



# Digital Whiteboards Desk Review

February 2016



## **DIGITAL WHITEBOARDS: OVERVIEW OF CUSTOMER REQUIREMENTS**

### **Overview**

As part of the ongoing Customer Information Strategy being developed across TfL, the LU Customer Strategy team are looking at the potential of using digital whiteboards as a way of providing customers with static information.

As such, a Proof of Concept is being developed to understand both business and customer requirements for such a screen. Workshops have taken place with stakeholders across TfL to understand business requirements, and what solutions (both hardware and software) might be suitable.

### **Purpose of this document**

This document outlines relevant insights from a range of recent research projects, related to customer information, whiteboard and digital formats. It pulls together key learnings to provide an overview of customers' needs and expectations from customer information delivered through digital channels.

Relevant projects include:

- a. Customer information (whiteboards) (2015)
- b. ESUBs (2014)
- c. Wonderwall (New Crossrail digital screens) (2015)
- d. Touchpoints desk research and customer research (2015)
- e. Digital bus information technology (2015/16)



## 1. Customers want whiteboard information to alert them to imminent service changes

***“I want to know if a line I use every day is going to close, however I don’t need to be told that the floor is slippery, I can see that for myself” (Customer Information, 2015)***

Customers feel the main role of whiteboard posters should be to **alert** them to imminent changes that will have an immediate impact on their journeys today, tomorrow or at the weekend. Whiteboard poster research in October 2015 **found that customers feel that short-term status updates and local directions (to events) are the most useful and relevant information to communicate via this channel.**

Information that is felt to be **‘non-urgent’** and does not alert customers of service changes is felt to be less relevant and generally ignored. This includes posters about fares and ticketing, safety and security, apology and station specific information.

Presently customers feel that information on whiteboard posters lacks impact and can lead to disengagement with this channel overall. The information can **lack of relevance** (eg planned closures on lines they don’t use) and there is often too **much information** trying to be conveyed (difficult to read in-the moment).

## 2. Digital formats are increasingly expected and appreciated

***“It seems the world is becoming more and more digital- you can do everything, even banking, completely online now. TfL needs to keep up with this trend” (Touchpoints, 2015)***

As customers’ lives become increasingly digital, there is a growing expectation that TfL deliver digital solutions that are live, accurate and actionable. Provision of live and accurate information enhances customers’ confidence when travelling in the station, while actionable information allows customers to quickly re-plan if and when something goes wrong (*Touchpoints, 2015*).

As evidenced by various recent projects in this area (eg Wonderwall (2015) ESUBs (2014), Customer information (2015), digital bus innovations (2015/6) customers are happy to see TfL progress and innovate in the digital space more.

However, while TfL is felt to be keeping up with digital trends to a certain extent, there is a general sense that whiteboard posters are a somewhat outdated and often unreliable



information channel. This is particularly the case when information has been left up for too long or is not relevant to customers of that station.

**'I recently saw a poster warning of wet weather. It had been up there all week and it hadn't rained in days!' (Customer Information, 2015)**

The table below outlines some useful principles in terms of what customers expect from TfL in terms of how they communicate customer information (Touchpoint desk review, 2015)

No	Key Principle	Detailed elements
1	Helping customers feel in control/be autonomous	demonstrably live, actionable, accessible, easy to use, on demand, localised or personalised
2	Stress-reducing	low-conscious, easy to process, avoiding info overload, feeling informed
3	Proactive/Pre-emptive	helping when things go wrong, anticipating needs, getting timings 'just right'
4	Joined-Up & Accessible	consistency across modes, customers know where to go to get help and use the best channels for them & TfL
5	Human	personalisation, demonstrates care, balance between digital & human
6	Everyday excellence	demonstrably live, 'alive' and interconnected environments, demonstrating progress and investment (where's my money going), everyday 'wins'

When we review whiteboard posters against these set of principles, we can see that the current channel is not delivering against them.

