth all the time”. TOCs in the United Kingdom have also adopted policies for Twitter, which include the social media platform’s functions, how TOCs use Twitter as an engagement tool, expectations for customer behaviour, and defining how they respond to customers through Twitter (Howard, 2020). As regulatory responsibilities fall on social media companies, individual train operating companies are left to self-regulate their own social media accounts. Further, the decentralised nature of social media requires TOCs to identify which social media practices and policies they choose to use, leading to variations in policies without the standardised set of guidance for all organisations.

While social media regulations and policies provide platform governance, the organisational placement of social media with transport operators should also be considered. Two studies provide insight into the organisational structure of social media use in transportation. Firstly,

Bregman (2012) indicates that 89 per cent of social media staff responsible for generating content were located within marketing and communication departments, although these could be wholly within the department or in collaboration with others. Further, this study indicated that over half of American and Canadian large urban transport agencies dedicated 40 hours to their social media accounts, with 24 per cent indicated dedicating more than 80 hours per month to social media (ibid., 2012). A study by Wojtowicz and Wallace (2016) found that out of 39 American departments of transportation, only 14 per cent had full-time staff dedicated to social media responsibilities, with the remaining departments of transportation either dedicating staff to social media during specific hours or having no dedicated social media staff. While not direct policy, understanding the organisational structure of Twitter within a transport operator can help understand social media priorities which, in turn, could inform policy decisions.

The overall consensus of the literature indicates that social media are beneficial tools, despite some risk, for organisations to adopt. Social media challenges focus on regulation, or a lack thereof, for organisations who use these platforms. Without these regulations, social media has developed without a set of standardised guidance, with organisations adopting their own policies or using policies from other organisations. Although social media has been adopted by train operating companies, regulation of social media in the context of the railway regulatory frameworks and how this has affected the development of TOC social media is not examined in literature. Furthermore, the self-regulation nature of social media has not been examined in the context of social licence to operate theory.

### **4.3 Methodology: Analysis of railway regulations and Twitter use by train operating companies**

#### *4.3.1 Research framework*

Thomson and Boutilier's (2011) widely cited social licence to operate theory provides the research framework for this study. The SLO is of particular interest as it explores stakeholder engagement outside of the regulatory framework. In this sense, the SLO focuses on the relationship between a company and its stakeholders (Brueckner and Eabrasu, 2018; Thomson and Boutilier, 2011). This is of importance as TOCs may be licensed by the Office of Rail and Road, however the legitimisation of their operations come from stakeholders. Howard's (2020) study indicated that Twitter use by TOCs can serve as a means to earn a SLO, and similarly, this study expands on this finding by using the SLO as the foundation for the research framework.

#### *4.3.2 Participants*

All franchise and open access train operating companies within the United Kingdom were included in this study (Table 4.1). As private train operators, concession operators were also invited to participate but declined to participate in the interviews. Interview participants were selected from each of the TOCs based on their positions within the TOC of having responsibility for the management of the company's Twitter accounts. These responsibilities included the creation and publication of Twitter content, Twitter policy management and development, managing daily Twitter functions such as customer services or engagement, and the coordination of Twitter-related functions. Based on these responsibilities, twelve participants were identified through contact via the TOC's Twitter page and LinkedIn, and ten participants were identified through snowball sampling.

**Table 4.1** Train operating companies participating in Twitter staff interviews

Train operating companies		
c2c	Caledonian Sleeper	Chiltern Railways
CrossCountry	East Midlands Trains	Govia Thameslink
Grand Central Railway	Greater Anglia	Great Western Railway
Heathrow Express	Hull Trains	London North Eastern Railway <sup>8</sup>
Northern	ScotRail	Southeastern
South Western Railway	TransPennine Express	Transport for Wales Rail
West Midlands Trains	Virgin Trains	

### 4.3.3 Data collection and analysis

Data was collected through semi-structured interviews with TOC Twitter management staff from every UK franchise and open access TOC. Additionally, regulatory documents and railway legislation were retrieved from the UK's National Archives and Department for Transport (DfT). Regulatory documents included current TOC franchise agreements as of June 2020 and TOC track access agreements<sup>9</sup> (Table 4.2) for every franchise and open access TOC in the UK.

**Table 4.2** Franchise and open access agreements reviewed

Franchise Agreement	
Caledonian Sleeper	Chiltern
CrossCountry	East Anglia
East Midlands	Essex Thameside
Great Western	InterCity East Coast
Northern	ScotRail
South Eastern	South Western
Thameslink, Southern and Great Northern	TransPennine Express
Wales and Borders	West Coast Partnership
	West Midlands

<sup>8</sup> Two London North Eastern Railway Twitter staff members were interviewed separately.

<sup>9</sup> The InterCity West Coast (Virgin Trains) and East Midlands franchise operators changed between the time of the interview and the review of franchise agreements. Due to this, the franchise operators of West Coast Partnership (Avanti Trains) and East Midlands Railway were used in the franchise agreement analysis.

<b>Track Access Agreements (open access operators)</b>	
Grand Central Railway	Heathrow Express
Hull Trains	

The regulatory documents were reviewed to understand stakeholder engagement and social media regulations. Further, legislation was reviewed to understand the stakeholder engagement requirements for TOCs. TOC franchise agreements were analysed to identify the inclusion of social media in agreements. Open access operator track access agreements were analysed to determine what, if any, social media activities were required for operating licensing.

Interview participants were chosen based on positions that included responsibility for the TOC’s social media accounts, and all but one were management-level positions. Participants represented a range of departments including customer-focused departments such as customer relations and customer experience, and information sharing departments such as operations, communications, marketing, and public relations. Staff were responsible for creation and dissemination of content on social media; development and compliance of policies regarding the operator’s use of social media; management of staff whose responsibility is to monitor Twitter, share content, and respond to customer queries; and coordination with departments across the TOC.

23 participants were interviewed over the course of 21 interviews between December 2018 and July 2019. The interviews ranged in length from 50 to 105 minutes. Interview questions explored TOC social media account development, policies, practices, and resources. Participants were provided the opportunity to indicate where commercial or political sensitives required anonymous reporting, which is reflected in the findings when necessary.

## **4.4 Findings: Railway regulations and Twitter use by train operating companies**

### *4.4.1 Railway regulation in the United Kingdom*

Despite the lack of social media's presence in railway legislation, there are regulations regarding consultation with the public. More specifically, the Railways Act 2005 defines the responsibility for notifications of any network alterations through station notices, notices in local newspapers in the affected areas, and in national newspapers. There is a provision, however, that allows notice to be given "in such other manner as appears to the person giving the notices to be appropriate" (Railways Act 2005, p. 53). This additional provision allows TOCs discretion on means to give notice of any alterations. Given this, it is possible that Twitter could be considered by TOCs as an appropriate manner for giving notice of these changes.

While there are no specific legislative requirements for social media use by TOCs, the Office of Rail and Road does provide guidance on handling complaints, including on social media. ORR defines a complaint as "any expression of dissatisfaction by a customer or potential customer about service delivery or company or industry policy" (Office of Rail and Road, 2015, p. 8). This definition is an acknowledgement that there is a distinction between complaints and feedback. Feedback can include positive, negative, or neutral comments that do not require any action on the part of the TOC (Office of Rail and Road, 2015). TOCs are required to record all complaints and comply with data protection legislation, such as GDPR, in maintaining the complainant's confidentiality and privacy of their personal information (ibid., 2015).



The Office of Rail and Road (2015) sets out specific guidelines for feedback or complaints made via social media:

- Feedback can occur on social media and TOCs must be able to identify feedback that could be considered a complaint.
- Information of the complaint process should be made available in multiple locations, including social media.
- Social media policies should be in place that inform passengers of the TOC's social media approach, making complaints through social media, and the engagement strategies through social media.
- In instances where complaints require an investigation, TOCs should determine if the feedback is a formal complaint and, if so, provide assistance in making a formal complaint.

There is some understanding of ORR's interest in social media use by TOCs. The challenge for TOCs, however, is in defining what tweets can be considered complaints. *"The ORR wants it [the reporting of complaints through Twitter] to change. The trouble is, someone tweeting in and saying, 'You bunch of so and sos' and their train is two minutes late. Is that a genuine complaint? Is it fair to hold that against the train company? I don't know. It's a difficult one, if I'm honest"* (Franchise information manager). When discussing regulations, however, there did not appear to be an understanding or knowledge of the ORR guidance regarding social media.

The ORR's guidelines on social media use suggests that social media is considered to be an important engagement tool for TOCs. In particular, there is a recognition of social media as a platform for customers to provide feedback, while recognising the challenges in defining and reporting complaints. Making information on the complaint process and on social media strategy public is reflective of Fung et al.'s (2004) and Wagner et al.'s (2020) studies on the

need for transparency. Further, the ORR guidance suggests a need for a cohesive strategy for Twitter use across the industry.

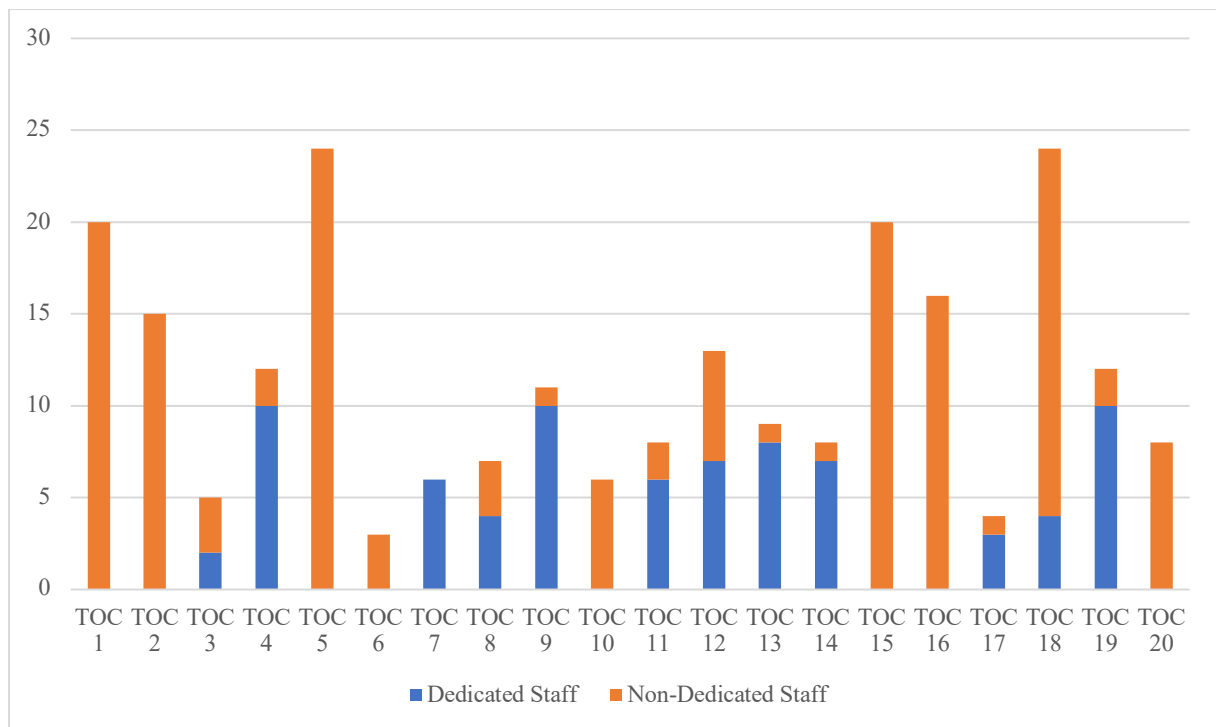
An interesting finding is that the ORR recognises the importance of setting standards for social media use yet does not regulate the social media use of TOCs. Their guidance places the onus on TOCs to self-regulate their social media in the absence of ORR regulations. There appears to be disagreement, however, on the extent to which complaints can be accepted through Twitter and reported to ORR. The hesitancy, then, for TOCs is that regulation of Twitter may lead to reporting of decreased passenger satisfaction and suffering reputational damage as a result.

#### *4.4.2 Development and organisation of train operating company Twitter accounts*

TOCs developed their Twitter accounts despite a lack of legislative requirements and before ORR guidance was issued. There was a sense that the accounts needed to be created out of a need to communicate and engage with customers, and Twitter was seen as an emerging platform for doing so. The introduction of social media to TOCs was an initiative built from the ground up. *“It was just the case of one of the team within the marketing department actively bringing the social media page from her phone, on the side of her day job”* (Franchise contact centre manager). Employees from TOCs recognised a need to communicate with customers through Twitter, sharing information and responding to queries from their own personal accounts. *“We had a kid that used to work for us. He noticed the people tweeting about [TOC 9] [and] he started informally answering questions”* (Franchise social media manager).

As TOCs respond to customer feedback, they continue to develop their use of Twitter. One example of TOCs responding to their needs is the adoption of 24-hour account management. While the majority of rail services do not run 24-hours, many TOCs have made the decision to offer staffed Twitter accounts to respond to queries at all times. *“There was massive disruption and people were tweeting us all throughout, all round the clock to try and get information about when it [location omitted] was going to be fixed”* (Franchise social media manager). The need to be available at all times has become a priority, with TOCs responding to a need from customers to answer questions in a timely manner, regardless of the time of day.

Having established their Twitter accounts, TOCs must respond to stakeholders and be seen as reliable, honest, and transparent to earn and maintain a SLO (Thomson and Boutilier, 2011). This can be reflected by the placement of the Twitter staff, both organisationally and physically (Figure 4.1). There were over 230 staff members across all TOCs that manage Twitter accounts, of which 77 positions were solely dedicated to social media, and over 150 are positions with only partial social media responsibilities. These positions suggest that TOCs are allocating resources due to an understanding of the value of Twitter. *“The exec team have been quite supportive from the start. We have to prove that we need extra people but, once we have, they’re usually pretty good at bolstering anything that we need to keep growing social”* (Franchise social media manager).

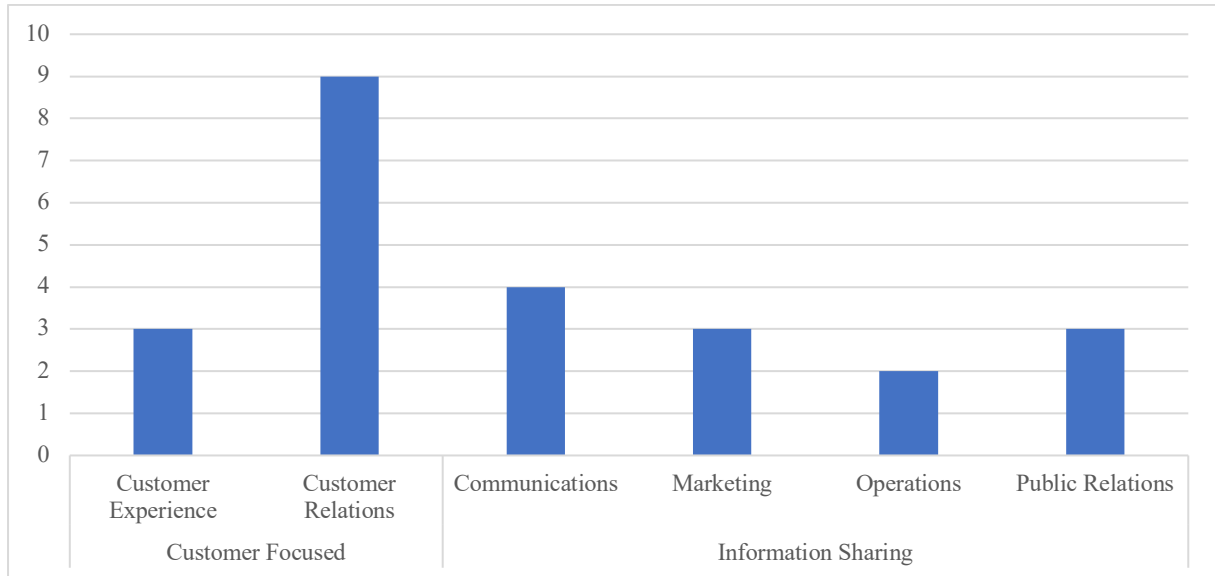


**Figure 4.1** Number of dedicated and non-dedicated train operating company Twitter staff<sup>10</sup>

Twitter staff are broadly placed into two categories: customer-focused departments such as customer service or experience, and information sharing departments such as marketing, communications, and operations (Figure 4.2). Customer-focused departments represent the organisational location for Twitter in over half of the TOCs. This is a commitment by TOCs to provide a single channel for customers to receive timely information as well as an additional means of providing customer service and engagement. *“I think our vision is to try to get everything done in one place so that customers don’t have to worry”* (Franchise customer engagement manager). Twitter teams located in operations and communication departments reflect the priority for sharing information with customers rather than providing customer services, although communication teams place a greater focus on the brand and reputation of the TOC. *“It just minimises our chance of giving a reputational crisis, really. If we’ve got the*

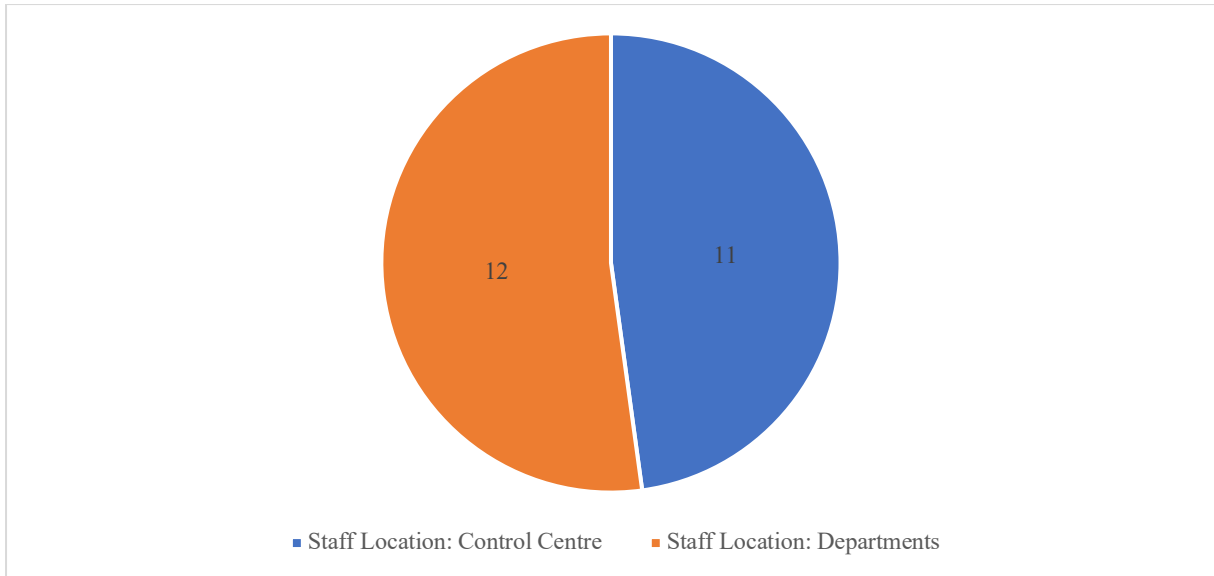
<sup>10</sup> TOC 9 and TOC 17 have an unspecified number of non-dedicated staff that are represented as ‘1’.

*people there that we can ask, then there's less chance of us guessing and saying this may or may not be the exact right line that we want to use” (Franchise social media manager).*



**Figure 4.2** Organisational departments of train operating company Twitter staff

The need for TOCs to be seen as credible and trustworthy has also affected the locations where staff work, whether in their respective departments such as communications and customer services, or in the TOC control centres (Figure 4.3). Staff located in communications or customer service departments have access to colleagues and systems that can be useful when communicating or engaging with customers. *“Here you’ve got internal comms, PR, corporate affairs, marketing, you name it, they’re all here” (Franchise social media strategy manager).* Staff located in control centres have access to real-time information and can quickly disseminate accurate, reliable, consistent, and timely information over Twitter. *“I much prefer our version in and amongst the actual operational decisions being made, because what that means is the information that they put out with social media is absolutely correct because they’re sitting next to the people who are actually making the decisions” (Franchise customer information manager).*



**Figure 4.3** Work locations of train operating company Twitter staff

For some TOCs, it is important that staff managing the Twitter accounts are cross trained in both customer service and communication functions, and that other staff are trained in the use of Twitter even if it is not their primary focus. This is particularly important during disruptions, as one senior manager of customer experience described, *“it gave me that backup, ultimately, of being able to handle a crisis.”* The need to cross train staff in multiple areas may also reflect of the size of the TOC. *“We are [a small] TOC in the country. We have a guest service centre that has guest ambassadors. They are responsible for customer communications; they look after social media in terms of customer communications. It’s divided amongst the masses in [TOC 2] so it can be a bit challenging”* (Franchise communications manager). Despite this necessity, there is still a recognition that this presents a challenge for managing the Twitter and other social media channels.

