Ticket Machine Usability Research
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Agenda

- Background

- Methodology and Sample

- Key Findings

- Disabled Passengers

- Recommendations

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Background

- Ticket queuing times research at major stations (May 2008)

- Buying a ticket at the station (October 2008)

- Ticket queuing times at large regional station (Aug 2010)
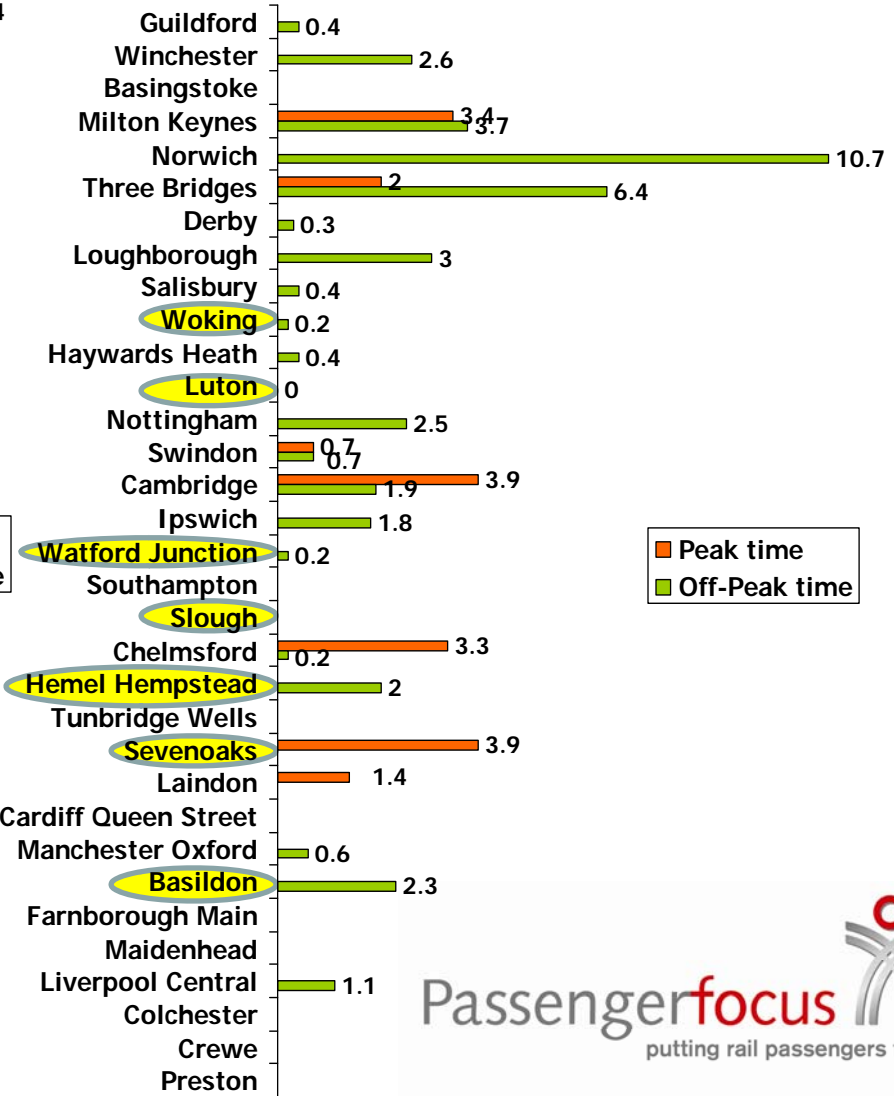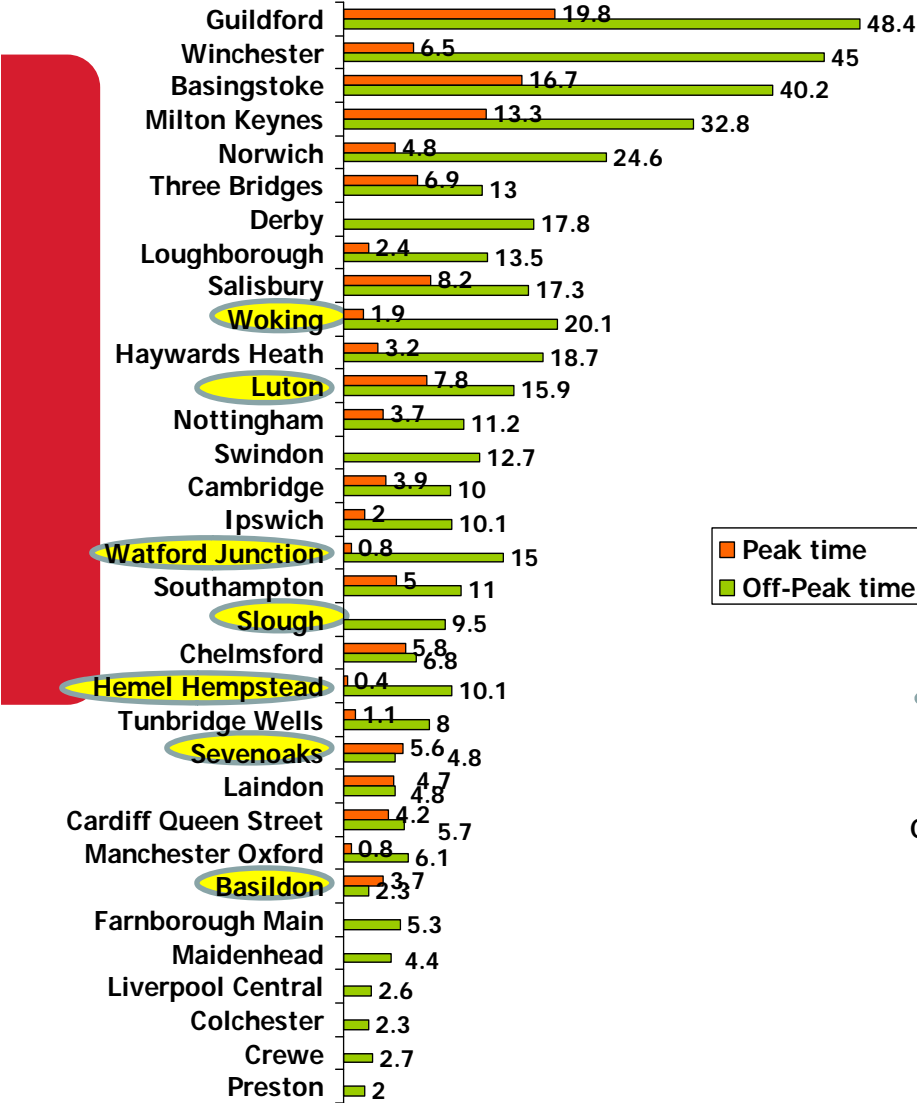
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Queue times exceeding TSA