- **Helping customers feel in control/be autonomous:** Customers respond well to information channels that are 'demonstrably live'. Since whiteboard posters are static and often left up for too long, there is a feeling that this channel is unable to keep up with the ever changing state of the system and, as a result, customers are sceptical of the channels' accuracy and relevance.
- **Stress reducing:** Often, whiteboard posters are very text heavy, making customers unable to take in all the information at a glance. As customers already experience 'information overload' within the station environment, any information channel that adds to this overload is frustrating.
- **Everyday excellence:** Customers feel that whiteboard posters demonstrate a lack of progress and investment in the system. Specifically, the fact that posters are taped to walls, edges are coming off, and their general 'scruffy' appearance can give the impression that TfL is not modern and up-to-date.



At present, customers feel that whiteboard posters have their place as an important information channel to alert them to information in the station. However, they feel important changes need to be made to ensure they have more impact and customers are able to act on the information.

### 3. Digital information meets the need for more real-time and accurate information

*“I appreciate seeing a clock on the top of the screen and flashing when buses are approaching – it helps make the information feel more real-time” Digital Bus innovations research (2016)*

We know from research into the new Crossrail digital screens (Wonderwall, 2015) and a recent project on Digital Bus Innovations (2016) that customers appreciate digital solutions that make the information feel more live and accurate. For example, digital clocks, rolling BBC updates and the TfL twitter feed helped make the information feel ‘demonstrably live’ and provided reassurance to customers that the information they are receiving is accurate.

However, scrolling/split screens and animation should be used with caution as it can also act as a distraction if used too much or inappropriately. For instance, the first wave of research into the Crossrail Wonderwall (2015) found that scrolling information and the TfL twitter feed was getting in the way of some important modal information.

### 4. ‘Less is more’ from a design perspective

*“I feel like TfL whiteboards have too much information on them- you would never have time to stop and read all of that” (Customer information, 2015)*

The design and look and feel of information are a big determinant of how much impact the information is going to have. The customer information research (2015) found that as customers are rushing through the system, they often don’t have more than 4 seconds to absorb the information around them. It is therefore important that whiteboard posters are designed with this in mind. We consulted with information design experts (Sheila Pontis & Michael Babwashesingh) to create some key principles for effective whiteboard poster information design.

- Structure
  - Make it clear what **type** of information is being communicated
  - Use clear and direct language (concise, few words, plain English)
- Hierarchies
  - Rank information by **importance or priority**
  - Arrange information in a systematic way so it follows a logical visual structure

- Visuals
  - Support message with most effective image type where appropriate
  - Make content-driven decisions about graphic elements (only use them if they support what is being said; aid comprehension)

**To achieve the greatest impact, information design principles should be considered holistically rather than individually**