Another organisational challenge is TOC departments not having relevant information shared with Twitter staff in a timely manner. Accessibility to information can be difficult due to Twitter accounts being staffed outside of office hours. *“If it’s commercial questions coming in*

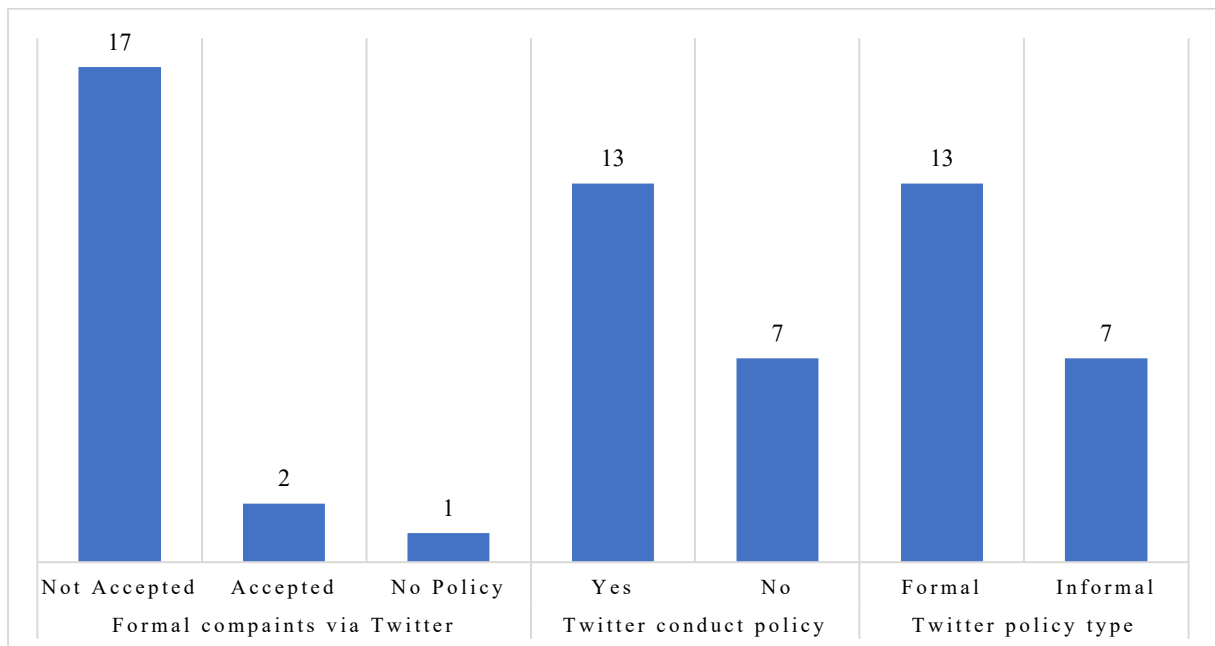
*at half past six at night, there's nobody there to assist. There's nobody sat in finance at five o'clock on a Friday night that's going to take our calls"* (Franchise contact centre manager). Where staff are not located in the control centre, delays in getting information on service disruptions can affect the real-time sharing of information that is a central function of the Twitter accounts. *"We need to get the right information at the right time from our control team. If we've got up to date accurate information, we can then pass that on to the customer. Sometimes the information is not clear cut, it could be wrong, and it'll update so quickly"* (Franchise social media manager).

The key finding in the development of TOC Twitter accounts is the lack of coordination between other TOCs and government agencies. Although, as previously mentioned, ORR issued guidance for how TOCs use social media, that guidance was provided after TOCs had developed their Twitter accounts. In the absence of coordination with ORR, TOCs developed and placed their Twitter teams in the areas each TOC has deemed to be most appropriate for their needs and priorities. While this system might be beneficial to TOCs, customers must navigate and understand the differences in TOC Twitter and how they function, creating an incohesive engagement strategy for the industry.

#### *4.4.3 Train operating company Twitter policies*

Twitter policies for TOCs fall under three main categories: policies regarding how complaints are managed through Twitter, a Twitter customer code of conduct for interacting with TOCs, and usage policies explaining how TOCs use their social media (Figure 4.4). Similar to the development of the Twitter accounts, policies regarding the TOC Twitter were created organically. *"We're developing our strategy all the time because it is like pioneering a new*

*technology*” (Franchise social media content manager). In some cases, social media policies weren’t developed by TOCs, and they have adapted an informal policy. *“Just that collaborative approach of running things past each other and checking each other and commenting on what you thought was good, what you thought could be improved, regular meetings and that sort of thing”* (Franchise customer information manager).



**Figure 4.4** Train operating company Twitter policy overview

Twitter complaint policies state what types of complaints, formal or informal, TOCs will or will not accept through Twitter. Informal complaints through Twitter, those which are not specifically requiring a response but to simply express frustration, are not documented as formal complaints. *“Complaints via Twitter aren’t counted in official statistics. We have to report to the government, the Department for Transport, our number of complaints etcetera, etcetera. If someone has a rant on Twitter, that’s not included”* (Franchise communications manager). This informal chatter and feedback, as well as simple venting of frustrations, is the reason that customer complaints from Twitter are not included in the compulsory reporting of



complains to the UK Department for Transport. Nearly all TOCs do not accept formal complaints via Twitter, with those that do refusing to accept formal complaints about staff (Figure 4.4). Instead, many TOCs require formal complaints to be made to customer relations departments through non-social media forms of communication. *“One of the things we absolutely do, if somebody wants to make what they would class as a formal complaint, we signpost them to customer relations because that’s where I capture the data around formal complaints”* (Franchise customer relations senior manager).

Policies for TOCs are not limited to how Twitter should be managed. Fifteen TOCs have developed policies for Twitter users who interact with them. The policies include a customer conduct policy and/or a formal policy that defines the uses of TOC social media accounts (Figure 4.4). These policies can then be used by TOC Twitter staff to educate users on what is an acceptable means to engage with TOCs on Twitter. *“We would go back to our customer, and we do have rules of engagement publicly available on our websites”* (Franchise information manager). TOCs must also navigate challenges and set policies regarding complaints that become abusive to staff. *“Obviously, it is a person at the end, but people don’t realise that they’re there on the computers. They’re able to vent and get as angry as they like because that’s what Twitter’s now for, but there is a human at the end of the screen which I don’t think people realise”* (Franchise social media content manager). While staff understand the frustrations customers have and recognise that it is not typically directed at them, the messages can cross the line of what is acceptable. *“We try and ignore it and get through. If they are really vile, anti-Semitic, anything like that, racist, we won’t tolerate that. That’s an instant block”* (Franchise social media manager). Some TOCs with formal Twitter usage policies have developed handbooks or a code of practice for Twitter staff to assist them in social media priorities, message guidelines, how to respond to customer enquiries, frequently

asked questions, guidelines for managing service delays and emergencies, and procedures and contacts for working with other departments: *“A reminder of what our priorities are on Twitter ... a step by step and then a couple of examples during unplanned disruption ... guidance on what to do, what you need to understand, and then how to craft that tweet”* (Open access communications manager).

TOC Twitter staff recognised that social media policies continue to evolve. The policies are sometimes outdated due to the speed of changes in Twitter use. *“We’re going to review that [social media policy], because it was two years ago that they were last updated”* (Franchise customer engagement manager). TOCs do recognise a need for updated policies and new policies are being created while existing policies continue to be updated. *“That’s in our plan in the next few months, to just review and check that it’s still up to date and includes everything that we need it to”* (Franchise customer engagement manager).

While all but two TOCs do not use Twitter to accept formal complaints, TOCs are monitoring Tweets for feedback, sentiment analysis, and queries. *“We’re tagging everything according to topic so we can analyse it. You can also use it to mark the tone of messages, whether it’s positive or neutral or negatives, and at the end of an exchange whether you’ve been able to resolve the query”* (Franchise social media manager). The feedback shared through Twitter provides valuable data for TOCs, which is then shared to relevant departments. *“Every morning, after the morning peak, we provide a brief break down of what our customers are saying, the general feel and sentiment of the public, and that goes to the executive team and the top 50 [managers] because that’s straight from the customer’s mouth”* (Franchise social media manager).

In the absence of regulations, TOCs have established their own policies that enable them to self-regulate their Twitter accounts. By setting expectations and procedures for engagement, including complaints, each TOC has established its own regulatory framework. Interestingly, despite the lack of a requirement to report passenger satisfaction key performance indicators, TOCs are reporting all complaints through Twitter internally to improve their services. This transparency in how they use Twitter reflects Wagner et al.'s (2020) findings that Twitter users their set of community guidelines or terms of use as a form of regulation.

#### *4.4.4 Franchise and open access agreements*

The importance of Twitter, and social media more widely, for TOCs to engage with customers has become evident in the inclusion of this social media platform in franchising agreements (Table 4.3). It was not until February 2009 that Twitter was first adopted by London Midlands and Heathrow Express. As Twitter was new, it was not included in older franchise agreements. As new franchise agreements are established, however, social media is being included in these agreements. An example is the TransPennine Express franchise agreement, which states:

“The Franchise shall: ... ensure that customers are able to contact the Franchisee’s customer information team 24 hours a day, 7 days a week ... via Twitter with train service information enquiries and the Franchisee shall use all reasonable endeavours to ensure that a customer receives an informative response to that query within a reasonable time of such query being made” (Department for Transport, 2015c, p. 244).

**Table 4.3** Summary of train operating company franchise Twitter committed obligations

<b>Train operating company</b>	<b>Date</b>	<b>Social media usage obligations<sup>11</sup></b>
c2c (Essex Thameside Franchise)	2014	<ul style="list-style-type: none"> <li>• Provide accurate, detailed, and timely information (Twitter).</li> <li>• Marketing purposes.</li> </ul>
Caledonian Sleeper (Caledonian Sleeper Franchise)	2014	<ul style="list-style-type: none"> <li>• Provide real-time information.</li> <li>• Service disruption information.</li> <li>• Receive passenger feedback.</li> <li>• Provide customer service functions.</li> <li>• Provide customer report.</li> </ul>
Chiltern Railways (Chiltern Franchise)	2011 <sup>12</sup>	<ul style="list-style-type: none"> <li>• Passenger consultations meetings via Twitter.</li> </ul>
CrossCountry (Cross Country Franchise)	2016	<ul style="list-style-type: none"> <li>• Provide real-time information.</li> <li>• Service disruption information.</li> <li>• Communicate compensation claim eligibility.</li> <li>• Provide customer service functions.</li> <li>• Provide information on specific schemes (Great Western Route Modernisation).</li> <li>• Provide customer report.</li> </ul>
East Midlands Trains (East Midlands Franchise)	2019	<ul style="list-style-type: none"> <li>• Provide customer report.</li> </ul>
Greater Anglia (East Anglia Franchise)	2016	<ul style="list-style-type: none"> <li>• Provide information to customers (Twitter).</li> <li>• Customer engagement.</li> <li>• Marketing purposes.</li> <li>• Provide live car park occupancy data.</li> <li>• Provide customer report.</li> </ul>
Great Western Railway (Great Western Franchise)	2020	<ul style="list-style-type: none"> <li>• Service disruption information.</li> <li>• Provide customer services.</li> <li>• Provide information on schemes.</li> <li>• Provide customer report.</li> </ul>
Govia Thameslink (Thameslink, Southern and Great Northern Franchise)	2014	<ul style="list-style-type: none"> <li>• Provide real-time information (Twitter).</li> <li>• Service disruption information.</li> <li>• Consultations for timetable changes.</li> <li>• Marketing purposes.</li> <li>• Provide information on specific schemes.</li> <li>• Provide customer report.</li> </ul>

<sup>11</sup> Unless otherwise noted, social media includes Twitter. Where Twitter is specifically mentioned, this is noted in the table.

<sup>12</sup> The Chiltern Railways franchise agreement was originally enacted in 2002. 2011 is listed as the franchise agreement was amended and included a committed obligation for the use of Twitter.

London North Eastern Railway (East Coast Franchise)	2018	<ul style="list-style-type: none"> <li>• Provide information to customers.</li> <li>• Provide customer service functions.</li> <li>• Customer engagement.</li> <li>• Provide customer report.</li> </ul>
Northern (Northern Franchise)	2015	<ul style="list-style-type: none"> <li>• Reporting suspicious or criminal behaviour.</li> <li>• Promote British Transport Police services.</li> <li>• Internal social media function for staff to address customer services issues.</li> <li>• Provide customer report.</li> </ul>
ScotRail (ScotRail Franchise)	2014	<ul style="list-style-type: none"> <li>• Provide real-time information.</li> <li>• Service disruption information.</li> <li>• Communication of severe weather response plans and travel advice.</li> </ul>
Southeastern (South Eastern Franchise)	2014	<ul style="list-style-type: none"> <li>• Communicate timetable changes.</li> <li>• Provide information and assistance on specific projects (Thameslink Programme).</li> </ul>
South Western Railway (South Western Franchise)	2017	<ul style="list-style-type: none"> <li>• Service disruption information (Twitter).</li> <li>• Receive passenger/stakeholder feedback.</li> <li>• Promote online customer forum.</li> <li>• Provide customer report.</li> </ul>
TransPennine Express (TransPennine Express Franchise)	2015	<ul style="list-style-type: none"> <li>• Provide service information (Twitter).</li> <li>• Marketing purposes.</li> <li>• Provide customer report.</li> </ul>
Transport for Wales Rail (Wales and Borders Franchise)	2018	<ul style="list-style-type: none"> <li>• Communications channel.</li> <li>• Marketing purposes.</li> <li>• Welsh language requirement.</li> <li>• Provide customer report.</li> </ul>
West Coast Partnership/ Avanti West Coast (InterCity West Coast Franchise)	2019	<ul style="list-style-type: none"> <li>• Service disruption information.</li> <li>• Communicate emergency timetables.</li> <li>• Provide customer services.</li> <li>• Provide information on specific projects (HS2).</li> <li>• Provide customer report.</li> </ul>
West Midlands (West Midlands Franchise)	2017	<ul style="list-style-type: none"> <li>• Create social media and information team.</li> <li>• Service disruption information.</li> <li>• Provide customer services.</li> <li>• Provide customer report.</li> </ul>

*Source: Department for Transport, 2014a, 2014b, 2014d, 2015a, 2015b, 2016a, 2016b, 2017a, 2017c, 2018, 2019a, 2019b, 2020a; Strategic Rail Authority, 2002; Transport Scotland, 2014a, 2014b; Welsh Ministers, 2018.*

Despite the lack of social media requirements in legislation, standardised language about the use of social media has been included in franchise agreements. The inclusion of social media is a committed obligation by the TOC. Nearly all TOCs now have obligations specific to their franchises (Table 4.3). *“There’s a franchise commitment ... It says we use Twitter predominantly for customer service, Facebook for marketing, and any other emerging social media platform for anything else that we may feel suitable in the future”* (Franchise customer experience senior manager). Since 2014, all TOC franchise agreements include the sharing of annual customer reports through various means, which includes specific mention of the sharing of these reports through social media: *“The Franchise shall ... publish the Customer Report in such readily accessible formats as the Secretary of State may reasonably require (including ... electronic formats (such as on the Franchisee’s website, through social media channels and by email)”* (Department for Transport, 2015b, p. 334).

For open access operators, track access agreements for Grand Central Railway (Department for Transport, 2017b), Heathrow Express (Department for Transport, 2014c), and Hull Trains (Department for Transport, 2020d) do not include specific language that requires them to provide committed obligations in relation to social media. Due to the nature of open access operators, they are not required to run services on behalf of the government. *“We don’t exist because the government deems that there should be routes made to operate to certain specifications”* (Open access communications senior manager). Their services, rather, are based on commercial interests. These operators, however, place value in and have informally committed to providing Twitter as a means to engage with their customers. *“We have active social media presence because our customers want it, need it, use it, and it’s worthwhile for us to provide it”* (Open access communications senior manager).

The findings indicate that the inclusion of social media in franchise agreements serves as a means to establish accountability and regulate its use of Twitter outside of government regulations. This includes a level of coordination between TOCs and the DfT, breaking from Bertot et al.'s (2012) findings of uncoordinated development of Twitter, in creating these agreements. Despite the recognition of social media's importance for TOCs, open access operators use social media without making a committed obligation, although they may choose to adopt some practices based on best practices of other TOCs or drawing from ORR guidance.

#### **4.5 Discussion: Railway regulations, the social licence to operate, and the use of Twitter by UK train operating companies**

As a communication and engagement tool, Twitter can act as a means to obtain a social licence to operate (Howard, 2020). Throughout the findings, key elements of the SLO can be seen through various policies, organisational structures, and commitments that TOC Twitter operates within. These, then, appeared to drive a desire to be seen by their customers as credible and trustworthy. However, there is little engagement with the wider community as indicated by Thomson and Boutilier's (2011) SLO model, which may be reflective of TOC focus on customers as TOCs are not responsible for larger schemes, particularly infrastructure, that impact the wider community. There was an implied wider stakeholder group engaging with TOCs, particularly those affected by construction programmes, although this Twitter engagement is not the focus of TOCs' use of Twitter. This implied stakeholder group reflects the potential for the inclusion of wider stakeholder groups of the SLO (ibid., 2011).

The development of Twitter by TOCs seems to indicate that there is a sense that engaging with customers through this platform offers benefits for both the TOC and their customers. The

creation of these accounts in response to customer demand is reflective of Mergel's (2013) study of government social media development. The accessibility and willingness to provide customer services could be seen as an effort to earn the trust of customers and positively reflect on the credibility and reputation of the TOC. Further, adopting 24-hour Twitter accounts demonstrates the importance TOCs place on engagement by being available when most convenient for their customers and may send a message that the TOC takes the customer's experiences and needs seriously. Within the context of Thomson and Boutilier's (2011) SLO definition, credibility and reputation are well represented, as these appear to be driving motivators for wanting to engage with customers. TOCs appeared to view Twitter as a tool that would provide genuine benefits for their customers. These actions and motivations indicated that the SLO is important to customer engagement outside of legislative requirements, suggesting there is a genuine concern for their customers rather than actions needed to fulfil regulations. This customer engagement supports Howard's (2020) finding that TOCs are using Twitter to engage with their customers in order to earn a social licence.

The three key components of SLO are evident within the organisation of TOCs. TOCs focus on their customers and use Twitter to provide customer services and share information with them. This information sharing lends itself to both establishing legitimacy and credibility by providing transparency, which is also reflected in the desire to provide the most updated, accurate and reliable information possible, which also lends itself to building trust with customers. This information sharing reflects how governments use Twitter in that they offer a high level of communication, as indicated by Haro-de-Rosario et al. (2018). Further, placing Twitter teams in control centres or customer service departments suggests a commitment to looking after the best interests of their customers, which is a key factor to earning trust. These placements reflect the influence of organisational factors noted in Oliveira and Welch (2013),



although they break from a previous study of transport operators in that the majority of TOCs place their Twitter teams in their control centres rather than marketing and communications indicated in Bregman (2012). The importance of obtaining the SLO through Twitter is evident in the allocation of resources, particularly staff. This marks a departure from Bregman's (2012) study as TOCs are dedicating significant staff time to the monitoring and use of Twitter well beyond what was indicated in Bregman's study. This may reflect the evolving nature of Twitter and aligns with Howard's (2020) finding that customer services are a new TOC Twitter function that did not exist in 2012.

The lack of regulations may have allowed TOCs the flexibility to tailor their Twitter accounts to be used in a manner best suited for their customers. This may be indicative of the rapid development and uncoordinated implementation of Twitter indicated by Bertot et al. (2012). Indeed, this is reflected in franchise specific commitments, such as the Welsh language requirement for Transport for Wales Rail (Welsh Ministers, 2018). Being able to adjust their Twitter accounts might give TOCs an additional platform for creating a better customer experience, which may lead to higher levels of customer satisfaction. Engaging with customers in meaningful ways complements Warren et al.'s (2014) findings that social media use for engagement can increase trust in institutions. The wide variance of TOC Twitter policies and functions, however, can create confusion for customers. Due to the complexity of the railway system, customers may reach out to one TOC via Twitter as they understand how it functions but need to be redirected to another TOC that may not provide the same functions. For example, a customer may engage with a TOC Twitter team that can assist with a refund for their service, however tickets were purchased through a different TOC meaning they need to direct their Twitter engagement to that TOC which might not assist with refunds over Twitter. This patchwork creates a poor customer experience and negatively reflects on TOCs, with the

danger of losing the SLO as this can affect a customer's trust that the TOC are genuinely acting in the customer's best interest.

Along with tailoring their Twitter accounts, TOCs have established customer codes of conduct, which forms as a community standard similar to those indicated by Wagner et al. (2020). These conduct codes also are indicative of the need for shared norms and moderation listed in Grimmelmann (2015). Even with the ability to tailor their Twitter usage, their policies focus on how they use Twitter, the importance as an engagement tool, expectations from customers, and clarity in their engagement with customers is a reflection of Howard's (2020) findings. These policies also improve transparency and form a set of self-regulating guidelines, which is noted in Fung et al. (2004). Further, the absence of government regulations suggests that how TOCs use Twitter is largely regulated by customers using Twitter who create the demand and set expectations for how TOCs use their accounts. TOCs have come to see Twitter, in particular, as a tool to hear feedback from their customers, reflecting Bonsón et al. (2012), and suggests they see Twitter as a valuable tool for monitoring customer needs.

The need to be seen as legitimate, credible, and trustworthy are the key SLO components (Thomson and Boutilier, 2011) reflected in these policies. Legitimacy is seen in defining the type of information shared through Twitter, how they engage with customers, and how they respond to feedback. Credibility is also evident through providing public policies that clearly state TOC social media strategies and customer complaint processes, which helps manage feedback and further lends itself to being seen as credible. Further, having handbooks and policies may help with maintaining reliability and this can contribute to trust. There is a danger, however, in not responding to formal complaints through Twitter which could be viewed as not listening to customers and being unresponsive to them. This lack of reporting has the

potential to threaten a TOC's credibility as it stifles transparency in the reporting of these complaints and may damage trust as TOCs may be viewed as only looking after their own reputations and not operating in the best interest of their customers.

The committed obligation in franchise agreements offers a means for TOCs to self-regulate. These obligations largely focus on information sharing and customer services and engagement, which lends itself to all three key SLO components. In particular, credibility is evident through transparency commitments such as providing the customer reports through Twitter or customer services and receiving feedback that require TOCs to develop strategies for managing the feedback they receive from customers. Specific commitments such as Transport for Wales Rail's Welsh language commitment (Welsh Ministers, 2018) or ScotRail's weather-related commitment (Transport Scotland, 2014b), seem to suggest clearly defined activities that are in the community's best interest, which is critical to earning trust (Thomson and Boutilier, 2011). These specific commitments may also reflect the nature of franchises being awarded by devolved governments with smaller populations, which can focus on more localised requirements. All the committed obligations appear to compensate for the lack of legislative and regulatory requirements or go further than ORR's (2015) social media complaint handling guidance.