STRUCTURE		HIERARCHIES		VISUALS		PLACEMENT																													
<b>1 Clear definition of information types</b> Identify components to be communicated <table border="1"> <tr><td><b>What</b> Problem</td></tr> <tr><td><b>When</b> Date/Timeframe</td></tr> <tr><td><b>Where</b> Line/Station/Network</td></tr> <tr><td><b>Who</b> Person delivering message</td></tr> <tr><td><b>Why</b> Explanation</td></tr> <tr><td><b>How</b> What to do</td></tr> </table>	<b>What</b> Problem	<b>When</b> Date/Timeframe	<b>Where</b> Line/Station/Network	<b>Who</b> Person delivering message	<b>Why</b> Explanation	<b>How</b> What to do	<b>2 Unambiguous message</b> Use clear and direct language <table border="1"> <tr><td><b>Concise</b></td></tr> <tr><td><b>Few words</b></td></tr> <tr><td><b>Plain English</b></td></tr> </table>	<b>Concise</b>	<b>Few words</b>	<b>Plain English</b>	<b>3 Well-defined hierarchies</b> Rank by importance or priority <table border="1"> <tr><td><b>Primary information</b> eg problems, events, date, location</td></tr> <tr><td><b>Secondary information</b> eg descriptions, explanations</td></tr> <tr><td><b>Technical information</b> eg links, logos</td></tr> </table>	<b>Primary information</b> eg problems, events, date, location	<b>Secondary information</b> eg descriptions, explanations	<b>Technical information</b> eg links, logos	<b>4 Logical visual structure of the information</b> Arrange in a systematic way <table border="1"> <tr><td></td></tr> <tr><td></td></tr> </table>			<b>5 Appropriate use of visuals</b> Support message with most effective image type <table border="1"> <tr><td><b>REALISTIC</b> </td></tr> <tr><td></td></tr> <tr><td></td></tr> <tr><td><b>DOG</b></td></tr> <tr><td><b>ABSTRACT</b></td></tr> </table>	<b>REALISTIC</b> 			<b>DOG</b>	<b>ABSTRACT</b>	<b>6 Purposeful use of visual variables</b> Make content-driven decisions about graphic elements <table border="1"> <tr><td><b>COLOUR</b> </td></tr> <tr><td><b>POSITION</b> </td></tr> <tr><td><b>SIZE</b> </td></tr> <tr><td><b>SHAPE</b> </td></tr> <tr><td><b>ORIENTATION</b> </td></tr> <tr><td><b>TEXTURE</b> </td></tr> <tr><td><b>VALUE</b> </td></tr> <tr><td><b>TYPOGRAPHY</b> A a A a A a</td></tr> </table>	<b>COLOUR</b> 	<b>POSITION</b> 	<b>SIZE</b> 	<b>SHAPE</b> 	<b>ORIENTATION</b> 	<b>TEXTURE</b> 	<b>VALUE</b> 	<b>TYPOGRAPHY</b> A a A a A a	<b>7 Optimisation of performance</b> Ensure impact of information display in context and use <table border="1"> <tr><td><b>Production</b> eg specifications, output</td></tr> <tr><td><b>Display</b> eg placement, context, duration, updates/maintenance</td></tr> </table>	<b>Production</b> eg specifications, output	<b>Display</b> eg placement, context, duration, updates/maintenance
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In addition, customers are keen to see more of TfL's design heritage reflected in the look and feel of whiteboard posters. At present, whiteboard posters can look a bit scruffy and customers would welcome a cleaner and slicker look.

## 5. Fewer screens are likely to have more impact

Two different lenses to consider here are the Customer Perspective and Staff Perspective:

### i) Customer Perspective

Placement of information is key – if placed at the correct point along customers' journeys it can help customers maintain the flow of their journey while seeing important information that is relevant to them. However, if placed inappropriately it can disrupt customers quite a bit and cause frustration.



Placement of whiteboard posters largely depends on the information that is being presented (eg directions to an event at station exit, line closure information in ticket hall).

However, currently customers feel whiteboard posters aren't always positioned in the optimal place- the information is sometimes irrelevant (eg planned disruption on a specific line in the wrong part of the station) or it is positioned in a crowded part of the station where customers are unable to stop and read it without disrupting other people's journeys.

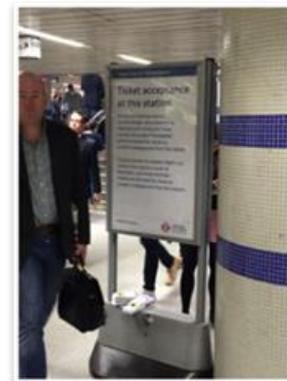


In addition, customers feel that there are **too many** whiteboard posters in stations (often two posters containing the same message side by side). Customers feel TfL could benefit from prioritising certain messages and cutting down the amount of posters in station.

## ii) Staff perspective

Most staff members (especially at larger stations such as King's Cross) agree that they could do with more guidance on where the whiteboard posters should be positioned in the station as well as the relevant time period for displaying.

Currently, staff feel they are receiving too many posters and are often left feeling unsure a) which posters should be prioritised, b) where they should go in the station and c) the time period they should be displayed.



As a result, many staff members use a 'common sense' approach when putting whiteboard posters across the station, often resulting in posters being left up for too long or being placed in inconvenient places.

Staff also feel there is an inconsistency in the amount of 'whiteboards' that are available in each station- some stations have too many while others have too few. This results in posters sometimes being taped to walls or empty whiteboards being scattered across the station (or old posters being left up for too long as staff feel an empty whiteboard 'looks bad').

Both customers and staff feel that a more streamlined approach to optimal placement would be beneficial.