#### **4.6 Conclusions: Contributions, policy recommendations, and future research from the analysis of Twitter use by train operating companies in the context of UK railway regulations**

This chapter examined the use of Twitter in the context of regulatory requirements for franchise and open access railway operators in the United Kingdom. An analysis was conducted of UK

railway legislation, regulatory guidance, franchise agreements, and track access agreements. Further analysis was conducted from interviews of TOC Twitter staff in order to understand the development of Twitter, organisational structure, policies, and ways regulations affect them. This analysis examined the regulatory environment and policies for Twitter use in the context of the three key components of the social licence to operate: legitimacy, credibility, and trust.

There are four key findings in this chapter. Firstly, TOC Twitter accounts are not regulated by legislation and only receive minimal guidance from the railway's regulatory body. Secondly, TOCs developed their Twitter accounts outside of regulatory requirements and without coordination with other TOCs or other government or regulatory agencies. Without regulations, TOCs are free to develop and use their Twitter accounts as they see fit, however this has led to a lack of industry standards and consistency in Twitter use among TOCs. Thirdly, TOC franchise agreements are being used to regulate the use of Twitter and social media more broadly. In the absence of government regulations, franchise agreements provide a means to contractually bind TOCs to committed obligations including their use of Twitter and other forms of social media. Finally, the development, organisation, policies, and franchise agreements are reflective of stakeholder engagement strategies necessary to obtain the social licence to operate. Importantly, with the lack of Twitter regulations and minimal guidance by the government, a social licence can serve as means of being held accountable to their stakeholders.

This chapter addresses two gaps in the literature. Firstly, this chapter contributes to literature on the use of TOC Twitter as a means to obtain a social licence to operate, moving beyond Howard (2020) in analysing organisation and policies from the perspective of TOC Twitter

managers, and in examining the regulatory frameworks, or lack thereof, in how Twitter is used by TOCs in the United Kingdom. Secondly, this chapter adds to the literature on Twitter use by public transport operators, such as Bregman (2012), and offers insight into the development, organisation, and self-regulation of Twitter within transport operators.

There are several policy implications arising from this study. Firstly, given the lack of regulatory guidance and the lack of cohesiveness in Twitter use by TOCs, Twitter could be included in future regulations to provide cohesiveness in the use of Twitter across multiple transport operators, regardless of transport mode. In regulating Twitter, TOCs can adhere to a minimum set of requirements that provides consistency for customers, reflects positively on TOCs, and creates a better customer experience. Secondly, transport operators should develop policies and processes to accept formal complaints through Twitter to capture all feedback. Accepting formal complaints would make it easier for customers to file complaints and for operators to provide a high level of customer service resulting in high levels of customer satisfaction. Alternatively, operators can include their sentiment analysis of customer Tweets along with their reporting of formal complains. Finally, in the absence of regulations, an independent customer-focused watchdog organisation can be used to regulate the use of Twitter by transport operators.

This study examined legislation and policies in relation to Twitter use by train operating companies, however it did not offer a comparison to other industries, such as retail or service industries. Future research providing a comparison of Twitter use in transport with other industries might provide useful and could offer new insights that lead to additional policy recommendations. As this study occurred with the context of the United Kingdom, additional research using a wider international context could provide additional insights into regulatory

requirements and policies. Finally, as this chapter focuses on private transport operators, additional studies into public operators could provide a complete picture of the transport industry.

## **CHAPTER 5**

### **Tweeting for a social licence to operate: Franchise and open access train operating company Twitter accounts and stakeholder engagement in the United Kingdom**

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An abridged version of this chapter was presented as: Howard, J.M. (2019). Train tweets: Engaging customers through Twitter. Presented at the European Transport Conference in Dublin, Ireland, 9-11 October.

## **Abstract**

Social media has become a tool for transport operators to engage with stakeholders. However, in most of the previous research, the significant role played by social media in terms of the transport sector has not been adequately addressed, particularly in the context of the United Kingdom, such as where train operating companies have turned to Twitter as a key platform for engaging with their stakeholders. In order to fill the research gap, this chapter provides insights into the extent to which train operating companies are exploiting the potential of Twitter, through an examination of the perspectives of their staff regarding the use of Twitter as a tool for engaging with their stakeholders. Using semi-structured interviews with 23 franchise and open access operator Twitter staff in the United Kingdom, this study analyses Twitter from the perspective of the social licence to operate theory. This chapter contributes to the existing literature on the use of social media analysis for stakeholder engagement by transport providers – and moves beyond content analysis of Twitter to examine its use by train operating companies directly from the perspective of staff who are managing rail operator Twitter accounts. The findings indicate that train operating companies are using Twitter to build relationships with customers in order to improve their reputation and be seen as trustworthy. However, the interviews revealed that there is a limited view by operators of the requirements to earn the social licence to operate. Further, operators have a limited view on stakeholders, focusing on their customers rather than the wider community. The interviews also found that train operating companies assume that credibility is automatically given and, as a result, that Twitter is used to improve the customer experience. Finally, train operating companies recognise the consequences of negative tweets but do little to address them outside of service disruptions. The implications of the results derived from the social media policies and analysis of the train operating companies should be taken into account as a bottom-up



approach which can assist in policy making by transport planners in order to enhance and protect the operator's reputation and improve public transport services in the United Kingdom.

### **Keywords**

Train operating company; Social media; Twitter; Social licence to operate; Stakeholder engagement; Transport policy

### **Highlights**

- Twitter is analysed from the perspective of the social licence to operate theory.
- New insights into the characteristics of Twitter from the perspective of TOC Twitter staff are provided.
- Maintaining a good reputation and being viewed by customers as trustworthy are key driving factors in their use of Twitter.
- Using Twitter as a method for engaging with customers can positively influence customer satisfaction regarding TOCs' services.

## **5.1 Introduction: Train operating company stakeholder engagement through the use of Twitter**

The Railways Act 1993 implemented the privatisation of rail services in the United Kingdom, and by 1997 privatisation of the rail industry was complete (Funnell and Jupe, 2017). As a result of privatisation, it became increasingly important for train operating companies (TOC) to gain legitimacy and trust from the public. However, while train operators are private companies, they are still providing a public service and, in the case of franchises, operate services contracted by the government and licensed by the Office of Rail and Road for specific sections of the rail network (Abrams, 2015).

Train operating companies are subject to licensing and regulations from the government, however rail operators need to gain legitimacy for their activities from their stakeholders in order to receive approval from their communities. The concept of the social licence to operate (SLO) involves companies consulting stakeholders to explain or justify their activities, come to an agreement, and obtain the 'licence' to operate from the TOC stakeholder (Demuijnck and Fasterling, 2016). In this study, we define TOC stakeholders as comprising the following interest groups: individuals (for example passengers or line-side residents), customers (and owner groups), national funders, local funding bodies, investors, freight end users, passenger representative bodies, companies that form part of the TOC supply chain, regulatory authorities, and local government agencies and authorities (Network Rail, 2019). Nevertheless, the SLO literature also indicates that, in addition to stakeholders, there is a focus on the broader community in which a company operates (Joyce and Thomson, 2000; Nelsen and Scoble, 2006; Parsons et al., 2014).

The emergence of social media has changed the landscape of organisational communication, allowing companies to establish two-way communication with stakeholders. Social media can offer new opportunities for transparency and interactivity with stakeholders, which can in return trigger a positive evaluation of the organisation's image and reputation, resulting in both short-term and long-term consumer trust (Du et al., 2010; Kollat and Farache, 2017). Research previously conducted has focused largely on content analysis of tweets, rather than undertaking a deeper examination into why Twitter is used by TOCs. Although research such as Bregman (2012) examines social media use in the wider public transport context, research specific to UK TOCs is limited and has focused on Twitter functions (Howard 2020), message framing (Nisar and Prabhakar, 2018), and sentiment analysis (Mogaji and Erkan, 2019). Mogaji and Erkan also noted a lack of literature on customer relationships with TOCs. Howard's (2020) study further indicated that Twitter can be a means to obtain a SLO. In this context, there is a literature gap on how and why TOCs use social media to engage with their stakeholders, particularly in terms of the SLO. Furthermore, these studies presented an a largely positivist approach to TOC use of Twitter; however, there is a gap in terms of a pragmatic research approach from the perspective of the TOC.

As Twitter continues to evolve, this research aims to fill the aforementioned gaps and to discuss Twitter use from the perspective of train operating companies' Twitter management staff. Due to the focus on exploration and understanding of the use of Twitter by rail operators, a qualitative approach to the research was applied by using semi-structured interviews (Creswell and Creswell, 2018). This study seeks to understand Twitter use and attitudes towards it from the perspective of TOC Twitter management staff to gain a deeper understanding of the motivation for using this social media platform. To this end, this study aims to understand the

functions, risks, challenges, and policy implications of Twitter use and how these relate to the social licence to operate.

This chapter is divided into the following five sections: Section 5.2 presents a literature review regarding consumer relationships through social media, the benefits and risks of using social media, and Twitter and the SLO for TOCs. Section 5.3 discusses the conceptual framework used and describes the data collection and the research methodology of the semi-structured interviews. The findings from the interviews are presented in Section 5.4. Section 5.5 offers a discussion of the results regarding the use of Twitter and the SLO. Finally, Section 5.6 summarises the study and provides policy implications regarding TOC's use of social media to engage their stakeholders in order to improve services provided by public transport operators.

## **5.2 Literature review: Social media and consumer relationships, social media benefits and risks, and Twitter and the social licence to operate for train operating companies**

Recently, social media has come to be regarded as not only a useful tool for raising companies' visibility or for publicity purposes (Gruber et al., 2017; Yang and Kent, 2014), but also as dialogical and interactive tools (Kent, 2013). Twitter lends itself to communication, conversations and sharing, through which relationships are built via short messages and real-time updates that create an awareness of issues and the sharing of those messages (Kent, 2013; Kietzmann et al., 2011; Saxton et al., 2019; Van-Ruler and Verčič, 2005). Twitter has also become a tool for TOCs to provide customer services (Howard, 2020). Furthermore, real-time

updates are particularly important for rail operators, as technology failures can lead to major service disruptions (Pender et al., 2014).

Previous research has examined the effects of organisations' social media posts on stakeholders' perceptions (Haigh and Wigley, 2015; Haigh et al., 2013; Men and Tsai, 2015). Studies on brand relationships have shown that interaction between customers and brands has a positive effect on the quality of the relationship between them (Hudson et al., 2016). Dijkmans et al.'s (2015) study of the airline KLM's social media use showed that a customer's level of engagement with a company has a positive effect on the perception of its reputation. Moreover, customers engaging with their favourite brands through social media have a stronger relationship with that brand than those who do not interact with their favourite brands (Hudson et al., 2016). The informality of tweets allows for a humanisation of the relationships between customers and businesses which has the effect of strengthening these relationships (Comm, 2010).

Twitter has the potential to affect customer trust both positively and negatively. Engagement with customers on social media can increase the loyalty and trust in brands through an improved customer relationship with the company's brand and products, as well as with other customers (Laroche et al., 2013). Kietzmann et al. (2011) identified the idea of reputation based on trust as a key aspect of Twitter use. As Twitter allows companies to communicate directly with their customers, they can build trust and develop relationships with them (Comm, 2010). Indeed, Twitter has become a tool that transport operators can use to share information with customers directly, before traditional media outlets (Efthymiou and Antoniou, 2012), which allows customers to receive this information first hand (Clegg et al., 2018). During a crisis, however, angry users can respond negatively to official statements from companies, as listing the facts

of a situation can be perceived as talking down to them (Ott and Theunissen, 2015). Furthermore, attempts by companies to manage their reputations through the deletion of critical posts or the blocking of critics can damage trust among users and create further anger as these actions are seen as a form of censorship or breeding suspicion about a company's activities (ibid., 2015).

While there are numerous benefits to the use of social media, dangers exist that social media can pose to a company's reputation. Using social media comes with risks as organisations are unable to control the conversations relating to their organisations, and those conversations may damage their reputation (Aula, 2010). As Aula explained: "The loss of reputation affects competitiveness, local positioning, the trust and loyalty of stakeholders, media relations, and the legitimacy of operations, even the licence to exist" (Aula, 2010, p. 44). A study conducted by Corstjens and Umbljls (2012) showed that negative comments on social media were a stronger influence on brand sales than positive or neutral comments. However, a study of TOCs in the UK suggested that negative comments on Twitter could be used constructively to identify areas where TOCs can improve the customer experience (Mogaji and Erkan, 2019).

Companies may also face the danger of online firestorms, defined as: "the sudden discharge of large quantities of messages containing negative WOM [word of mouth] and complaint behaviour against a person, company, or group in social media networks" (Pfeffer et al., 2014, p. 119). These messages have a strong effect despite being predominantly based on opinion rather than facts (Pfeffer et al., 2014). Companies' responses in these situations must be carefully crafted and they should engage with those affected through interpersonal methods, thereby demonstrating that they are listening to customer concerns (Ott and Theunissen, 2015). In addition, companies should provide status updates which, combined with engagement with

those affected by the crisis, can demonstrate a company's commitment to their customers and transparency (ibid., 2015). A well-crafted response is critical, as Jain et al. (2006) demonstrated regarding the effects of message framing on product attractiveness, showing that message framing is key as it can significantly influence a consumer's decisions. Indeed, an examination of the message framing of rail operators in the UK suggests that the customer experience can be enhanced by the operator focusing on positive experiences, which outweighs the influence of negative framing (Nisar and Prabhakar, 2018).

The concept of the social licence to operate is not new and was initially defined as an industry-based concept rooted in a risk-management perspective (Boutilier et al., 2012; Owen and Kemp, 2013). However, in recent years, there has been increasing interest in the concept from companies and governments (Esteves et al., 2012; Vanclay and Esteves, 2011). The social licence to operate involves ongoing community acceptance or approval of a company's operations (Joyce and Thomson, 2000). Owen and Kemp (2013) identified that the granting of the SLO is an indicator of the presence of a critical mass of public consent and suggested that the existence of a licence, or lack thereof, can manifest in a disinclination to accept an organisation through to a relationship built on a high level of trust. While critics argue that there is a lack of a clear definition and scope for the SLO, there is nonetheless a consensus that the SLO focuses on the relationship between a company and its stakeholders (Brueckner and Eabrasu, 2018).

In this sense, social media, and Twitter in particular, constitute an essential tool for companies to build their corporate reputation and gain a SLO. Company usage of social media can reflect the three components of the SLO: legitimacy, credibility, and trust (Howard, 2020). In the case of Twitter, the relationship between a company and its stakeholders reflects the functions

identified by Kietzmann et al. (2011) which regard Twitter as a means through which to hold conversations, share information, establish a presence, build relationships, strengthen a company's reputation, and foster trust. These functions are reflected in SLO theory in terms of building relationships through communicating and sharing information to stakeholders, listening to stakeholders, and establishing a reputation and earning credibility and trust in order to obtain the social licence to operate (Thomson and Boutilier, 2011). A key function of the SLO is the need to build relationships with stakeholders, rather than simply gain their approval or support, as was noted by Parsons et al. (2014) and Owen and Kemp (2013).

The strong link between the SLO and the use of Twitter is particularly important for TOCs, for whom having a SLO from stakeholders is critical to their operations. Jijelava and Vanclay (2014) indicated that engaging with stakeholders can lead to proactive actions that may increase support for an organisation. In the case of TOC stakeholders, and customers in particular who represent the largest share of revenue (Abrams, 2015), it is particularly important to gain acceptance for their operations in order to maintain and extend their customer base. This is especially important as stakeholders include those who can affect a company's profitability (Graafland, 2002). While companies may have a legal right to operate, opposition from stakeholders can negatively impact an organisation's operations (Boutilier and Zdziarski, 2017). Pushback on TOC operations from stakeholders can have a negative impact not only on revenue but can also threaten franchise and licensing agreements from the government. TOCs must have a reputation for being reliable, honest, and keeping their promises in order to be seen as credible (Thomson and Boutilier, 2011). Furthermore, a train operating company's reputation can be affected by their stakeholders' perceptions (Gunningham et al., 2004; Joyce and Thomson, 2000). Indeed, complaints and passenger satisfaction affect the reputation of the TOC and are taken into consideration when the Office of Rail and Road considers new open



access applications (Office of Rail and Road, 2020a). As a result, building relationships with stakeholders and having the SLO is important to the TOCs' continued and successful operations.

In summary, the existing literature has discussed the main role played by the use of social media, such as the advantages of engaging with customers and improving customer relationships with companies, which can serve to increase stakeholders' loyalty and trust in brands (Laroche et al., 2012). The use of social media, however, can also damage a company's reputation as a result of negative word of mouth publicity due to an unpredicted incident (Pfeffer et al., 2014). In addition, the impacts of social media on TOCs have been overlooked, particularly in the context of the UK. Therefore, this study aims to examine the perspectives of TOC staff regarding their use of Twitter as a tool for engaging with their stakeholders in order to improve transport services in the UK.

### **5.3 Methodology: Analysis of stakeholder engagement through train operating company Twitter accounts**

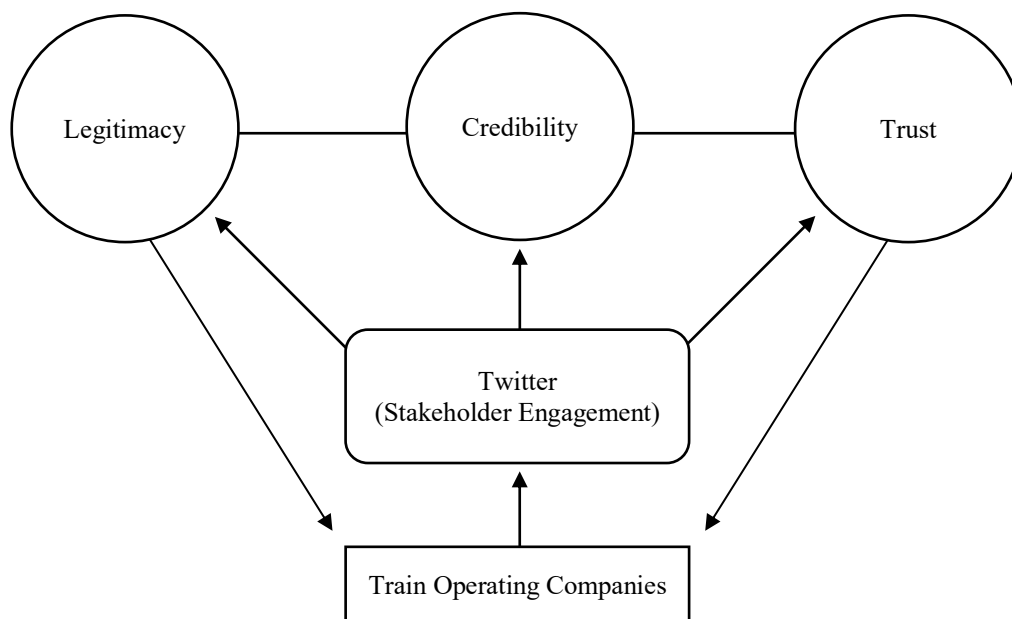
#### *5.3.1 Conceptual framework*

This research is based on the theory of the social licence to operate, in particular Thomson and Boutilier's (2011) definition. This theory has been frequently cited in the SLO literature and focuses on the core aspects of the SLO, namely the relationship between a company and its stakeholders (Brueckner and Eabrasu, 2018). Stakeholder engagement is key to obtain the SLO (Thomson and Boutilier, 2011). This study uses Twitter and is focused on the three key SLO components: legitimacy, credibility, and trust (see Table 5.1 and Figure 5.1) (ibid., 2011).

**Table 5.1** Key required components for the social licence to operate

SLO Requirement	Definition
Legitimacy	<ul style="list-style-type: none"> <li>• Legitimacy is gained by engaging stakeholders and communication of the company’s activities.</li> <li>• Legitimacy can be gained by listening to stakeholders.</li> </ul>
Credibility	<ul style="list-style-type: none"> <li>• Credibility can be achieved by demonstrating openness and transparency in the provision of information and a company’s decision making.</li> <li>• Credibility is earned when companies are reliable, honest, and keep their promises.</li> <li>• Credibility is gained when companies demonstrate reliability by listening to stakeholders and responding to feedback.</li> </ul>
Trust	<ul style="list-style-type: none"> <li>• A basic level of trust is formed through honesty and reliability.</li> <li>• A full level of trust is created when communities believe that companies operate in the best interests of the community.</li> </ul>

*Source: Thomson and Boutilier (2011).*



**Figure 5.1** Theoretical framework of train operating company use of Twitter for obtaining the social licence to operate

*Source: Author, developed from Thomson and Boutilier (2011).*

### 5.3.2 *Data collection*

Semi-structured interviews allow for follow-up investigation of specific answers given by participants (Kvale and Brinkmann, 2009). In-depth semi-structured interviews were used to gain an understanding of the engagement practices utilised by TOCs using Twitter and to learn more about the role of these practices in achieving a social licence. This approach allows for a deeper delve into understanding the attitudes and perceptions of TOC staff with regards to using Twitter, which cannot be determined through content analysis.

To validate the data, triangulation of the interviews was undertaken to establish coherency in the themes that emerged (Creswell and Creswell, 2018). As private rail operators are not subject to freedom of information laws (Booth and Richardson, 2001) and are not transparent to the public due to commercial sensitivities (Abrams, 2015), group interviews that would have included multiple operators were not selected as the sharing of information in a setting with other rail operators may result in certain information being withheld. Furthermore, participants were given the opportunity to remain anonymous in all their responses or in specific responses, and in relation to the mention of specific TOCs, in order to protect sensitive information.

The interview questions were designed to understand which requirement (from legitimacy, credibility, and trust) of the SLO is reflected in or missing from TOC Twitter usage. In addition, the questions were formulated to gain insight into what the perceptions of TOC Twitter use are across these three requirements. Finally, the questions covered the risks and challenges for TOCs in using Twitter.

The interview data was coded using NVivo 11. As this study was undertaken in the context of a specific theory, preliminary codes were determined to reflect the themes from SLO theory, although additional codes were added to provide flexibility in the data analysis as well as to examine any unanticipated themes (Creswell and Creswell, 2018).

### 5.3.3 Selection of participants

In total, 23 individuals were interviewed over the course of 21 interviews conducted between December 2018 and July 2019. The participants were selected from each of the 20 private train operating companies that provide services entirely within the UK. These operators consisted of open access and franchise operators. As private train operators, concession operators were also invited to participate but declined to participate in the interviews. With the exception of London North Eastern Railway (LNER), all the TOCs interviewed were private at the time of the interviews. These operators represent all forms of service types, which include airport rail links, commuter, regional, and intercity services (see Table 5.2).

The interviewees' professional experience with social media ranged from 1 year to 10 years, with 74 per cent indicating they had 5 or more years of social media experience. The participants represented all open access and franchise operators in the UK. The interviews ranged in length from 50 to 105 minutes.

**Table 5.2** Overview of train operating companies participating in interviews

<b>Train operating company</b>	<b>Service type</b>	<b>Passenger journeys</b>	<b>Twitter created</b>
<b>Franchise operators</b>			
c2c	Commuter	49.1M	2011
Caledonian Sleeper	Intercity	0.3M	2014
Chiltern Railways	Commuter Regional	29.3M	2009

CrossCountry	Intercity	40.7M	2010
East Midlands Trains	Intercity Regional	26.7M	2008
Govia Thameslink <sup>13</sup>	Commuter Regional Airport rail link	300M	2010
Greater Anglia <sup>14</sup>	Commuter Regional Airport rail link	84.9M	2010
Great Western Railway	Commuter Intercity	100.1M	2008
London North Eastern Railway	Intercity	22.3M	2011
Northern	Regional	101.3M	2010
ScotRail	Commuter Regional	97.8M	2009
Southeastern	Commuter	183.2M	2011
South Western Railway	Commuter Regional	216.0M	2011
TransPennine Express	Intercity Regional	29.2M	2009
Transport for Wales Rail	Commuter Regional	34.1M	2009 <sup>15</sup>
Virgin Trains	Intercity	39.5M	2009
West Midlands Trains <sup>16</sup>	Commuter Regional	78.7M	2009 <sup>15</sup>
<b>Open access operators</b>			
Grand Central	Intercity	1.5M	2014
Heathrow Express	Airport rail link	6.2M	2009
Hull Trains	Intercity	1.0M	2014

*Passenger journeys source: Heathrow Express (2020b) and Office of Rail and Road (2020b).*

Interviewees were selected based on holding positions that included responsibility for TOC Twitter accounts, including the following tasks:

<sup>13</sup> Franchise includes Gatwick Express, Great Northern, Thameslink, and Southern railways.

<sup>14</sup> Franchise includes Greater Anglia and Stansted Express railways.

<sup>15</sup> Transport for Wales Rail and West Midlands Trains created new Twitter accounts when the franchise changed operators. The original franchise dates are used as TOC staff did not change in the franchise transition and provided continuity in Twitter usage.

<sup>16</sup> Franchise includes London Northwestern Railway and West Midlands Railway.

- Creating and disseminating content on Twitter;
- Development and compliance with policies regarding the operator's use of Twitter;
- Management of staff whose responsibility is to monitor, share content, and respond to customer queries;
- Coordination with departments across the TOC.

Outreach to participants was conducted by sending direct messages to each operator's Twitter accounts, TOC customer service emails or webforms, identifying and emailing individuals via LinkedIn, or through professional networks. The messages requested contact information for the person responsible for the management of the operator's Twitter account. Once these details were provided, or if there was direct contact from staff responsible for the Twitter account, further communication provided more details about the scope of the research as well as information on participating in an interview.

#### *5.3.4 Interview format*

In obtaining a SLO, there are two participants in the process, the companies seeking the SLO and the stakeholders who determine if a SLO should be given to the company (Demuijnck and Fasterling, 2016). These interviews were therefore focused on the train operating company's use and goals for social media use in this process. The participants were given the option to meet at a location most convenient to them. As such, most of the interviews took place at the offices of the train operating companies, except for two interviews that were conducted at the University of Westminster. The interviews were conducted with the participants on a 1-1 basis. Two interviews were conducted, at the request of the participants, with an additional participant from the same company and with responsibility for social media policy and use. Following the interview, the recordings were transcribed. Transcripts were then provided to the participants to check for accuracy.

## 5.4 Findings: Stakeholder engagement and train operating company Twitter usage

Overall, the findings indicate that train operating companies are using Twitter in a manner that reflects key aspects of the social licence to operate, although with only a limited group of stakeholders, their customers, rather than wider stakeholder groups. TOCs recognised the importance of Twitter in protecting or improving their reputation, gaining credibility, and being seen as trustworthy. Reputation and trust emerged as the key themes that guided the use of Twitter by TOCs. Although there are risks involved in using Twitter, including the inability to control messaging from Twitter users (Aula, 2010), there is an understanding that this social media platform plays an important role in stakeholder engagement for train operators.

### 5.4.1 Train operating company usage of Twitter to gain legitimacy

Engaging with stakeholders and communicating with them is the core of legitimacy (Gilley, 2006; Taylor, 2019) and all the interviewees were aware of the importance of Twitter in achieving this. Each of the interviewees defined social media as a tool for engagement and communication. In particular, they defined social media as a space for real-time interactions and instant responses to their customers. *“Social media at TOCs needs to be more responsive. It needs to be considerate of the needs of the customer, right at that moment in time because those needs are immediate”* (Franchise customer experience manager). Of the various social media platforms, Twitter was considered by each of the TOCs to be their primary social media application. *“Twitter’s more the information comms, a little bit of marketing, community building, but these are the general main feed for the customer information and customer communications”* (Franchise social media manager). Other forms of social media were viewed as predominantly marketing vehicles, with limited or no capabilities for customer service or

real-time information. *“Instagram’s the marketing one to deal with that. We wouldn’t answer them on Instagram, we highlight to them where to go for customer information. Facebook, a bit half and half. We mainly put out marketing information, but we answer customer queries on Facebook as we would Twitter”* (Franchise social media manager).

As TOCs experience major service disruptions, the sharing of real-time information is of particular importance for rail operators (Pender et al., 2014). The need to put out information in a timely manner was mentioned by all TOCs as a function of Twitter that is critical for their operations. Due to the significant increase of tweets during disruptions, the immediacy of sharing information and responding to customers was identified as a unique aspect of Twitter. *“I think where it differs for railway operators as opposed to other industries is obviously, during disruption, is the massive spikes [of tweets] we see”* (Franchise customer information manager). There was an understanding that stakeholders, and specifically customers, were looking for information explaining why and how disruptions were affecting services. *“It’s got to be really speedy and accurate. [It’s a] fast-moving environment, especially when they have disruption and customers are fighting for information about why the services stopped and what we’re going to do to get them moving and what compensation they’re going to get”* (Franchise social media manager).

One interesting finding was that some companies had more limited views of components of the SLO. Operators deviate from the SLO in terms of what constitutes a stakeholder with the focus of Twitter use being customer engagement rather than engagement with a wider group of stakeholders. In addition, the interviews revealed that there was limited use of Twitter in achieving legitimacy and the potential wider application of the social media platform for engaging with other fundamental stakeholders. In other words, TOCs in the UK are aware of



the power of social media in terms of communicating and engaging with their own customers, but are not aware of how they can use it to gain legitimacy among a broader set of stakeholders, including local government bodies, local residents, potential new customers, state/provincial government bodies, investors, business owners, etc.

#### 5.4.2 *Train operating company usage of Twitter to gain credibility*

In addition to sharing information, engaging with customers can demonstrate their listening to customers' concerns, a company's commitment to their customers, and transparency (Ott and Theunissen, 2015). Similarly, TOCs are using Twitter to not only listen to their stakeholders, but to respond to their feedback. The real-time nature of Twitter also allows TOCs to respond to customer issues with a level of immediacy. This extends to issues that occur during journeys, with Twitter staff being able to contact train crew or station staff immediately. *"If there was something specific on a train, I could get in touch with the onboard manager. We've got access to the people that we need to, in order to be able to get the best possible outcome for the customer"* (Open access operations manager). The desire to quickly respond to customers suggests TOCs are conscious of their needs and feel a duty to respond to those needs to maintain a positive relationship with them.

Adapting open, honest, and transparent messaging is key to building and maintaining credibility (Thomson and Boutilier, 2011). Sharing the information in a transparent means is felt to be in the best interest of their passengers as disruptions affect their journeys. *"It's just honesty and transparency. It's like the same way that you build trust with people in your team or with friends and relatives. You'd be open and as transparent as you publicly can be honest with people"* (Franchise customer information manager). Understanding the expectations of

customers is especially critical during times of service disruption, when TOCs must anticipate their needs. To do this, they use analysis of prior incidents to provide answers to commonly asked questions and proactively sharing disruption information to better assist customers in a quick, timely manner. *“You get into one of those disruptive instances where you’re using proactive messaging, trying to answer the questions before they’re coming in, which is our way of managing volumes, what we think the customers are going to be looking for”* (Franchise social media manager).

To engage with customers effectively, it has become increasingly common for train operators to adopt a casual tone of voice. The informality of tweets humanises a relationship and can lead to a strengthening of the relationship between customers and companies (Comm, 2010). All but two of the TOCs have shifted from a standardised tone of voice to a more casual tone (see Table 5.3). The use of non-standardised messaging allows for a Twitter account that is more personable and relatable to the customer. As Twitter accounts have become one of the main methods for TOCs to engage with their customers, adopting a more casual tone of voice allows them to respond to customer queries and tweets in a personalised way.

*“Scripts don’t work on social media. Customers know when they’re having a corporate response and they don’t like it. They can see through it. They like us to be direct. When we moved it [social media] in-house, we got rid of the scripts and straightaway customers came back. We were getting a lot of feedback, people were saying, ‘I’m getting a more honest approach.’ So, customers appreciate it more. If we went back to it as being scripted, I think the interactions would drop because people would think: ‘Oh, I’m just going to get an automated response’”* (Franchise communication manager).

**Table 5.3** Train operating company Twitter strategies for credibility

Train operating company	Tone of voice	Response time	Response rate goal
TOC 1	Casual	5 minutes	60%
TOC 2	Casual	No time frame	100%
TOC 3	Casual	No time frame	100%
TOC 4	Casual	No time frame	No rate goal
TOC 5	Casual	No time frame	No rate goal
TOC 6	Casual	No time frame	No rate goal
TOC 7	Standard	No time frame	No rate goal
TOC 8	Casual	15 minutes	70%
TOC 9	Casual	Unspecified	Unspecified
TOC 10	Standard	10-15 minutes	100%
TOC 11	Casual	8 minutes	100%
TOC 12	Casual	5-10 minutes	100%
TOC 13	Casual	No time frame	100%
TOC 14	Casual	1-3 minutes	40%
TOC 15	Casual	No time frame	Unspecified
TOC 16	Casual	5 minutes	100%
TOC 17	Casual	20 minutes	95%
TOC 18	Casual	10 minutes	80%
TOC 19	Casual	No time frame	100%
TOC 20	Casual	5-10 minutes	100%

Not all TOCs have adopted a casual approach to tweets, with a standard tone of voice used more by open access operators than franchises. Providing a standardised response is thought to demonstrate reliability and consistency to their customers. *“They reflect the fact that the essence of our brand is about just being a reliable service provider that just does a good job with the things that are important to customers at a price that’s right”* (Open access customer policy manager). Despite this more corporate tone, however, staff are still able to show their own personalities. *“We do encourage colleagues to let their personality across, as well, because we don’t want it to come across as sterile. Social media is a friendly and*

*conversational place most times*” (Open access communications manager). Even with the standardised tone, TOCs recognise the importance of the informality indicated by Comm (2010).

Evaluating Twitter use is key to TOCs understanding the needs of their customers and effectiveness of their engagement with them through the social media platform. Using feedback received on Twitter, TOCs can identify areas where the customer experience can be improved (Mogaji and Erkan, 2019). This is particularly important as it allows TOCs to respond to those needs and demonstrate their commitment to their stakeholders (ibid., 2019). Having the immediate feedback from customers allows TOCs to implement practices quickly without the need for studies to be conducted. *“Everything that comes in that we think that we can fix, or we think that somebody should know about, we forward it to them straightaway”* (Franchise social media manager). Response rates to customer queries or mentions are a key performance indicator on Twitter, with operators aiming to respond to a minimum number of messages within a specific time frame (see Table 5.3). These response times are used to determine if they are providing the level of service that is expected in a real-time environment. *“We get through, normally in any period, 70-75 per cent of our responses within 10 minutes. The ones that we can’t get to in 10 minutes are dealt with in half an hour. I’ve asked to get to all of them, [with] 80 per cent dealt with in 10 minutes”* (Franchise customer experience manager). TOCs have also turned to Twitter to understand how they are performing. To do this, an evaluation is performed to include the percentage of Tweets responded to, sentiment analysis, message analysis, and surveying stakeholders about the TOC’s effectiveness on Twitter. *“We’re tagging everything according to topic so we can analyse it. You can mark the tone of messages, whether it’s positive, negative, or neutral, and then at the end of an exchange, whether you’ve been able to resolve the query”* (Franchise social media manager). This feedback not only gauges the

effectiveness of Twitter, but also provides valuable feedback on services that can be shared with other departments. *“I do a weekly report on the type of contact that we have; how many people contacted us; sentiment where positive, negative and neutral; and an engagement report”* (Franchise customer engagement manager).

A noteworthy finding is that TOCs largely appear to assume that credibility is automatically given by customers. TOCs are using their Twitter accounts to improve the customer experience rather than needing to earn credibility and seek approval from stakeholders. TOCs use Twitter to build relationships with customers, but Twitter is not used for gaining credibility outside of its customer base. Essentially, TOCs recognise the importance of building relationships with customers, however their actions are limited by not seeking to build relationships with wider stakeholder groups or those that are critical of or oppose the TOC’s actions.

#### *5.4.3 Train operating company usage of Twitter to gain trust*

Establishing credibility leads to earning the trust of stakeholders (Thomson and Boutilier, 2011). This can be seen as customers are increasingly turning to Twitter for information or customer service functions. For some operators, the increase of Twitter enquiries comes at a time of decreases in traditional contact methods such as telephony, web forms, emails, and written correspondence. *“The contact centre, so that’s either telephone or written correspondence, they’re lucky if they deal with 1,500 in a week, whereas we’re potentially dealing with 10,000* (Franchise social media manager). Customers are seen to be turning to Twitter for customer service enquiries due to the accuracy of information provided as well as the quick response, which is often provided faster than traditional contact methods. *“The expectation is you can get a response now. Where, pre-internet days as it were, you’d probably*

*have to write a letter or make a phone call, and there was the length of time to be able to do so was a lot different. It's shifted towards Twitter"* (Franchise digital manager). That customers have turned to TOC Twitter suggests that TOCs have earned the trust of their stakeholders.

Although TOCs can respond to stakeholder feedback, there is recognition that Twitter is a platform that can become threat to trust (Aula, 2010). The negativity on Twitter from users led one franchise customer relations manager to state: *"I think it's quite evil. Some of the positive stuff is now being massively outweighed by the negative stuff. So it's fundamentally evil, I believe"*. Due to the nature of social media as a platform for information being shared from the ground up, Tweets can create negative comments about the TOC. This is particularly concerning to TOCs as the media actively monitors Twitter to publish stories that may reflect negatively on a TOC and has the potential to harm the reputation of the operator. *"People can jump on the social media feed about an incident that's happened to them and completely dominate the feed and get everybody jumping on top of it all, the campaign groups will all jump on, and something becomes the news. We see journalists using the Twitter feed to pick out stories"* (Franchise customer relations manager). Further, stakeholders for TOCs differ from other industries as they are providing services that are used by many, especially commuters, on a daily basis. As a result, the experience of a passenger, particularly when experiencing negative events, can end up on social media. *"They want something that's either transactional or it's an emotional moment for them or, in social media, they want to kick us or point out our failings somewhere. Why sling mud in isolation when you can do it in public?"* (Franchise customer relations manager).

A key function of the SLO is to build relationships with stakeholders (Owen and Kemp, 2013; Parsons et al., 2014). Twitter is seen by TOCs as a method of building relationships with

customers. There is an acknowledgment that, while Twitter is about information sharing and responding to stakeholders, there is a perceived desire by customers to have relationships with the TOCs. Having that relationship was seen as key to building trust with customers, in particular. *“They want to have that relationship with [TOC 13]. Over time, we will get that trust back and then have that ability to have that relationship with customers and I think, maybe, some people want that, they want to have that relationship”* (Franchise communications manager). Twitter was viewed as one of the ways to foster this relationship building. TOCs will monitor and respond to tweets that aren’t directed towards them. In some instances, TOC Twitter staff have responded to those messages and gone beyond typical customer service or information sharing functions to engage with them. *“A customer had left her home-baked muffins onboard, she was really upset. She just said [via Twitter], ‘Left my home-baked muffins so whoever finds them is in for a treat.’ We arranged for a local baker to deliver these baked good to her office. She came out of her meeting and said, ‘I wasn’t expecting this’ and she tweeted it”* (Franchise social media customer service manager). For some TOCs, they strive to go above and beyond for their customers and strengthen their relationships with them. There is a sense of wanting to look after the best interests of their customers, even outside of their services.

Positive customer tweets can result in the building of online communities that enhance the reputation of the TOC. Twitter, in particular, was identified by Kietzmann et al. (2011) as a platform for conversations and building relationships while strengthening reputation and building trust. One unique aspect of TOC Twitter is the presence of relationships between TOCs and online rail enthusiast communities. *“We get quite a lot of train spotters and industry fanatics, and those type of people on there who ask obscure, specific questions about things, which is remarkable. It’s quite a lot of them, it’s not like once a month we get some random”*

(Franchise customer information manager). These enthusiasts create communities in their interactions not only with TOCs, but also with other enthusiasts and stakeholders. *“There are a lot of positives in terms of train spotters, they’ll talk between themselves. So, they’ll ask for a train set and where it’s going up and down to, and you have a little bit of train chat with them”* (Franchise social media customer service manager).

Online communities also have the potential to negatively impact a TOC’s credibility and threaten its reputation. Opposition from stakeholders can negatively affect a company (Boutilier and Zdziarski, 2017). Stakeholder anger can manifest itself in parody TOC accounts or online groups on various social media platforms, resulting in the TOC losing control over the messaging. To combat this, TOC Twitter staff monitor these accounts and, at times, will reach out to partner with their members in order to address their concerns. However, this is not always successful: *“They’re commuters, very unhappy commuters, some of them are ex-commuters. They’re very influential. They are constantly contacting MPs and writing to us. They want us to lose our franchise. They don’t believe anything we say, and they don’t trust us, so it’s a real problem”* (Franchise media manager).

One finding from the interviews is, surprisingly, that despite the acknowledgement of the danger Twitter poses to a TOC’s reputation, there is a resignation that little can be done to effectively respond and mitigate opposition to the TOC’s activities. Instead, TOCs focus on building relationships with customers that already approve of their actions. Another interesting finding is the extent to which some TOC Twitter teams go in making individual customers happy. The story of sending cupcakes to a passenger goes well beyond simply responding to them and empathising with them on Twitter. These gestures are outside the scope of the TOCs’ operations and were done without the expectation that their actions would lead to positive



publicity on Twitter. There is an intrinsic motivation for these actions, rather than the types of stakeholder engagement seen with the SLO, which focuses on a company's operational activities. Overall, TOCs recognise that developing and fostering relationships with customers can build trust and that opposition can result in negative publicity and affect their reputation. Despite this, there is a lack of strategic planning in mitigating the effects of opposition.

### **5.5 Discussion: The social licence to operate and train operating company stakeholder engagement through Twitter**

One of the main findings was the lack of stakeholder engagement outside of TOC customers. That TOCs focus their engagement on Twitter nearly entirely on one stakeholder group, their customers, suggests that TOCs are not using the social media platform to its full potential. The strong focus on customers represents a break from SLO literature which largely focuses earning the trust of the wider community and a broader range of stakeholders (Gunningham et al., 2004; Jijelava and Vanclay, 2014; Joyce and Thomson, 2000; Owen and Kemp, 2013; Parsons et al., 2014). Primarily engaging with customers might reflect the focus on profits, as customers represent the largest source of revenue (Abrams, 2015). The focus on customers and not the wider community may also reflect the franchise and open access system in the UK. When franchise and open access agreements are considered, the responsibility for stakeholder engagement in this process falls on government agencies, rather than on the TOCs themselves (ibid., 2015). As TOCs are focused on services, rather than infrastructure programmes that may affect wider stakeholder groups, their primary concern is providing a positive passenger experience and achieving high levels of passenger satisfaction.

Stakeholders aside, the ways in which TOCs use Twitter to obtain legitimacy do reflect SLO theory. Thomson and Boutilier (2011) defined the means to gain legitimacy as engaging stakeholders and communicating actions to them. The interviewees acknowledged the importance of Twitter as a stakeholder engagement tool and this is reflected by Twitter becoming the primary social media channel across all TOCs. Twitter has further become the main form of communication with customers for real-time information. This suggests that TOCs are responding to their customers by adapting this platform in a space where customers prefer to receive their information and interact with TOCs. The legitimising of TOC operations can be inferred through the interactions and types of requests that operators are receiving through Twitter. The high volumes of customer interactions suggest that they see TOC Twitter accounts as a legitimate and credible source of information.

Honesty, openness, and transparency when engaging with stakeholders is key to obtaining credibility (Thomson and Boutilier, 2011). One of the ways TOCs use Twitter to achieve this is through adopting a casual tone of voice and by providing real-time, accurate, honest, and relevant information. Sharing real-time information, particularly in times of disruptions, suggests that TOCs are using Twitter to openly and honestly acknowledge situations that may present a risk to their reputation. This may be partially due to necessity of the situation, but also as TOCs view communicating honesty as necessary to being seen as credible. Despite this, Twitter may present a challenge in maintaining transparency in certain situations as the tweet limit of 280 characters limits the amount of information that can be shared. Using a casual tone of voice may make TOCs more relatable to customers and result in them as being seen as genuine and honest. This reflects Comm's (2010) assertion of Twitter's informal nature lends itself to relationship building between companies and their customers. Not all TOCs have adopted a casual tone, however, as open access operators prefer a standardised tone of voice.