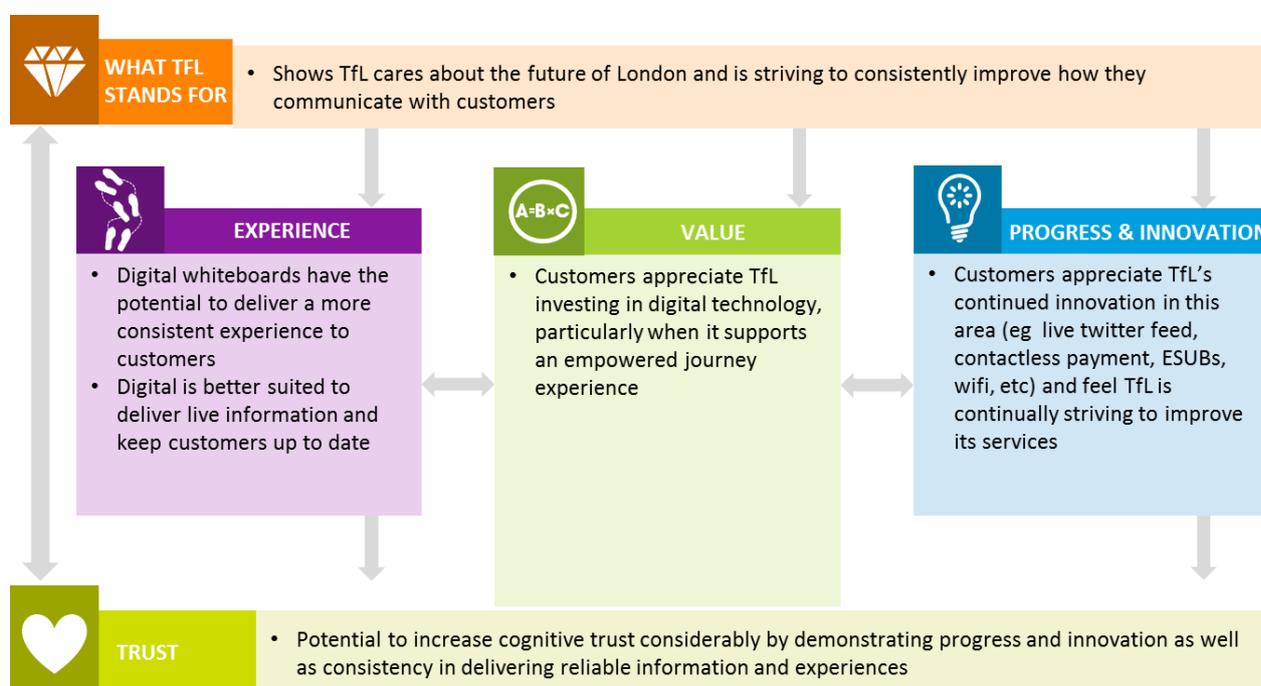
## 6. Digital whiteboards have the potential to have a positive impact on TfL's reputation and customer satisfaction

*"You can really see that they are moving forward as an organisation and continually updating their services to keep up with the times" (Customer commenting on new e-ink digital bus innovation, 2015)*

The customer experience can certainly be improved with the use of more digital information channels. Customers want to feel in control of their journeys and to be able to move through the system with ease (without stress and anxiety). More 'real-time' information can support this experience and demonstrate that TfL genuinely cares about its customers. At the moment TfL meets customers' information needs when things are running well on the network, but they can feel let down and in the dark when things go wrong

As a result, customers want TfL to consistently deliver information in a way that demonstrates progress, innovation, an integrated organisation and customer care. There is potential for a digital whiteboard channel to improve the customer **experience** by adding more relevant and accurate information that can support a more empowered customer experience.

### Potential Impact of Digital Whiteboards on TfL's reputation





## **Bibliography**

(Ordered by year)

*ESUBS (2014)*

*Touchpoints Desk Research (2015)*

*Wonderwall (2015)*

*Customer Information (whiteboards) (2015)*

*Digital Bus Information Technology (2015/16)*