The reasons for choosing one tone over the other may reflect the risk-management perspectives that SLO theory originates from (Boutillier et al., 2012). That franchise operators have adapted a casual tone suggests this tone makes them relatable and fosters a better relationship with customers, while open access operators are more focused on standardised or corporate messaging suggesting they may be more risk averse by keeping to more strictly controlled messaging. As the SLO is based on relationship building (Owen and Kemp, 2013; Parsons et al., 2014), a casual tone of voice may better facilitate the relationship between the customer and TOC and more closely reflect SLO theory.

The findings suggest that TOCs are placing a high level of value on providing a positive customer experience and achieving high levels of customer satisfaction. This can be seen through listening and responding to customer enquiries and feedback, which are key to being seen as credible and important to building and maintaining relationships with stakeholders. (Thomson and Boutillier, 2011). Using Twitter, TOCs can gauge customer sentiment and receive feedback directly from customers. The feedback from customers suggests that TOCs recognise the importance of understanding their customers' needs. TOCs are using metrics such as response times and response rates which suggests that they are taking the feedback they receive from customers seriously and view Twitter as an important engagement tool. This reflects literature on brand communities which indicates that engagement with customers leads to a stronger relationship (Hudson et al., 2016) and has a positive effect on customers' perception of a company's reputation (Dijkmans et al., 2015).

Despite TOCs using Twitter channels to engage with customers, not all TOCs respond to every tweet or message. This may suggest that TOCs do not have the necessary resources to respond to all customers. The lack of engagement may also reflect a belief that not all customers need

to be responded to as the engagement is not necessary to maintain credibility. As the findings indicated, there is an assumption that credibility is automatically given by customers and their approval is not needed. This is a break from SLO theory, which acknowledges the importance of earning approval for their operations from stakeholders (Owen and Kemp, 2013). The focus on the customer experience may explain why TOCs have adopted a casual communication style and focus on using customer feedback to improve services rather than attempting to gain approval for those services that need improvement, while operators using a standardised communication style may not feel the pressure to adopt the casual style and instead focus on maintaining consistent corporate messaging. This assumption of credibility may also explain the differences in response rates and times. TOCs who adopt metrics suggests TOCs are seeking to improve the customer experience. TOCs who do not have requirements for response times and response goals may be less concerned with improving the customer experience as they do not need to gain credibility as it is assumed to exist despite the lower levels of customer engagement. Furthermore, TOCs are keeping their promises to customers by sharing their feedback across the TOC. However, the lack of follow-up with customers on the actions taken from sharing feedback may lead customers to believe the TOCs are not listening to them, feeling as though their feedback is only being acknowledged with the promise of action without passing along the feedback, which can negatively affect the SLO. As Thomson and Boutilier (2011) noted, keeping promises is critical for credibility.

The goal of earning trust by engaging with stakeholders through Twitter was evident throughout the findings. The volume of tweets and decrease in traditional forms of customer contact suggest that customers turn to TOC Twitter as they see TOC accounts as a credible source for information and assistance. This may explain why TOCs place an emphasis on providing customer service functions and responding to customers, which supports Howard's

(2020) finding that TOCs have moved beyond communication with customers to include customer service functions. That TOCs focus on building relationships and fostering online communities also suggests that they see this as having more of a positive impact on reputation and building trust, offsetting any potential opposition or threats. As Owen and Kemp (2013) noted, acceptance of a company's operations is based on relationships with stakeholders and is built on trust. One of the more interesting findings was that TOC Twitter teams will go beyond the scope of their services to assist individual customers, such as replacing forgotten items. These individualistic actions suggest there is a genuine and deep concern for their customers, as well as a desire to form a much closer relationship with them. TOCs are also building communities online to engage with customers and promote a positive image. This suggests TOCs understand the value of building loyalty among customers. Encouraging the relationship as well as interactions between customers reflects Laroche et al.'s (2013) findings that this engagement leads to loyalty and trust.

Reputational risk through Twitter was acknowledged by TOCs, however there seemed to be little inclination to mitigate any negative publicity, outside of service disruptions, shared through Twitter. TOCs did recognise the dangers posed to reputation during times of disruption and the need to respond to affected customers, reflecting Pender et al. (2014). Responding to these customers suggests that they are more interested in managing the situation by improving the customer experience despite the challenges of a negative situation. This supports Ott and Theunissen (2015) study that indicates providing status updates and engaging with affected customers is key to demonstrating transparency and listening to customers. Despite acknowledging the risk negative tweets pose to a company's reputation, only one TOC attempted to combat this. This suggests that TOCs may not be adequately prepared, either strategically or with resources, to handle this type of opposition. This may also reflect the

nature of TOCs as providing an essential service where customers may not have alternate transport options and are reliant on the TOC's services, leaving little incentive for TOCs to respond to opposition. By not taking these comments seriously, however, they run the risk of a firestorm as discussed by Pfeffer et al. (2014) which may catch the attention of government officials and, ultimately, may pose a danger to their franchise or operating agreements. That all but one TOC recognised this suggests a lack of understanding of the full impact negative tweets can have on the TOC.

## **5.6 Conclusions: Contributions, policy recommendations, future research from the analysis of Twitter stakeholder engagement by train operating companies**

This study demonstrates the interrelationships between the SLO, social media, and public relations. This highlights new areas for exploration and engagement and offers new possibilities for establishing an interactive, meaningful relationship through which to manage the corporate image of train operating companies in the UK. The results of this study indicate that TOCs are using Twitter as a means of maintaining a social licence to operate. Key components of the SLO - stakeholder engagement, legitimacy, credibility, and trust (Thomson and Boutilier, 2011) - were evident in the interactions with stakeholders, the evaluation of stakeholder sentiment, the importance of sharing feedback across the TOC, and the impact of losing control of the messaging. A further measure of the SLO can be seen in the high volumes of interactions between the TOC and stakeholders through Twitter.

In terms of contributions, this research adds to the literature by providing a qualitative investigation into the use of Twitter from the perspective of the train operating companies' Twitter staff. Previous research has focused on the functional uses of Twitter by public

transport operators (Howard, 2020), and this research contributes by providing insight into the rationale for Twitter use and the perspectives of TOC staff with regards to their use of Twitter. Furthermore, this study also adds to the literature on the social licence to operate by providing a qualitative examination within the context of rail transport. Building upon Howard's (2020) analysis of TOC Twitter, this study provides an understanding of how Twitter is used to maintain a TOC's social licence to operate with its customers.

From a practical perspective, the lessons learned in this examination of Twitter use by TOCs suggest several policy recommendations. First, it is crucial for TOCs to create a strategic plan to develop the use of social media with their stakeholders. This means dedicating resources including technological, financial, and human resources to social media development and management in order to meet the demands of the high volumes of stakeholder interactions. Second, TOCs should include Twitter in franchising or other regulatory agreements. This would provide an indicator to stakeholders that the company is accessible and responsive to their needs. Third, TOCs should constantly re-evaluate their Twitter usage as the platform continues to evolve. Finally, TOCs should develop mechanisms for responding to incidents that have the potential to negatively impact a TOCs reputation, such as creating close relationships with the media so that they can respond swiftly and effectively to incidents that have the potential to become a news story and reflect poorly on a TOC.

Limitations should be noted, offering future research opportunities. The degree of TOC Twitter use helps companies and market researchers analyse companies and compare them with other competitors or industry averages. Qualitative analysis should be combined with social media metrics to draw better conclusions about where to increase or intensify social media activities. This research examined private train operators. Additional research of public train operators

would provide a more complete analysis of Twitter use by TOCs. This analysis was also conducted outside of regulatory or franchise frameworks. A future examination of these requirements would provide a better understanding of the regulatory environment affecting the use of TOC Twitter. As this research focused on the perspectives of TOC Twitter staff rather than stakeholders, a qualitative analysis of the effectiveness of TOC social media goals from the stakeholders' point of view would provide a more comprehensive analysis of TOC Twitter. Finally, this study focused specifically on Twitter. Research taken to include current and emerging forms of social media, such as WhatsApp, would create a complete view and comparison of social media activities.



## **CHAPTER 6**

# **Tweeting during a pandemic: Examining the effects of COVID-19 on the use of train operating company Twitter and the social licence to operate**

## **Abstract**

The COVID-19 pandemic had a significant impact on the public transport industry. In the United Kingdom, the government initially urged people to avoid public transport. Once the dangers posed by COVID-19 became apparent, however, the government initiated a stay-at-home order and mandated that travel should only be made by key workers or for essential journeys during the first lockdown. As a result of this messaging and the lockdown, rail passenger journeys plummeted, services were reduced, and franchises were suspended. Within this context, this study examines the role Twitter played in train operating company's messaging during the first COVID-19 lockdown in the United Kingdom through the perspective of the social licence to operate theory. A content analysis of train operating company tweets was undertaken to understand the message themes related to the pandemic and the levels of Twitter user engagement with those tweets. Further content analysis of these tweets was conducted to understand which stakeholders were engaged by train operating companies through Twitter. Tweets were examined between the first day of government-issued advice to avoid non-essential travel on 16 March 2020 through 30 April 2020, which included the first month of lockdown. The findings indicate that train operating companies altered their messaging to include tweets related to COVID-19, with a focus on health and safety, key workers, and transport services during the pandemic. A change was found in stakeholder engagement, with operators engaging the wider community representing a shift from the pre-pandemic use of Twitter to engage only with their customers. As a result of this shift in stakeholder focus, engagement with community-related tweets saw a higher level of engagement over customer-related tweets. The significance of these results should be considered as wider community stakeholder engagement by train operating companies can enhance the operator's relationships with the community and improve their reputation. The

study offers policy recommendations for operators to take full advantage of Twitter in engaging with their communities.

### **Keywords**

Train operating company, COVID-19, Coronavirus, Social media, Twitter, Corporate social responsibility, Social licence to operate, Stakeholder engagement

### **Highlights**

- Twitter use by train operating companies during COVID-19 is analysed from the perspective of the social licence to operate theory.
- The effects of the pandemic on rail services, the health and safety of passengers and the community, acknowledgement and support for key workers, and life during lockdown were key themes of TOC tweets.
- Train operators expanded the focus of their tweets from customers to include the wider community.
- Using Twitter to include the community in messaging results in higher levels of user engagement.

## **6.1 Introduction: COVID-19 in the United Kingdom, train operating companies, and stakeholder engagement**

The COVID-19 pandemic has had a profound impact on the everyday lives of individuals, businesses, and governments around the world. The first two cases of COVID-19 were confirmed in the United Kingdom and announced on 31 January 2020 (BBC, 2020a) followed by the first death from COVID-19 on 5 March (Mahase, 2020). As cases continued to increase, the UK Prime Minister announced on 16 March that non-essential travel should be avoided and encouraged working from home (Johnson, 2020a). One week later, on 23 March, the Prime Minister announced the country would enter a lockdown with legal effect on 26 March in England, Scotland, and Wales (Institute for Government, 2021), and on 28 March in Northern Ireland (BBC, 2020b). The lockdown issued a stay-at-home order for the population, stopped all social events, and closed most non-essential businesses and the hospitality industry, as well as additional organisations such as libraries and places of worship (Johnson, 2020b).

The increase in COVID-19 infections and deaths and government messages urging the avoidance of non-essential travel had an unprecedented impact on the UK's passenger rail industry. By the time of the announcement to stop non-essential travel on 16 March, passenger rail journeys had already dropped 78 per cent compared to the number of passenger journeys in 2019, in the week prior to that announcement (Office of Rail and Road, 2020c). Only 10 days later, when the first national lockdown became legally enforceable, passenger journeys were at 13 per cent compared to 2019 and would continue to fall to a low of 4 per cent by 10 April (ibid., 2020c). In response to the drop in passenger journeys, the government and rail industry reduced passenger rail services on 23 March, providing only a basic level of service necessary for key workers and essential journeys (Department for Transport, 2020c). The

Department for Transport also suspended rail franchising agreements in England and established new emergency agreements that transferred revenue and cost risks to the government, while providing train operating companies (TOC) with funding to order to continue to provide rail services, particularly for key workers (Department for Transport, 2020b). The suspension of rail franchising was ultimately made permanent in May of 2021 when the government outlined a new plan for railways in the United Kingdom (Department for Transport, 2021).

As the pandemic is still ongoing as of September 2021, literature on the effects on the transport industry continues to emerge. Literature has not yet examined train operating company Twitter messaging and stakeholder engagement related to COVID-19. As Bregman (2012) and Howard (2020) noted, Twitter was a vehicle for sharing information and engaging with customers. Howard (2020) further indicated that Twitter functions were reflective of the social licence to operate, which examines stakeholder engagement by an organisation to gain approval for their actions or operations (Thomson and Boutilier, 2011). However, as Thomson and Boutilier indicated, a full SLO is granted when a community, not just customers, believes a company is looking out for their best interests. Given the significance of the pandemic on everyday lives and on the rail industry, Twitter has played a role in pandemic-related messaging from train operating companies. With the pandemic affecting the entire community, not just TOC customers, an analysis of TOC tweets may offer insights into how TOCs used Twitter in response to UK government travel advice and during the first lockdown of the COVID-19 pandemic and provide new insights into TOC stakeholder engagement during the beginning of the pandemic.

This chapter addresses the aforementioned gap in the literature by conducting a content-based analysis of tweets by UK train operating companies with regards to the COVID-19 pandemic. The aim of this research is to analyse train operating company tweets in relation to the COVID-19 pandemic in order to understand themes related to the pandemic and stakeholder engagement. More specifically, this study explores whether Twitter is being used to engage with only TOC customers as noted by Bregman (2012) and Howard (2020), or if pandemic-related tweets reflect a shift to engagement with the wider community reflected in Thomson and Boutilier's (2011) social licence to operate (SLO) theory.

This chapter is presented in the following five sections. A literature review of the effects of COVID-19 on public transport, corporate social responsibility during the pandemic, and the use of Twitter during COVID-19 is provided in Section 6.2. The research methodology is presented in Section 6.3. An analysis of the use of Twitter by train operating companies during the start of the COVID-19 pandemic in the UK is provided in Section 6.4. The discussion is offered in Section 6.5. Finally, the conclusion is presented in Section 6.6.

## **6.2 Literature review: The effects of COVID-19 on public transport, corporate response to COVID-19, and the use of Twitter during COVID-19**

The spread of infectious diseases can be associated with crowded public transport vehicles (Musselwhite et al., 2020). On the London Underground, passengers were found to have a higher risk of infection of influenza-like illnesses, with higher numbers of infection among those who spend more time on or come into more contact with others on the Underground (Goscé and Johansson, 2018). In a study on the spread of COVID-19 in China, an association

was also made between air transport and high-speed trains from Wuhan and the number of COVID-19 cases in destinations (Zhang et al., 2020).

Public transport passengers who paid closer attention to information on the pandemic indicated a perception that public transport was less safe (Dong et al., 2021). The pandemic had increased the level of concern for hygiene on public transport (Beck and Hensher, 2020). Shen et al. (2020) recommended sharing guidelines on the prevention and control of COVID-19 on public transport as well as on guidance on behavioural expectations and traveling safely. In the UK, government advice recommended avoiding public transport to prevent transmission of COVID-19 due to overcrowded vehicles and stops (Marsden and Docherty, 2021).

The effects of government restrictions and transport-related pandemic messaging resulted in a significant drop in passenger journeys for public transport operators. In a review of literature on passenger demand and journeys, Gkiotsalitis and Cats (2020) noted that drops in passenger journeys resulted from public behaviour change due to government guidelines. Seventy-four per cent of cities/towns in Europe recommended the restriction of passengers on public transport (Zhang et al., 2021). The first notable drop in the usage of public transport in the UK occurred on 8 March 2020, when the UK government announced plans to delay, rather than contain, COVID-19 infections (Hadjidemetriou et al., 2020). In Sweden, the government opted for providing recommendations instead of a mandatory curfew or lockdown. Yet despite maintaining normal service levels, as the Public Health Agency's COVID-19 risk level increased, railways and the Stockholm metro saw a decrease in journeys up to approximately 60 per cent (Jenelius and Cebecauer, 2020). With the decrease of public transport use, journeys shifted to alternate forms of transport, with the largest modal shift to cars, walking, and cycling

(Zhang et al., 2011). The government's actions were turning people away from public transport and encouraging a shift to other forms of transport.

As a result of the drop in passenger journeys, many transport operators reduced or cancelled their services. A study of the transport industry in the UK found that it was not prepared for COVID-19, despite the recognition of the importance of transport as an essential service for key workers (Marsden and Docherty, 2021). On 18 March 2020, Transport for London announced the closure of up to 40 Underground stations without interchanges and suspended the Waterloo & City line along with overnight Underground and Overground services (Transport for London, 2020). Public transport operators in Berlin, Washington D.C., Naples, Rome, and Valencia also took various measures such as reducing timetables, shortening operating hours, or closing lines (Union Internationale des Transports Publics, 2020). Due to the decrease in passenger revenue, two of the three open access operators in the UK, Grand Central and Hull Trains, ceased operations for the duration of the first lockdown (Grand Central, 2020; Hull Trains, 2020). Without the demand for journeys, transport operators were losing revenue and operating their networks at full capacity was financially unsustainable.

One means to examine how organisations respond to the needs of their stakeholders, such as during the pandemic, is through corporate social responsibility. Corporate social responsibility (CSR) can be defined as voluntarily using company resources to improve social welfare, resulting in an enhanced relationship with stakeholders (Barnett, 2007; Batty et al., 2016). Companies integrating CSR into business strategies allows them to set themselves apart from competitors, enhance their competitive advantage, and develop strong stakeholder relationships (Carroll and Shabana, 2010). Within the transport industry, a study of intercity bus companies indicated that a company's CSR engagement positively affects customer



satisfaction which leads to customer loyalty (Chang and Yeh, 2017). In an example of CSR in the railway industry, a study by Ridley (2011) indicated that the UK Department for Transport reduced the regulatory requirements for community railways, which have low levels of passenger journeys yet play a socially important role for citizens, to encourage increased usage of these lines, reduce service operating costs, and increase the involvement of communities served by these railways. Companies benefit from CSR through the development of their reputation and legitimacy (Kurucz et al., 2008). This is also reflected in McWilliams and Siegel (2001), where the CSR can contribute to building or maintaining a reputation for quality, reliability, honesty, and trustworthiness. Reputation and legitimacy are key to the SLO as legitimacy forms the basic level of the SLO, while reputation is needed to establish credibility and, ultimately, trust (Thomson and Boutilier, 2011). Improving social welfare can have a positive impact on stakeholders regardless of if they patronise an organisation.

CSR and the social licence to operate can offer insight into the actions of companies during the COVID-19 pandemic. Indeed, as De George (1981) noted, companies have a responsibility, and are accountable to, their stakeholders during times of crisis. During the COVID-19 pandemic, companies were found to exhibit corporate social responsibility by using their resources to help their communities during the pandemic (Ahmed et al., 2021). Companies also focused their support, primarily in the form of donations, to supporting people affected by COVID-19 and medical professionals working to support them (Mahmud et al., 2021). The pandemic provided an opportunity for companies to demonstrate their commitment to the community. For TOCs, this commitment to the community could be seen in their partnership with the government in providing services for key workers.

The CSR responses to COVID-19 largely focus on the communities, which is a key stakeholder group for the social licence to operate. As Brueckner and Eabrasu (2018) noted, there are many definitions of stakeholders, ranging from local stakeholders to broader society. Engagement with stakeholders can lead to the creation of proactive actions that may increase support for an organisation (Jijelava and Vanclay, 2014). Gunningham et al. (2004) suggested that the SLO is simply a response to stakeholder demands and expectations of a business. Another view of the SLO reflects the broader community's view on how policies positively or negatively impact them (Kelly et al., 2017). Trust must be established between organisations, communities, and government so that a full SLO can be earned (Warhurst, 2001). The suspension of TOC franchises by the government and providing government funding to run key services offers examples of how trust can be earned between these government, transport operators, and communities. While a basic level of trust requires honesty and reliability, full trust occurs when communities believe that companies are operating in their best interests (Thomson and Boutilier, 2011). The corporate response to the pandemic, then, can have a positive effect on earning the trust of their communities which will result in the highest level of the SLO being earned by a company.

Twitter provides an opportunity for companies to engage with communities. Literature on the social licence to operate and Twitter is limited to Howard's (2020) study of Twitter use by train operating companies. As discussed, corporate social responsibility reflects the same SLO principles of legitimacy, credibility, and trust. Companies are being driven by creating legitimacy through sharing their CSR information (Gómez-Carrasco et al., 2021). Twitter users were more likely to engage with tweets related to CSR than non-CSR tweets, which was influenced by the frequency of these tweets and resulted in higher levels of information dissemination and endorsement (Araujo and Kollat, 2018). While companies are using Twitter

for CSR communications, they rarely use it as a means for engagement and meaningful two-way conversations which represent full CSR engagement (Okazaki et al., 2020). During the pandemic, Twitter provides a useful means of engaging with stakeholders and disclosing ways in which train operating companies are supporting their stakeholders during the pandemic.

Twitter played an important role in sharing information regarding the COVID-19 pandemic. A study of Twitter usage by politicians suggested that citizens were interested in receiving information about emergencies through Twitter (Haman, 2020). World leaders from the Group of Seven (G7) turned to sharing COVID-19 information through Twitter, using it to quickly communicate with citizens during the pandemic in three main categories: informative, morale-boosting, and political tweets (Rufai and Bunce, 2020). The sharing of messages through Twitter requires a coordinated effort across agencies, and fragmentation can lead to limited public health information being shared by different parts of government (Zeemering, 2021). Gong and Ye (2021) found that American governors were networking with each other to share information and cooperate during the pandemic and increased the number of tweets during weekdays and as COVID-19 grew rapidly (ibid., 2021). Despite the importance of messages from politicians, the sharing of personal COVID-19 narratives of emergency physicians on Twitter was perceived as more effective at communicating health recommendations compared with the impersonal guidance shared by American federal officials (Solnick et al., 2020). Regardless of who was sharing information, Twitter had become an important space for sharing information regarding the pandemic.

As people stayed at home during the pandemic, social media was increasingly used as an accessible tool for sharing medical information, to connect to others such as family and friends, and to share pandemic-related information (Saud et al., 2020). A study of retweeted themes

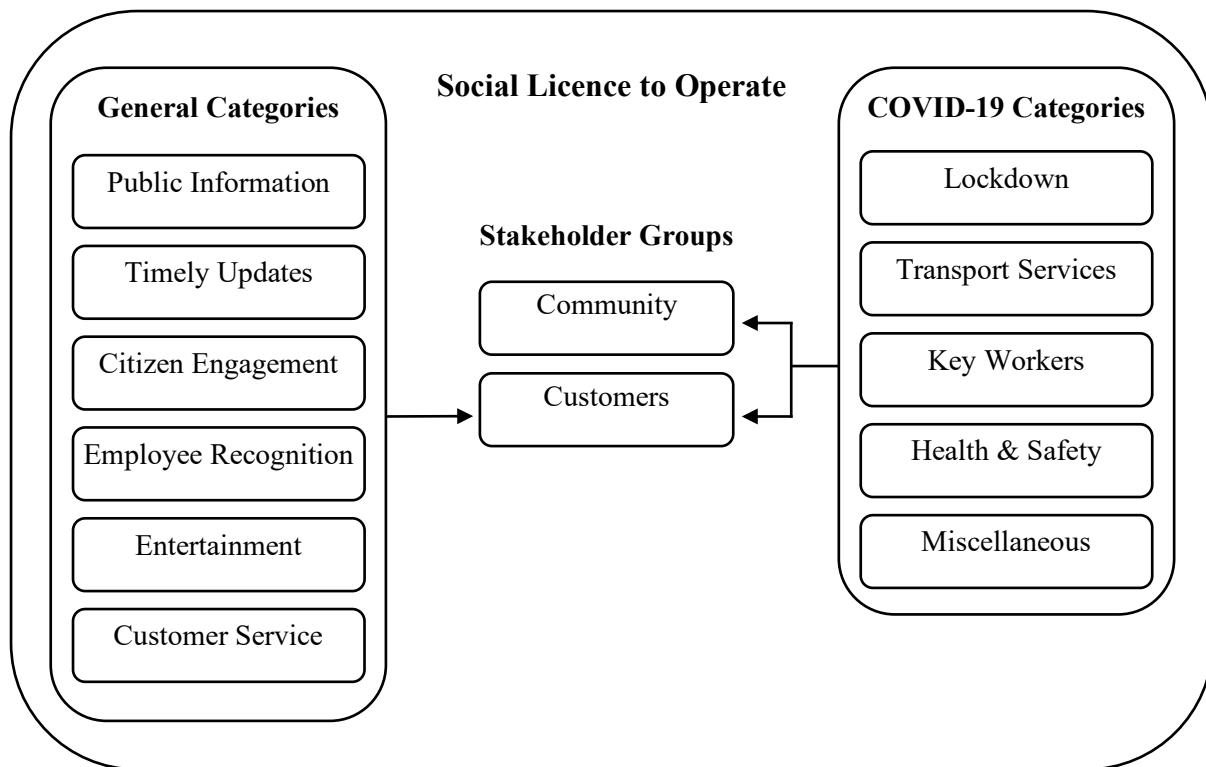
showed that life during lockdown was the most retweeted theme followed by attitudes regarding COVID-19 living during lockdown, social restrictions, political issues, messages about safety, individuals who were infected, support for key workers, work, and COVID-19 facts and news (Thelwall and Thelwall, 2020). To help organise COVID-19 information, hashtags were included in tweets (Gong and Ye, 2021). A study of Canadian public health tweets found that Twitter was being used for three types of functions: information tweets informing or educating readers on COVID-19 risks or transmission, action tweets which encourage certain actions or changes in behaviour, and community tweets which promote community-building and supports (Slavik et al., 2021).

The literature indicates that the pandemic has had a significant impact on the train operating companies with government actions resulting in decreased passenger journeys and reduced services. However, the literature does not provide information on how the pandemic is being communicated to passengers by TOCs. As the literature suggests, Twitter is a place that people are turning to for information related to the pandemic. Further, literature reveals that Twitter can play a part in communicating CSR activities, and those activities during a crisis can positively affect the reputation and relationship with stakeholders, which are also important factors in the social licence. As such, Twitter communication by train operating companies has yet to be examined in the context of the COVID-19 pandemic, resulting in a lack of understanding on how these affect the social licence to operate.

### **6.3 Methodology: Analysis of train operating company tweets and Twitter stakeholder engagement during the beginning of the COVID-19 pandemic in the UK**

#### *6.3.1 Research framework*

The research framework (Figure 6.1) was adapted from Howard's (2020) analysis of functions and policies of UK train operating companies' Twitter accounts, Bregman's (2012) study on the functions of social media by American and Canadian public transport agencies, and Thomson and Boutilier's (2011) social licence to theory. As Bregman (2012) noted, public transport operators use social media to engage with their customers across five categories: 'Public Information', 'Timely Updates', 'Citizen Engagement', 'Employee Recognition', and 'Entertainment'. Howard (2020) found that train operating companies in the UK were using the functions noted by Bregman but added a new category of 'Customer Service', which reflected the evolution of TOC Twitter. Further, Howard (2020) also indicated that TOC Twitter was focused on one stakeholder group, their customers, although Thomson and Boutilier's (2011) SLO theory indicates that full trust is created when the wider community believes companies are operating in the community's best interests. In this study, 'community' is defined as citizens and businesses of the communities TOCs serve, which include both customers and non-customers. The research framework seeks to understand the content of the TOC tweets during COVID-19 and which stakeholder groups they are engaging through their use of Twitter.



**Figure 6.1** Research framework: COVID-19 Twitter analysis

*Source: Adapted by author, drawing from Bregman (2012), Howard (2020), and Thomson and Boutilier (2011).*

### 6.3.2 Data collection and analysis

This study included 28 TOCs in the UK which includes franchise, open access, and concession and public operators. Data collection consisted of 9,325 tweets from TOC Twitter accounts from 16 March through 30 April 2020. These dates were chosen as they reflect the dates between when non-essential travel was discouraged by the UK government through to the announcement that the UK had passed the peak of the pandemic, which includes the UK lockdown implemented on 26 March (Institute for Government, 2021). Using this data, a content analysis of TOC tweets was conducted to determine message content (Table 6.1) and stakeholder engagement. Additional data on likes and retweets of TOC tweets was conducted to measure levels of engagement (Alton, 2019). The data was downloaded into Excel

spreadsheets using the Twitter crawler Vicinitas for each TOC Twitter account. Using Howard’s (2020) methodology, the content of the tweets was hand coded into COVID-19 tweet categories (Table 6.1) and stakeholder tweet categories using Excel. Verification of the accuracy of downloaded tweets was conducted by examining every 50 tweets downloaded from the study time frame, or every other tweet for accounts having less than 50 tweets in the same time frame, from each TOC account and compared with the individual tweet’s identification number to confirm the accuracy of the tweet content with the dates of the tweet posting.

**Table 6.1** COVID-19 tweet categories and descriptions

<b>COVID-19 Category</b>	<b>COVID-19 Category Description</b>
Lockdown	<ul style="list-style-type: none"> <li>• References to the UK lockdown.</li> <li>• References to staying (e.g., self-isolation, quarantine, and lockdown rules) or working from home.</li> </ul>
Transport Services	<ul style="list-style-type: none"> <li>• References to essential journeys and who can use transport.</li> <li>• Service information relevant to COVID-19 (e.g., changes to timetables, onboard services, tickets, services).</li> </ul>
Key Workers	<ul style="list-style-type: none"> <li>• Any mention of key workers, including staff from: the National Health Service (NHS), railways, emergency services, other essential services.</li> <li>• Recognition of key workers (e.g., Clap for Carers).</li> </ul>
Health & Safety	<ul style="list-style-type: none"> <li>• Preventing spread of COVID-19 including self-isolation.</li> <li>• Recognising COVID-19 symptoms.</li> <li>• References to safety and well-being.</li> <li>• References to the health consequences of COVID-19 (e.g., hospitalisations, self-isolation, deaths).</li> <li>• Recognition of providers of health &amp; safety services (e.g., NHS).</li> </ul>
Miscellaneous	<ul style="list-style-type: none"> <li>• Other messages that do not fit the four categories above (e.g., entertainment, non-passenger services).</li> </ul>

Tweets were analysed through several categories including Bregman’s (2012) five categories of social media functions and Howard’s (2020) addition of a customer service function. As

noted by Bregman (2012), 97 per cent of transport agencies indicated that communication with current riders was the most important goal for the use of social media. The further inclusion of customer services as a function also reflects the focus on customers (Howard, 2020). As the tweets from both of these studies revealed a focus on customers and not the wider community, these tweets are categorised as ‘Non-COVID’ with tweets with COVID-19 messages categorised as ‘COVID’ (Figure 6.1). The ‘COVID’ tweets and retweets are further broken down into the following categories: ‘Lockdown’, ‘Transport Services’, ‘Key Workers’, ‘Health & Safety’, and ‘Miscellaneous’ (Table 6.1). These categories were derived from key message themes used by the UK government in COVID-19 related communications regarding the first lockdown, restrictions, travelling, and transport (Department for Transport, 2020b, 2020c; Johnson, 2020a, 2020b). These themes were used as they had direct impact on the transport industry and were specific to the UK’s response to the pandemic. Tweets categorised as ‘Non-COVID’ are indicated as ‘Customers’, based on Bregman and Howard’s findings. For tweets categorised as ‘COVID’, tweets intended for customers or recognition of customers and/or their activities were categorised as the stakeholder group of ‘Customers’, while tweets with an intended audience of community or recognition of community and/or its activities, as previously defined, were categorised as the stakeholder group of ‘Community’.

9,325 TOC tweets were analysed in this study through four steps. Firstly, the content of each tweet was analysed to determine if the tweet contained messages related to COVID-19, as defined in Table 6.1, and categorised as either ‘Non-COVID’ or ‘COVID’. Once the COVID-19 tweets had been identified, a second tweet analysis was conducted by categorising the COVID-19 tweets based on the definitions of the five categories listed in Table 6.1. Important to note is that tweets may be categorised in multiple COVID-19 categories depending on the tweet content. A third tweet analysis was conducted on COVID-19 TOC tweets to categorise the stakeholders in the categories of ‘Customers’ or ‘Community’. Finally, the engagement



consisting of likes and retweets of all non-COVID-19 and COVID-19 TOC tweets were analysed to determine the levels, or amount, of engagement with Twitter users. The level of engagement was calculated through the average number of favourites and retweets per TOC tweet and by comparing the results between the ‘Community’ and ‘Customer’ stakeholder groups. The content of these tweets and engagement levels were analysed and hand coded in order to produce the highest tweet analysis quality (Murthy, 2017). The tweets were analysed and categorised twice, independent of one another. Using these two analyses, a comparison was made to identify discrepancies and address them through a comparison of similar tweets to ensure that the same definition was consistently applied (Howard, 2020).

#### **6.4 Findings: Train operating company COVID-19 tweets, stakeholder engagement, and levels of Twitter user engagement**

##### *6.4.1 COVID-19 train operating company tweet message analysis*

The majority of tweets analysed, nearly three-fifths, contained messaging related to COVID-19 (Table 6.2). ‘COVID’ messages were the majority for all but six of the franchise operators and one of the three concession and public operators. Concession and public operator ‘COVID’ messages represented just over half of the tweets. For open access operators, however, ‘Non-COVID’ tweets remained the primary types of message with only one-fifth of tweets related to COVID-19.

**Table 6.2** Number of COVID-19 tweets per tweet category (16 March through 30 April 2020)

Train Operating Company	Tweet Category		COVID-19 Tweet Category				
	Non-COVID	COVID	Lockdown	Transport Services	Key Workers	Health & Safety	Misc.
<b>Open Access Operators</b>							
Grand Central	89	20	3	17	0	2	6
Heathrow Express	90	12	0	11	9	1	0
Hull Trains	12	7	0	7	2	1	0
<i>Total open access tweets</i>	<i>191</i>	<i>39</i>	<i>3</i>	<i>35</i>	<i>11</i>	<i>4</i>	<i>6</i>
<i>Percentage of tweets</i>	<i>80%</i>	<i>20%</i>	<i>5%</i>	<i>59%</i>	<i>19%</i>	<i>7%</i>	<i>10%</i>
<b>Concession and Public Operators</b>							
Merseyrail	248	118	36	87	32	74	1
Translink (NI Railways)	112	237	161	128	34	170	6
Transport for London	61	128	98	115	72	98	80
<i>Total concession/public tweets</i>	<i>421</i>	<i>483</i>	<i>295</i>	<i>330</i>	<i>138</i>	<i>342</i>	<i>87</i>
<i>Percentage of tweets</i>	<i>47%</i>	<i>53%</i>	<i>25%</i>	<i>28%</i>	<i>12%</i>	<i>29%</i>	<i>7%</i>
<b>Franchise Operators</b>							
Avanti West Coast	3	28	16	9	16	18	12
c2c	99	33	3	26	15	7	4
Caledonian Sleeper	5	24	2	19	7	11	3
Chiltern Railways	49	63	10	51	24	29	15
CrossCountry	45	103	52	59	28	39	25
East Midlands Railway	1	30	7	21	14	12	8
Gatwick Express	11	108	0	108	86	34	0
Greater Anglia	1,084	718	58	651	103	84	18
Great Northern	54	367	68	365	195	213	17
Great Western Railway	77	47	20	18	25	26	16
London North Eastern Railway	46	169	98	63	61	97	54
London Northwestern Railway	40	102	6	87	30	28	8
Northern	201	361	98	250	131	133	139
ScotRail	300	654	272	295	178	312	155
Southeastern	224	296	24	259	62	124	39
Southern	117	375	72	369	199	221	21
South Western Railway	306	155	50	121	52	80	32
Stansted Express	309	578	30	539	12	32	0
Thameslink	130	370	71	362	202	221	24
TransPennine Express	77	101	49	60	49	56	34
Transport for Wales Rail	130	71	35	43	17	33	6
West Midlands Railway	32	98	6	85	27	30	10

<i>Total franchise tweets</i>	3,340	4,851	1,047	3,860	1,533	1,840	640
<i>Percentage of tweets</i>	41%	59%	12%	43%	17%	21%	7%
<b>Total of all tweets</b>	<b>3,952</b>	<b>5,373</b>	<b>1,345</b>	<b>4,225</b>	<b>1,682</b>	<b>2,186</b>	<b>733</b>
<b>Percentage of all tweets</b>	<b>42%</b>	<b>58%</b>	<b>13%</b>	<b>42%</b>	<b>17%</b>	<b>21%</b>	<b>7%</b>

Figures listed as actual numbers except where indicated as a percentage.

An examination of the 'COVID-19' messages was conducted through five classifications as indicated in Table 6.2. The majority of 'COVID' tweets, approximately two-fifths, were classified as 'Transport Service', which is related to the effects of the pandemic on rail services. This messaging was predominant for all but three franchise operators and one public operator. For these operators, the 'Lockdown' category represented the highest number of tweets for all but London North Eastern Railway which had approximately the same number of tweets for 'Lockdown' and 'Health & Safety'. There were a limited number of tweets to assess the messaging on open access operators due to the low number of tweets, with only 39 total tweets related to the pandemic.

The analysis of COVID-19 tweets based on the type of operator showed differences in the messaging (Table 6.2). 'Transport Services' was the main message category for franchise and open access operators. Concession and public operators, however, had nearly the same amount of 'Transport Services' and 'Health & Safety' tweets. 'Health & Safety' tweets accounted for second highest number of messages from franchise operators, followed by 'Key Workers' and 'Lockdown'. Concession and public operators placed more than twice as much emphasis on 'Lockdown' messages than 'Key Workers'. 'Key Workers' represented the second highest number of tweets for open access operators, while the remaining three categories have less than ten tweets each. Finally, across franchise operators and concession and public operators, 'Miscellaneous' represented the lowest number of tweets. Example tweets of categorisations are shown in Table 6.3.

**Table 6.3** COVID-19 example tweets per category

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**Lockdown**

@GWRHelp (Great Western Railway): 15 April 2020

*Need some inspiration to keep the kids distracted in lockdown? We've got you covered! Check out our #GWREnterTrainment page for a range of rail-related activities like quizzes, games and colouring to keep them busy!* [link to “EnterTrainment” activities page]

@LNER (London North Eastern Railway): 10 April 2020

*This #BankHolidayWeekend, playing your part has never been more important.* [house emoji]  
*Please stay home* [blue heart emoji] *Save Lives* [hospital emoji] *Protect the @NHSuk*  
*By working together and following the advice from Government, we will come through this together, stronger.* #StayHomeSaveLives #Covid\_19 [video about COVID-19 travel on LNER services]

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**Transport Services**

@HeathrowExpress (Heathrow Express): 21 March 2020

*To ensure train services for key workers can keep running throughout the Coronavirus (COVID-19) outbreak, a Reduced Timetable will run across the UK rail network and from tomorrow, Sunday 22 March, Heathrow Express services will depart every 30 minutes:* [link to Heathrow Express COVID-19 travel information].

@TPExpressTrains (TransPennine Express): 25 March 2020

*Due to the impact of #Coronavirus, we've had to temporarily close our contact centre. You can still reach us by email or by filling in our online contact form –* [link to TransPennine Express “Contact us” webpage] *Please be aware it may take us longer to get back to you.* #COVID19

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**Key Workers**

@EastMidRailway (East Midlands Railway): 10 April 2020

*We're running a reduced service for essential travel for key workers such as NHS staff, emergency workers & carers. So that key workers & our staff can practice social distancing & stay safe. If you're not a key worker & your journey is not essential, please do not travel* [image which reads: “Please only travel if it is essential. Stay at home. Protect the NHS. Safe lives.”]

@SouthernRailUK (Southern): 30 April 2020

*We're proud to continue running our services for all key workers, and to show our support with our specially rebranded train. Remember to #ClapForCarers tonight at 8pm and show your appreciation to the NHS* [clapping emoji] [blue heart emoji] [train emoji]. *We're with you* #ClapForNHS #SupportTheNHS #railwayfamily [image of rebranded train with the messages: “NHS WE THANK YOU Key workers supporting key workers”]

@SW\_Help (South Western Railway): 6 April 2020

*Are you still travelling by train for essential journeys? We want to hear about your travel plans and experiences so we can improve our timetable for #KeyWorkers.*

*Make your voice heard:* [link to Transport Focus survey on timetables]

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## Health & Safety

@CrossCountryUK (CrossCountry): 9 April 2020

*Working with @womensaid, Britain's train companies have developed 'Rail to refuge' – a scheme that covers the cost of train travel to refuges for those seeking to flee domestic abuse during the #coronavirus #lockdown. You can find out more information at [link to Rail Delivery Group scheme page].*

@ScotRail (ScotRail): 13 April 2020

*[checkmark emoji] When you cough or sneeze, cover your mouth and nose with a tissue or your sleeve (not your hands) [checkmark emoji] Immediately BIN the tissues [checkmark emoji] Wash your hands with soap and water for at least 20 seconds or use a sanitiser gel if soap and water aren't available  
Catch it. Bin it. Kill it.*

---

## Miscellaneous

@northernassist (Northern): 12 April 2020

*[Rabbit head emoji] Thanks to the lockdown, we're spending more time with our furry friends. Hurray! [Dog head emoji] So we're going to be sharing our staff's mischievous companions! [Cat head emoji] Jenny has sent us this gorgeous photo of Simba, who seems to be making the most of the weather! #CovidCompanion [photo of cat]*

@GreaterAngliaPR (Greater Anglia News): 29 April 2020

*While travelling isn't an option, take a virtual tour of our stunning Hereward Line between Ely and Peterborough - famous for vast skies, wildlife in abundance and the legend of Hereward The Wake. #TravellingFromHome #WhatIMissMost [link to YouTube video: "Explore the Fens on the Hereward Line railway"]*

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*Source: CrossCountry (2020); East Midlands Railway (2020); Greater Anglia (2020); Great Western Railway (2020); Heathrow Express (2020); London North Eastern Railway (2020); Northern (2020); ScotRail (2020); Southern Railway (2020); TransPennine Express (2020).*

The key finding is that, overall, TOCs changed the majority of their messaging to focus on COVID-19 as the pandemic began to affect their services. Interestingly, despite the lockdown preventing nearly all but key workers from traveling, it was the least mentioned category aside from miscellaneous messages. The largest group of messages, although not the majority, continued to focus on their services, although COVID-19 messages were included as a part of these. Also worth noting is that despite COVID-19 having the greatest impact on open access

operators, with two of the three suspending their services as a result, their tweets remained focused on non-Covid messages.

#### 6.4.2 COVID-19 train operating company tweet stakeholder analysis

Twitter messages appeared to address wider community issues, as demonstrated in the tweet content analysis. Among all train operating companies, approximately one-third of all tweets were classified as ‘Community’ with the remaining tweets categories at tweets intended for ‘Customers’ (Table 6.4).

**Table 6.4** Number of tweets per stakeholder category (16 March through 30 April 2020)

Train Operating Company	Stakeholder Group	
	Community	Customers
<b>Open Access Operators</b>		
Grand Central	4	105
Heathrow Express	10	92
Hull Trains	3	16
<i>Open access totals</i>	<i>17</i>	<i>213</i>
<i>Percentage of tweets</i>	<i>7%</i>	<i>93%</i>
<b>Concession and Public Operators</b>		
Merseyrail	58	308
Translink (NI Railways)	172	177
Transport for London	122	67
<i>Concession/public totals</i>	<i>352</i>	<i>552</i>
<i>Percentage of tweets</i>	<i>39%</i>	<i>61%</i>
<b>Franchise Operators</b>		
Avanti West Coast	26	5
c2c	19	113
Caledonian Sleeper	16	13
Chiltern Railways	50	62
CrossCountry	75	73
East Midlands Railway	23	8
Gatwick Express	91	28
Greater Anglia	141	1,661

Great Northern	226	195
Great Western Railway	43	81
London North Eastern Railway	141	74
London Northwestern Railway	36	106
Northern	239	323
ScotRail	526	428
Southeastern	181	339
Southern	236	256
South Western Railway	79	382
Stansted Express	39	848
Thameslink	235	265
TransPennine Express	81	97
Transport for Wales Rail	52	149
West Midlands Railway	41	89
<i>Franchise totals</i>	<i>2,596</i>	<i>5,595</i>
<i>Percentage of tweets</i>	<i>32%</i>	<i>68%</i>
<b>Overall total</b>	<b>2,965</b>	<b>6,360</b>
<b>Percentage of all tweets</b>	<b>32%</b>	<b>68%</b>

Figures listed as actual numbers except where indicated as a percentage.

As with the COVID-19 messaging, there are variations in stakeholder groups based on the type of operator. The most noticeable difference is with open access operators, with less than ten per cent of their tweets identified as ‘Community’ tweets. Concession and public operators have a slight increase in ‘Community’ tweets with two-fifths of tweets categorised as such. Finally, franchise operators maintain the same percentage of tweets as the overall figure. Of the franchise operators, eight tweeted more messages included in ‘Community’ rather than ‘Customer’. One of the notable differences across the various operators is the higher-than-average number of ‘Community’ tweets among publicly owned operators, with more than half of Transport for London (TfL) tweets categorised as ‘Community’.

**Table 6.5** Stakeholder tweet analysis excluding Greater Anglia and Stansted Express

<b>Train Operating Company</b>	<b>Stakeholder Group</b>	
	Community	Customers
Excluding Greater Anglia and Stansted Express		
<i>Franchise totals</i>	2,416	3,086
<i>Percentage of tweets</i>	44%	56%
<b>Overall total</b>	<b>2,785</b>	<b>3,851</b>
<b>Percentage of all tweets</b>	<b>42%</b>	<b>58%</b>

Figures listed as actual numbers except where indicated as a percentage.

Franchise operators reflect the overall totals for stakeholder groups. The Greater Anglia accounts, including Stansted Express, appeared as outliers in the number of ‘Customer’ tweets. This is due to the high volume of service-related tweets. In comparison to ScotRail, the TOCs with the highest ‘Customer’ tweets were Greater Anglia and Stansted Express. Stansted Express had nearly twice the number of ‘Customer’ tweets while Greater Anglia had nearly four times the number of ‘Customer’ tweets. As such, Table 6.5 provides an analysis without Greater Anglia’s Twitter accounts. The number of community posts increases from 32 per cent to 42 per cent, which then shows the highest number of ‘Community’ tweets across all TOC types. Important to note is that two of the franchise operators, London North Eastern Railway (LNER) and Northern Trains, were operated by the Department for Transport instead of private operators typically managing franchises. Of these, LNER also showed more ‘Community’ tweets while Northern Trains indicated a higher number of ‘Community’ tweets than the average with over two-fifths of tweets categorised as ‘Community’.

An important finding is that TOCs have expanded their tweet engagement to include the wider community and not just their customers. This is a significant break from Howard (2020) and Bregman’s (2012) studies that indicated that Twitter use is focused on customers rather than



the wider community. This is an indicator of the importance of wider community stakeholder engagement, particularly during the pandemic.

#### *6.4.3 COVID-19 train operating company Twitter stakeholder engagement and the social licence to operate*

A company's relationship with its stakeholders is central to obtaining the social licence to operate (Brueckner and Eabrasu, 2018). As Thomson and Boutilier (2011) indicated, there are three levels of the SLO: legitimacy, credibility, and trust. The use of social media by train operating companies has been determined to reflect these levels and act as a method to obtain the SLO from customers (Howard, 2020). Stakeholders, however, are a wider group than just customers.

To achieve legitimacy, companies must communicate their activities and engage with stakeholders (Thomson and Boutilier, 2011). This is achieved through the COVID-19 tweets regarding communication of service changes. As with Howard (2020), this is seen by TOCs communicating service and health information through Twitter. Further, TOCs inviting users to interact with them suggests that they are also listening to their stakeholders and engaging with them in a two-way conversation. The pandemic may have offered an ideal situation to increase the amount of engagement with the community, particularly as people were required to stay home. In lockdowns, technology served as a means to communicate with each other, and this applied to Twitter. TOCs could spend more time engaging with the community as there were fewer services running and the community could engage with TOCs out of a need to interact with others due to restrictions on in-person activities.

Reliability, honesty, and transparency in information sharing and decision making are needed to obtain credibility (Thomson and Boutilier, 2011). With the need for the public to stay at home during the lockdown, TOC messages consistently included messaging about staying home. Operators were honest about their need to run services for key workers and the importance of preventing the spread of the coronavirus. In the COVID-19 tweets, they were transparent in communicating that TOCs services are meant for essential journeys only, and that TOCs made the decision to run services in order to support key workers.

Credibility and honesty form the basic level of trust (Thomson and Boutilier, 2011). A full level of trust, however, is achieved when communities feel a company is looking after their best interests (ibid., 2011). As Howard (2020) noted, there can be difficulty in determining if a community believes the TOC is operating in their best interest, particularly as TOC tweets were focused only on customers. The pandemic provides an opportunity to compare levels of engagement based on stakeholder groups through the number of TOC tweets that have been favoured or retweeted by other Twitter users. Comparing the engagement provides a measurement of whether users respond to messages for the community or those for customers. The findings (Table 6.6) show that all TOCs had a higher level of engagement with tweets that were categorised as ‘Community’ when compared to ‘Customer’. This finding was the same across all types of operators. Despite all operators showing higher engagement with ‘Community’ tweets, differences remained in the extent of that engagement across operator type. Concession and public operators indicated the highest levels of engagement both in terms of tweets favourites and retweeted. Open access operators, however, have below average levels of engagement of ‘Community’ tweets.

**Table 6.6** Average Tweet engagement per stakeholder group

Train Operating Company	Stakeholder Group					
	Community			Customers		
	Tweets	Favourites	Retweets	Tweets	Favourites	Retweets
<b>Open Access Operators</b>						
<i>Tweets and engagements</i>	17	170	45	213	858	246
<i>Engagements per tweet</i>	-	10	3	-	4	1
<b>Concession and Public Operators</b>						
<i>Tweets and engagements</i>	352	15,409	5,690	552	2,444	708
<i>Engagements per tweet</i>	-	44	16	-	4	1
<b>Franchise Operators</b>						
<i>Tweets and engagements</i>	2,596	85,247	15,267	5,595	43,202	10,064
<i>Engagements per tweet</i>	-	33	6	-	8	2
<b>Overall tweets and engagements</b>	<b>2,965</b>	<b>100,826</b>	<b>21,002</b>	<b>6,360</b>	<b>46,504</b>	<b>11,018</b>
<b>Overall engagement per tweet</b>	<b>-</b>	<b>34</b>	<b>7</b>	<b>-</b>	<b>7</b>	<b>2</b>

Figures listed as actual numbers.

The critical finding is that the inclusion of the wider community resulted in an increased level of engagement on Twitter. TOCs are achieving legitimacy, the most basic level of the SLO, by sharing information. Twitter users are responding to these TOC tweets by favouriting and retweeting them, which indicates approval of the community-related messages. This community focus, engagement, and approval are essential for gaining the highest level of the SLO (Thomson and Boutilier, 2011). Overall, how TOCs use Twitter during COVID-19 indicates a shift towards higher community engagement, a stronger relationship with customers and community stakeholders, and a means for obtaining a high level of SLO that was not present before the pandemic.

## **6.5 Discussion: Train operating company COVID-19 tweets, Twitter stakeholder engagement, and the social licence to operate**

With the messages from government asking people to avoid public transport, and the first lockdown preventing all travel except for key workers and essential journeys, TOCs changed their messaging to reflect the rapidly changing environment due to COVID-19. The messages related to COVID-19 suggests that TOCs were showing genuine concern for the wellbeing of the community. With just over one-third of tweets related to the lockdown or health and safety issues, there is a sense that TOCs are looking after the best interests of their communities, which is key for obtaining trust (Thomson and Boutilier, 2011). These messages may reflect the perception that public transport was less safe (Dong et al., 2021) and concerns about hygiene on public transport (Beck and Hensher, 2020). The sense of community was evident in tweets related to supporting and recognising health workers during events such as the Clap for Carers, as shown in the Southern ‘Key Workers’ tweet (Table 6.3). Further, tweets such as CrossCountry’s ‘Health & Safety’ tweet (Table 6.3) indicated that TOCs are developing schemes, independent of government requirements, to support the safety of community members. While TOCs have a business interest in ending the pandemic and a return to pre-pandemic passenger levels and revenues, by providing messages that are outside of their services, TOCs appear to have transitioned from customer-focused messaging to messages for the greater community.

The low number of TOC COVID-19 tweets by open access operators was notable, however there may be several explanations for this. Firstly, as these operators are purely commercial businesses with no government subsidies, their focus may remain on their customers rather than the wider community as customers are their primary source of income (Grand Central,

2020; Hull Trains, 2020). Secondly, as open access operators are profit-driven, and given the decrease in passenger revenue, services for Hull Trains and Grand Central were suspended on the 30 March and 4 April 2020 respectively (Grand Central, 2020; Hull Trains, 2020). With the suspension of services, these operators were not as active on Twitter as other operators. Heathrow Express continued to maintain a reduced level of service to Heathrow despite the drop in air passenger travel, and despite Transport for London also continuing to provide services to Heathrow. The ability to continue services during the lockdown, however, may be explained due to Heathrow Express operating as a wholly owned subsidiary of Heathrow Airports Holdings Limited, which owns and operates Heathrow Airport (Heathrow Airports Holdings Limited, 2021).

The analysis of TOC COVID-19 tweets allowed for a comparison of the findings from previous studies by Bregman (2012) and Howard (2020). The prominence of ‘Transport Services’ tweets reflects Howard’s study that indicated the information sharing functions regarding services was the most used function of Twitter. Unlike the analysis in Howard (2020), however, ‘Transport Services’ is less dominant and accounts for less than half of the tweets. Additionally, COVID-19 posts included recognition of employees, entertainment functions, citizen engagement, and customer service functions from Bregman and Howard’s studies. Within the context of the pandemic, however, Bregman and Howard’s categories were not the primary function of the tweets, which could reflect the unique circumstances of the pandemic. For example, tweets about washing hands and cleanliness are not specifically related to TOCs. Further, the decrease in services and passengers may have led to a decrease in the number of tweets, which may also affect the number of real-time status updates, with fewer services potentially reducing the number of delays and service cancellations. Indeed, statistics from the Office of Rail and Road (2021) indicated that record levels of on time punctuality at stations and final destinations

increased by 17.1 per cent and 6.2 per cent respectively while service cancellations decreased to 1.2 per cent, a record low.

With the decrease in journeys, and much of the population in lockdown, people engaged with TOCs through Twitter. The overall increase in user engagement with TOC COVID-19 'Community' messaging was reflected in the increased amounts of retweets and favouriting of TOC tweets. The retweeting of TOC COVID-19 messages supports Thelwall and Thelwall's (2020) study that indicated COVID-19 tweets with similar themes were retweeted by the public. This engagement may reflect the TOC Twitter accounts being seen as a community space by the public. The engagement with the wider community also reflects the use of Twitter by government agencies and politicians as noted by Haman (2020). As noted in the findings, publicly owned operators showed a high number of 'Community' tweets, particularly Transport for London and Translink. These two operators provide public transport services and manage their own Twitter accounts, despite TfL contracting their services to operators as a concession. This suggests that, as public operators, there may be a greater sense of serving the community rather than just customers, which may explain the higher levels of 'Community' tweets. This could also be, as government managed operators, reflective of the political climate and a need to follow government messaging regarding the pandemic. Additionally, as taxpayer funded agencies, there may be a sense that they have an obligation to the wider community, regardless of if they use their services. Franchises also run designated services on behalf of the government and, as mentioned in public and concession operators, they may still have the same sense of obligation to the wider community. There is also a possibility that the suspension of the franchise agreements may have influenced the types of tweets sent out as franchises were able to only focus on providing services for key workers without concern for increasing passenger journeys and revenue. Open access operators, however, have below average levels

of engagement of 'Community' tweets. This may reflect the nature of these operators as entirely commercial entities, as previously noted, with lower expectations of a community focus as they do not receive public funding or are running services on behalf of the government. The higher level of engagement with their 'Community' tweets, however, still suggests approval of their focus on the community rather than only their customers

Thomson and Boutilier (2011) indicate that companies need to be seen as reliable by listening and responding to stakeholders. TOCs actively sought the feedback of key workers, adjusting their services in accordance with the feedback as indicated by the South Western Railway tweet in Table 6.3. Also important to note is the importance of key workers in the messaging, as they serve a wider purpose in the community as medical professionals or other emergency workers which were critical to fighting the pandemic. This acknowledgement of the wider community reflects CSR literature indicating the importance of the railways in supporting communities (Ridley, 2011). This is also reflective of CSR literature where companies use their resources to help their communities (Ahmed et al., 2021), and particularly with those affected by the COVID-19 pandemic including medical professionals as noted by Mahmud et al. (2021). This acknowledgment of the importance of providing services for key workers, rather than for the general public, suggests that TOCs are providing these services for the benefit of the wider community rather than their customers.

The COVID-19 pandemic led to a shift in how TOCs used Twitter. Whereas the focus had been on customers before the pandemic, TOCs were seen to acknowledge and engage with a wider group of community stakeholders once the pandemic began. This shift in messaging and outreach appears to have resonated among Twitter users, with their increased engagement suggesting they approve of the change in messaging and outreach. When the pandemic ends,

however, it remains to be seen whether the shift to including community stakeholders through Twitter becomes permanent.

## **6.6 Conclusions: Contributions, policy recommendations, and future research from the analysis of Twitter messaging and stakeholder engagement during COVID-19**

This study examined the use of Twitter during the first COVID-19 lockdown by train operating companies in the United Kingdom and the effects on stakeholder engagement in the context of the SLO. Through an analysis of TOC tweets and engagements, this chapter examined COVID-19 messaging, engagement, and the stakeholders relevant to each tweet. The findings show that TOC tweets shifted to COVID-19 messaging, resulting in a move towards inclusion of wider community stakeholders. With this inclusion of the community, TOCs can achieve the highest level of trust needed for the SLO by demonstrating their commitment to looking after the best interests of their communities. This trust was demonstrated through the increased stakeholder engagement activity as indicated by customers favouriting and retweeting community tweets over customer-specific tweets.

In regard to contributions, this study provides a content analysis of tweets by train operating companies during the beginning of the COVID-19 pandemic and lockdown. While literature has focused on the use of transport during the pandemic, this study addresses a gap in the literature by examining the messaging TOCs shared through Twitter during the pandemic and as a means to engage with stakeholders during the pandemic. This study also contributes to literature on Twitter use by transport operators, as well as literature on the social licence to operate. This study advances previous public transport Twitter use (Bregman, 2012) and SLO literature (Howard, 2020) through the analysis of stakeholder engagement, reflecting the



evolving nature of Twitter use as noted by Howard. While these two studies indicated that Twitter use was focused on customers, this study found that messages related to the COVID-19 pandemic appealed to the wider community, which is more reflective of the SLO.

As a part of the UK's pandemic response, the TOC franchises were suspended. In May 2021, the government outlined a new plan for railways in the United Kingdom. This plan will nationalise the railways under the public body, Great British Railways, and replacing franchises with concession agreements with operators being paid to run services on behalf of the government (Department for Transport, 2021). How this restructuring of the industry will affect communications and Twitter remains to be seen. As a government body, however, it is possible that an increase in community-related messages will be seen similar to the findings from public operators in this study.

Three policy recommendations can be made based on the findings. The first is to develop a strategy for increased community engagement through Twitter, rather than focusing solely on customers. Secondly, transport operators should develop corporate social responsibility practices and communicate those actions through various communications channels including Twitter. Thirdly, Twitter messages related to community-wide issues, such as during times of crisis, should be coordinated and consistent between transport operators, governments, professional organisations, and companies. Implementing these policies would assist the operator in being perceived as acting in the best interest of the community, which is key to obtaining a high level of trust (Thomson and Boutilier, 2011).

Limitations to this study are noted which will offer future opportunities for research. The focus of this study was purely a content analysis of tweets rather than the time frame of COVID-19 messages. An additional study into COVID-19 messaging in relation to the time frame of

government messaging, changes in passenger journeys, and wider pandemic events may provide additional insight into how COVID-19 tweet content and frequency changed throughout the pandemic. As previously mentioned, the franchise system in the UK is being replaced by concessions. Due to this change, future research may provide new insights into how the concession-based approach affects Twitter messaging. Although this research indicated a level of approval for Twitter use from stakeholders, future research of the effectiveness of the tweets from the perspective of Twitter users would provide a complete view of the messaging's effectiveness. Finally, this study was focused on content analysis. Research undertaken with the perspective of TOC staff managing Twitter during the pandemic would provide a complete view of its use, and combined with a study of Twitter users, would offer a comparison on TOC Twitter use and its effectiveness.

## **CHAPTER 7**

### **Conclusions**

Twitter has become an important tool for transport operators to communicate with the public. Literature related to Twitter by public transport operators has mostly focused on functions of social media, including Twitter, by transport operators (Bregman, 2012; Gal-Tzur et al., 2014; Grant-Muller et al., 2015; Manetti et al., 2016; Pender et al., 2014), content analysis (Casas and Delmelle, 2017; Collins et al., 2013; Mogaji and Erkan, 2019; Schweitzer, 2014), Twitter data collection (Collins et al., 2013; Gal-Tzur et al., 2014; Rashidi et al., 2017), and Twitter message framing (Nisar and Prabhakar, 2018). While these studies are useful in identifying the functions of Twitter and interpret data from tweets, several gaps in the literature exist.

Research involving Twitter research largely focuses on the public transport industry, such as Bregman (2012), rather than individual modes of transport such as passenger rail. Most of the transport systems studied are also managed and operated by public agencies. Private operators, however, are businesses where these types of decisions are made privately and often not shared with the public. Further, they are exempt from freedom of information requests due to commercial sensitivities (Booth and Richardson, 2001). It is because of this private nature that train operating companies (TOC) in the United Kingdom require acceptance of their activities from stakeholders in order to operate. To do so, companies can seek a social licence to operate (SLO) where stakeholders accept, approve, and partner with companies who must be seen as legitimate, credible, and trustworthy (Thomson and Boutilier, 2011). The literature does not include examinations of Twitter use by private TOCs, motivations of TOC Twitter use from the perspectives of their Twitter staff, understanding how regulatory requirements affect TOC Twitter use, or the lens of social licence to operate theory. Furthermore, the COVID-19 pandemic had a significant impact on the public transport industry and literature on the effects of COVID-19 on stakeholder engagement through Twitter has yet to be examined.

To address these gaps in the literature, the main objective of this study was to analyse the extent to which Twitter by train operating companies in the UK reflect the social licence to operate. Rail operators in the United Kingdom were studied due to the privatisation of UK railways with a private franchising, open access, and concession system. The research drew upon Bregman's (2012) study on social media use by transport operators, and Thomson and Boutilier's (2011) social licence to operate theory. With these two theories, this thesis examined the uses and motivations for Twitter use by TOCs.

This study provided several key findings. Firstly, in this study the use of Twitter was seen as a means for TOCs to have a reputation as being credible and trustworthy. This reflects the social licence to operate components of credibility and trustworthiness, which are critical to achieving stakeholder approval and co-ownership of a TOC's activities (Thomson and Boutilier, 2011). Secondly, this study showed a divergence from the SLO in relation to stakeholder engagement before the COVID-19 pandemic, with TOCs primarily focused on their customers rather than a wider group of stakeholders in the community. Twitter use, however, changed during the COVID-19 pandemic, with messages focused on the wider community and not just TOC customers. Before the pandemic, the lack of wider stakeholder engagement from TOCs suggested there may be limitations to the extent to which Twitter can be used as a wide-ranging tool for stakeholder engagement. However, given the change in focus of their Twitter use to engage and acknowledge the wider community, the previously identified Twitter limitation of focusing only on customers might be self-imposed by TOCs rather than as a function of Twitter. Thirdly, Twitter use by TOCs was constantly evolving to meet the needs of their customers. This was evident in the changing nature of Twitter functions, such as moving from being a primarily communication tool to one offering a customer service function, or the movement from a formal tone of voice to a casual one to be more relatable to customers. This

evolving nature of Twitter could also be seen in the move from a focus on only customers to the inclusion of the wider community in their use of Twitter during the pandemic. This suggests that TOCs are using Twitter as a two-way form of communication and are responding to their customers, which is key to the SLO as responding to feedback is an important requirement for obtaining the social licence (ibid., 2011). Finally, this study found that there is a lack of industry standards in relation to the use of Twitter and social media more broadly. This study identified a lack of uniformity in the organisational and physical placement of Twitter teams, Twitter and social media policies, and Twitter functions. This may allow, however, for a tailoring of Twitter functions to best meet the needs of customers, although doing so may lead to confusion for customers in navigating the different Twitter functions among multiple TOCs.

## **7.1 Key findings and reflections**

This dissertation set out to examine the extent to which the use of Twitter by train operating companies in the United Kingdom reflects the social licence to operate. To do so, four research objectives were used to explore possible answers.

### *7.1.1 Response for research objective 1*

***Research objective 1: Analyse the Twitter accounts, tweets, and policies of train operating companies in the UK to understand the ways in which Twitter may be used as a means to obtain a social licence to operate.***

The results of this objective show that Twitter can be used as a means to obtain a social licence to operate. The findings in this thesis largely reflect the overall literature on social media uses

by transport operators. Several key findings emerged from this study. Firstly, the primary function of Twitter use by train operators was as a communication platform. This was especially evident in the real-time status updates provided to help customers with their journeys, particularly during times of service disruption. This focus on information sharing is clear in both the TOC policies and tweets and was indicated by staff as a primary function. Secondly, Twitter was being used as a method to engage with customers and this was evident throughout this thesis. This engagement took various forms such as information sharing, responding to feedback, providing customer service functions, and building an online community in regard to the activities of the operator. Thirdly, this study found that customer service has become a main function of Twitter use by train operating companies, which was also confirmed by the TOC Twitter staff in interviews. This is an evolution of Twitter functions from a communications channel to one of wider engagement with customers. Fourthly, policies and functions of Twitter were found to have been created in the absence of regulatory requirements. In light of this, TOCs have gone a step further in including goals and functions of Twitter, and social media use more broadly, in the franchise agreements. Finally, the analysis from this study found that the functions of Twitter reflect those of the social licence to operate. As communication and stakeholder engagement are the foundation of the SLO, Twitter provides the forum for this to occur. In this study, evidence was found of key SLO activities including information sharing, responding to feedback, and being open about their actions and events such as service disruptions. The study also found, however, that transparency in decision making, a key SLO activity, was not represented beyond Twitter policies being made available online and linked on Twitter account pages, although this is not required for legitimacy. Each of these functions reflect Thomson and Boutilier's (2011) requirements needed to achieve a SLO.

In response to the first research objective, this study makes two main contributions to the literature. Firstly, this study introduced the concept of the social licence to operate to both social media literature and transport literature. In doing so, this study expands the literature by providing a new method of examining stakeholder engagement in the passenger rail industry. Secondly, this study found new evidence through the analysis of TOC tweets, policies, and interviews that an additional function, customer service, had become a function of Twitter that had not been identified previously. This study expands the literature by adding customer service as a Twitter function and, in particular, updates Bregman's (2012) findings, which are widely cited in the transport literature on social media in defining the key functions of social media use by transport operators.

In response to research objective 1, there are three policy and practice implications arising from the analysis of how Twitter is used by TOCs. Given the varying policies and functions, and the lack of regulations, this study found a lack of consistent functions across the operators. As such, operators could benefit from learning from one another's practices. This could lead to more consistency and, ultimately, a better experience for their customers. Further, Twitter policies should be made publicly available in an effort to promote transparency, which was identified by Thomson and Boutilier (2011) as an area of importance in obtaining a higher level of acceptance. Thirdly, based on this study's findings that the functions of Twitter have expanded, the constant evolving nature of Twitter means operators should continuously assess their Twitter functions and policies and update their policies and practices accordingly.



### *7.1.2 Response for research objective 2*

#### ***Research objective 2: Examine the social licence to operate in the context of UK railway regulatory requirements and Twitter use by train operating companies.***

The results show that, although there is a lack of regulatory requirements, TOCs self-regulate their Twitter use and are using alternative means such as franchise agreements to include Twitter, both of which contribute to the social licence to operate. The analysis in this study resulted in four key findings. Firstly, there are no legislative or regulatory requirements pertaining to Twitter use by train operating companies. Instead, the railway regulatory body only offers minimal guidance on social media use. Without a set of regulations, TOCs have been able to adapt their Twitter functions as prescribed by customers rather than through legislative and government requirements. Secondly, TOC Twitter accounts were developed outside of regulatory requirements and without coordination between the government, regulatory agencies, or other TOCs. Due to the lack of regulations, there is a wide range of Twitter functions across all TOCs. This variety results in a lack of industry standards that can be used to unify all TOC Twitter accounts into similar functions. Thirdly, Twitter and other social media functions are being included as committed obligations in new franchising agreements in the absence of regulations. In adding these committed obligations, TOCs are creating their own key performance indicators and regulations for their Twitter and social media accounts. This, then, keeps TOCs accountable to the UK government as these obligations are agreed upon in the franchise agreements between a TOC and the government. Finally, the development of Twitter, its organisation, policies, and franchise agreements reflect the stakeholder engagement strategies needed for the social licence to operate. This is of

importance as the social licence can serve as a means for TOCs to be held accountable to their stakeholders.

In response to the second research objective, this study makes three main contributions to address gaps in the literature. Firstly, this study provides the first examination of legislative, regulatory, and contractual requirements in respect to Twitter use by private train operating companies. This fills a gap in the literature regarding regulations of Twitter by train operating companies. Secondly, it examines these regulations in the context of the social licence to operate. In doing so, this study provides an understanding of how the social licence can fulfil a role in unofficial regulatory requirements. Thirdly, this study offers insight into the development, organisational structure, and self-regulation of Twitter by train operating companies. This offers a look into the rationale behind why and how TOCs are using Twitter given the lack of regulations.

In response to research objective 2, three policy and practice recommendations can be made based on the findings from this study. Firstly, regulations for TOC use of Twitter, and social media more widely, should be established. As there are no guidelines or requirements, TOCs must develop their own based on what they feel is appropriate. Doing so, however, creates an inconsistent patchwork of functions across the TOCs. Alternatively, standardised committed obligations could be included in all franchise agreements and made a requirement for track access for open access operators. Flexibility should be allowed, however, so TOCs can include any functions that may be relevant to their operations. Having flexibility to add functions is also beneficial due to the evolving nature of Twitter, allowing TOCs to adapt new functions. Secondly, TOCs should develop policies and processes to accept formal complaints via Twitter. Doing so would allow TOCs to provide a higher level of customer service through

Twitter which may, in turn, increase customer satisfaction. Thirdly, oversight of Twitter use should be given to an independent watchdog for passengers. This would allow TOCs to receive feedback from customers through an independent source. Additionally, an independent watchdog group could function as an alternative to regulations.

### *7.1.3 Response for research objective 3*

***Research objective 3: Explore the motivation for using Twitter through the perspectives of staff managing rail operator Twitter accounts.***

The results of this objective indicate that TOCs are motivated by improving their customers' experience. This study identified four key findings. Firstly, TOCs are motivated to use Twitter to create a positive customer experience. This is important as it may lead to improved customer satisfaction, which is one of their key performance indicators. Secondly, TOCs' views on the social licence to operate were limited with operators deviating from the social licence by focusing Twitter use for engaging with their customers rather than wider community groups. While there are numerous stakeholders, the provision of customer service and real-time information that are prevalent on TOC Twitter largely benefit the TOC's customers rather than the wider community. In focusing on customers, they are limiting their ability to gain legitimacy across a wider set of stakeholders. Thirdly, TOCs generally assume that credibility is automatically given by customers and use their Twitter accounts to improve the customer experience rather than earning credibility. TOCs do not typically reach out to stakeholders in opposition to the TOC, despite the dangers these stakeholders pose to their reputation. Finally, TOCs recognise the dangers posed by opposition, however they accept that they are unable to

effectively respond and mitigate the opposition. Instead, TOCs focus on developing stronger relationships with their customers.

In response to the third research objective, this study delivers three main key contributions to the existing literature. Firstly, this study looks at the internal decisions and policies behind Twitter use by TOCs. Secondly, this study goes beyond the functions and content analysis of current literature by providing an analysis through interviews with train operating company staff managing their Twitter accounts. While Bregman (2012) identified the goals public transport agencies have created for their social media use, this study provides an insight into the motivation for the goals and usage of Twitter. Thirdly, this study contributes to the literature through an analysis of the use of Twitter in the context of private rail operators. This represents a shift from previous studies that analysed publicly owned transport agencies in their use of Twitter and other forms of social media.

In response to research objective 3, there are three key policy and practice implications that can be gleaned from this study. Firstly, transport operator Twitter staff relied on their personal perceptions of what customers are looking for in their Twitter accounts. To better understand the demands, operators should consider surveying their Twitter users to determine if their needs are being met. Secondly, clear guidelines should be developed that states the uses of Twitter, the types of tweets that are responded to and the typical response times, and how feedback is being stored and shared across the operator. By clearly stating these guidelines, TOCs can provide a level of transparency in their operations regarding their Twitter accounts. Finally, TOCs should not become overly reliant or place disproportionate focus on using Twitter to communicate with customers. Although Twitter is well suited for sharing real-time

information, Twitter should be one part of a broader communication and engagement strategy so that TOCs may reach the widest possible group of stakeholders.

#### *7.1.4 Response for research objective 4*

***Research objective 4: To explore how the COVID-19 pandemic has affected the use of train operating company Twitter to obtain a social licence to operate.***

The results show that TOCs increased their stakeholder engagement to include the wider community rather than their pre-pandemic focus on only customers. This study found three key findings from this analysis. Firstly, tweets related to COVID-19 included themes related to the pandemic's effects on rail services, health and safety messages, acknowledgment of key workers, and life during lockdown. Given the messaging from government and the community spirit seen during lockdowns, these themes were reflective of wider community-focused COVID-19 messages. Secondly, TOCs shifted the stakeholder focus of their tweets from customers to include the wider community. This contrasts with the findings in previous objectives, which found TOCs focusing on their customers and not wider groups of stakeholders. Engaging with wider groups of stakeholders is particularly important to obtain higher levels of the social licence to operate. What cannot be discerned is if this shift in stakeholder engagement is temporary due to the pandemic or if it will be a permanent shift in how TOCs engage through Twitter. Thirdly, community messages resulted in higher levels of user engagement. Messages that engaged the wider community, such as thanking key workers or acknowledging the difficulties of life in lockdown, received a higher number of favouriting and retweets. This increase suggests community engagement is more well-received than those purely focused on customers and may suggest a higher level of approval for the TOCs activities in relation to the social licence to operate.

In response to the fourth research objective, this study offers two contributions to the literature. Firstly, this study provides an analysis of the content of TOC tweets during the beginning of the COVID-19 pandemic and first lockdown in the UK. Literature on the pandemic is emerging and the limited transport literature has largely focused on the effects of the pandemic on passenger journeys. Due to the limited amount of literature, there is a gap in examining transport operator messaging related to the pandemic through Twitter. Secondly, this study contributes to literature on both Twitter use by transport operators, as well as SLO literature. As seen in this study, the functions of Twitter continue to evolve to include new functions, such as the finding that indicates Twitter was used to engage with the community rather than only TOC customers. Similarly, this study contributes to SLO literature by examining Twitter in the context of the COVID-19 pandemic, as well as the limited literature on the SLO and transport.

In response to research objective 4, three policy recommendations are offered from this study. Firstly, TOCs should develop strategies for using Twitter to engage with the wider community. This would allow TOCs to use Twitter more effectively as an engagement tool. Secondly, corporate social responsibility practices should be developed if they are not already present and communicated through Twitter. As the pandemic has shown, there is an expectation that companies respond and TOCs should clearly communicate how they are working for the betterment of their communities. Finally, crisis communications should be coordinated between TOCs, government agencies, and professional and industry organisations. This is essential as a means to ensure reliability and consistency in messaging.

## 7.2 Societal relevance

Returning to the main research objective, the findings of this research have demonstrated that Twitter can be used to obtain a SLO, however, a large potential is untapped in the way train operating companies in the United Kingdom are using Twitter. This study adds to the literature by offering a pragmatic approach to Twitter research rather than the positivist approach to research that has been previously conducted. This inside look allowed for an analysis of why TOCs have made the decisions to make use of the functions identified in the literature. Further, having the views from TOC Twitter staff provided insight into whether the actual use of Twitter reflected studies conducted in the literature. This study, then, provides an analysis that links the academic literature with actual practice.

The findings in this thesis can be useful for transport planning policy and practices. The fractionalisation of the railway industry was noted in this study by the wide variances in the use of Twitter by TOCs. TOCs place a focus on their own customers and on improving the customer experience, rather than passengers across the entire rail industry. This fractionalisation of Twitter across TOCs does a disservice to passengers across the UK rail network, making engagement confusing for passengers and requiring them to research how each TOC uses Twitter. This problem is further compounded by a lack of regulatory guidance for Twitter use. By taking this siloed approach, TOCs are missing an opportunity to provide a better customer experience. Given this, several recommendations can be made. Firstly, the railway regulatory bodies should develop regulations for TOC Twitter use, rather than simply offering guidance. Specific regulatory recommendations are offered in the following paragraph. Secondly, the recommendations for regulations should be coordinated and adopted by the industry as standard policies and practices regardless of regulatory status. These should

also be included in franchise or track access agreements in the absence of regulations. Thirdly, TOCs should expand their outreach beyond their own customers. As the findings from Chapter 6 indicated a higher level of engagement with community-focused tweets, there is a potential desire by the wider community to engage with TOCs. Focusing only on customers is short-sighted as TOCs have additional stakeholders such as line-side neighbours or businesses leasing space in TOC-managed stations. Further, TOCs may have a level of corporate social responsibility expected of them by the communities they operate in, and Twitter can be a means to communicate and engage with the wider community in this aspect.

Several policy and practice recommendations for specific regulatory requirements are offered for the previously mentioned regulatory recommendation. Firstly, regulations should include the platforms TOCs must use. As all TOCs use Twitter as their main social media account, this could be the required social medium platform TOCs use. Secondly, regulations should be set for the levels of information that should be shared on social media platforms, such as only updating passenger on service delays when specific criteria levels are met. For example, this study noted the significantly higher number of tweets from Greater Anglia when compared to other TOCs. Setting criteria for information tweets may help reduce the volume of their tweets, which will help prevent important service updates from being missed by passengers. This regulation can also apply to sharing information on public consultations. Thirdly, regulations should be set for the minimum functions for Twitter. These functions should include real-time service disruption updates and providing the same set of customer service functions as other forms of TOC contact such as email or telephony. Fourthly, regulatory requirements for accepting formal complaints through Twitter should be established. The message function of Twitter provides a means to contact TOCs in the same manner as emails or web forms that currently accept formal complaints. However, Twitter is not being used by TOCs for this



purpose. Despite the concerns from Twitter staff for accepting formal complaints, there is no longer a barrier to accepting them through Twitter and therefore TOCs should be required to accept them. It should be noted, however, that formal complaints through tweets should not be considered formal complaints due to the nature of Twitter as a forum for expressing frustration. Fifthly, minimum levels of TOC responses to tweets should be established. As noted in the findings, each TOC sets their own targets for the percentage of tweets responded to and the amount of time they respond to those tweets, or have not adopted their own performance targets. This may be confusing to customers as they engage with multiple TOCs and may expect a level of service provided by one TOC Twitter to be the same as another. The sixth recommendation is that reporting requirements to regulatory bodies should be standardised. As previously mentioned in the findings, TOCs often report on sentiment analysis. This sentiment analysis could be used as the metric reported. That TOCs include this sentiment in internal reports indicated that the information is a legitimate form of feedback analysis that is valuable and useful. Finally, these regulatory recommendations should not prevent TOCs from using Twitter or other social media for additional purposes. For example, some TOCs may use Facebook pages or messaging platforms such as WhatsApp to provide customer services or use platforms such as Instagram as a marketing tool.

Finally, in addition to the theoretical analysis, this study offers a pragmatic examination of Twitter use by TOCs. Much of the data and findings could be included in benchmarking for TOCs. Due to this pragmatic aspect of the research, the hope is that this study will be beneficial not only to academics, but also provide insights that can be used by practitioners.

### **7.3 Limitations and further research**

The main theory in this study, Thomson and Boutilier (2011), was useful in providing a framework for the analysis. Thomson and Boutilier's social licence to operate, however, was limited in that it focused on stakeholders as a community rather than focusing on the difference in influence among stakeholders. In this study, the main stakeholder group was clearly identified as the TOC customers. Due to the nature of the social licence theory, they could not be separated out from the wider community. It would be useful to expand upon this theory to take into consideration the most prominent group of stakeholders, or those with the most influence as it is possible that the highest level of SLO can be given by one group of stakeholders and not another.

Despite the openness and honesty demonstrated by participants of the interviews, challenges occurred in the collection of supplementary data. As TOCs in the United Kingdom are largely private, there is a level of protection regarding sharing commercially sensitive information. While the research objectives did not require this information, they would have provided additional depth to the analysis. Fortunately, there was only one notable area where information was withheld. The TOCs were unable to share copies of their internal policies and any handbooks or materials related to their Twitter accounts, with only one TOC having shared their handbook. It is possible that these documents could have provided additional insights that were not discussed in interviews. These documents would have also been useful in the validation of data. Despite this, enough data was collected to validate the findings through publicly available policies and through the functions analysed through the activity of their Twitter accounts.

One of the main limitations in this study was the lack of data from the customer's perspective. While TOC staff mentioned they based their use of Twitter on the needs of customers, the actual views of the customers are not included. As this study found that Twitter use was largely focused on engaging with customers, the inclusion of customer perspectives would provide an understanding of how the use of TOC Twitter is perceived, what could be improved, and offer a complementary view of the findings of this study. In particular, further studies could be conducted with customers to determine if the motivation and understanding of customer needs by TOCs is translating to the customer's understanding of TOC Twitter use.

A second limitation is that the views of additional stakeholders were not included in this research. Although the TOC Twitter accounts were mostly for the benefit of customers, additional stakeholders were mentioned in the study. The media and politicians were the two additional stakeholder groups specifically mentioned. Future research should examine a wider group of stakeholders. In doing so, insight can be gained on how different stakeholders view TOC Twitter use and if they use Twitter for purposes outside of those indicated in this study.

As mentioned throughout this study, Twitter is constantly evolving. Indeed, this could be said of social media and technology as a whole. Additional studies should address this in two ways. Firstly, a longitudinal study should be conducted to determine how the use of Twitter changes over time. Secondly, Twitter should be examined in comparison to other forms of social media and technology. This would be of interest as social media platforms such as WhatsApp are now being used by some TOCs, and TOCs are also developing and using their own mobile applications.

This study focused on a specific transport sector, private train operating companies in the United Kingdom. While this study has been shown to reflect some findings of studies in other countries, in particular Bregman (2012) which focuses on American and Canadian public transport agencies, there is a need for research that could provide additional insights to Twitter use and regulatory frameworks in other countries. Additional research could offer a comparison regarding an international perspective, additional modes of transport, or other forms of communication.

This thesis prompted additional questions yet to be researched. Firstly, is the SLO being given to TOCs through their use of Twitter? As mentioned before, the customer perspective is not included in this research. It would be interesting to hear from customers to see if Twitter leads to legitimacy, credibility, or trustworthiness. Secondly, how do cultural expectations affect how Twitter is used? This study takes place within the UK, however, are the expectations from other countries influencing the use of Twitter in those countries? Certainly, this thesis can be applied to other countries but there will be other cultural influences at play. Thirdly, the shift in TOC Twitter stakeholder focus due to the COVID-19 pandemic was notable. When the pandemic has subsided, will TOCs revert to their previous focus on their customers or will they continue to engage with the wider community through Twitter? Fourthly, the franchise system in the UK is being replaced by a concession model under a new unified passenger railway agency. Questions remain on how this will affect the use of Twitter by TOCs as details have yet to be released. Finally, as social media platforms continue to evolve as previously noted, it remains to be seen how these developments will affect Twitter use by TOCs.

# Appendix

## Interview Questions

### *Primary Questions*

1. How do you define social media?
2. Where is social media team housed at the TOC, both physically and organisationally?  
Why?
3. What are your tasks working with social media platforms at the TOC?
4. What resources are allocated to Twitter and other social media use by the TOC?
  - a. Are you able to share the annual budget allocated for social media tasks?
    - i. Is this budget for all social media platforms?
    - ii. What does budget cover/pay for?
  - b. How many staff are allocated to social media use?
    - i. How many staff have social media as their primary responsibility?
    - ii. How many staff have social media as their secondary responsibility?
    - iii. Do staff work across multiple social media platforms, or are they dedicated to specific social media platforms?
    - iv. How many staff are monitoring social media at any point? Are there times with more staff or less staff?
    - v. Is training provided for staff using social media?
      1. How are staff trained and what topics and/or skills are included?
  - c. What software is used for using social media? Why?
5. How does Twitter use for TOCs compare to other industries? Why?
6. How does Twitter fit into the mission and goals of the TOC?

7. What are the goals and functions for your TOC in using Twitter?
  - a. How do these functions differ from other TOC social media platforms?
  - b. How are these functions similar to other TOC social media platforms?
  - c. What metrics do you use to measure success?
    - i. Are these the same as other forms of social media? Why?
8. How do you define success in using Twitter?
  - a. What is needed for success?
9. Why do you engage with your customers through Twitter?
  - a. How much of your customer engagement is through social media or other forms of communication (email, phone, letters, online forms, etc.)?
    - i. What has driven this?
10. How do you engage with your customers through Twitter?
  - a. What information is being sought out by customers?
    - i. Is this different across social media platforms?
  - b. How is feedback you receive from customers on Twitter shared with relevant departments?
  - c. How is the information recorded and stored?
  - d. What processes do you have to respond to feedback?
  - e. What are the similarities/difference between engagement through Twitter versus other forms of social media?
11. What tone of voice do you use for your Twitter accounts? Why?
12. How do you know what customers expect you to share on your Twitter feed?
  - a. Is this different from other forms of social media or communication?
13. What percentage of messages are coming through on the various platforms? For overall customer service (phone, email, web, etc)? How has this changed?

14. How have the goals and message content of social media changed, if at all, since you've been working with it in general and at TOCs?
  - a. What has led to these changes?
15. How do you feel current regulations/laws (General Data Protection Regulation/GDPR) influence your use of Twitter?
  - a. Records retention and maintenance?
  - b. Privacy laws?
  - c. Franchising agreements?
16. How have your social media regulations and policies been developed?
  - a. Why are the policies included chosen?
  - b. Do the policies differ based on the social media platform?
17. What companies do you consider to be your peers that you use for benchmarking regarding Twitter use?
  - a. Why these companies?
  - b. Are the same companies used for all forms of social media?
18. How do you feel Twitter for TOCs compares from other industries? Is it the same or are there differences?

*Secondary Questions*

1. Why did you decide to work in social media, both in general and at a train operator?
2. How many years of professional experience do you have in the social media field?
3. In which industries did you work before? For how many years?

4. Did you cover the same role as you currently hold in other company?
  - a. How does social media use by customers of your current TOC compare (similar/different) to other industries or TOCs you've worked for?
  - b. How does social media use by this TOC compare (similar/different) from other industries or TOCs you've worked for?
5. Where do you see the use of Twitter, and social media in general, in five to ten years for rail operators and overall?
6. Is there anything that we haven't discussed that you'd like to share?



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