- Queue times exceeded TSA mostly during off-peak at the weekend

- However, during an individual day there are clear 'spikes' which don't necessarily mirror peak/off peak ticket sales times

- The biggest peak is lunchtime; possible reasons may include more leisure travellers.

- But TVMs have rise and falls in usage to a much lesser degree

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Queue times (%) exceeding TSA – TO & TVM separately

Ticket Offices

Station	Peak time	Off-Peak time
Guildford	19.8	48.4
Winchester	6.5	45
Basingstoke	16.7	40.2
Milton Keynes	13.3	32.8
Norwich	4.8	24.6
Three Bridges	6.9	13
Derby		17.8
Loughborough	2.4	13.5
Salisbury	8.2	17.3
Woking	1.9	20.1
Haywards Heath	3.2	18.7
Luton	7.8	15.9
Nottingham	3.7	11.2
Swindon		12.7
Cambridge	3.9	10
Ipswich	2	10.1
Watford Junction	0.8	15
Southampton	5	11
Slough		9.5
Chelmsford	5.8	6.8
Hemel Hempstead	0.4	10.1
Tunbridge Wells	1.1	8
Sevenoaks	5.6	4.8
Laindon	4.7	4.8
Cardiff Queen Street	4.2	5.7
Manchester Oxford	0.8	6.1
Basildon	3.7	2.3
Farnborough Main		5.3
Maidenhead		4.4
Liverpool Central		2.6
Colchester		2.3
Crewe		2.7
Preston		2

Ticket Vending Machines

Station	Peak time	Off-Peak time
Guildford		0.4
Winchester		2.6
Basingstoke		
Milton Keynes	3.4	3.7
Norwich		10.7
Three Bridges	2	6.4
Derby		0.3
Loughborough		3
Salisbury		0.4
Woking		0.2
Haywards Heath		0.4
Luton		0
Nottingham		2.5
Swindon	0.7	0.7
Cambridge	3.9	1.9
Ipswich		1.8
Watford Junction		0.2
Southampton		
Slough		
Chelmsford	3.3	0.2
Hemel Hempstead		2
Tunbridge Wells		
Sevenoaks	3.9	
Laindon	1.4	
Cardiff Queen Street		
Manchester Oxford		0.6
Basildon		2.3
Farnborough Main		
Maidenhead		
Liverpool Central		1.1
Colchester		
Crewe		
Preston		

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Methodology & Sample

Objective: To assess TVM usability from a passenger perspective and to provide guidelines for improvement

Fieldwork conducted in March and April 2010

60 Semi-Structured Interviews (45 minutes each):
- 15 x (EMT, FGW, Southeastern and SWT)

Sample included 6 interviews with respondents with disabilities:
- 2 x vision impaired
- 2 x wheelchair users
- 2 x learning difficulties

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Video – Tomorrow_Op (5mins)

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Key Findings

- Majority unlikely to spontaneously consider TVMs as a natural alternative to buying ticket from staff:

- Most lack confidence to buy tickets from TVMs

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Front Screen

Contrast between button and background more important than contrast between button and text within it

Video – zones 2-6 (3min)

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Welcome to FastTicket. Popular Tickets.
Prices shown for one adult.
Please select from the other options for alternatives.

First transforming travel

LONDON TERMINALS	First Anytime Single	£132.00
LONDON TERMINALS	Anytime Return	£159.00
LONDON TERMINALS	Off-Peak Return	£59.00
LONDON TERMINALS	Off-Peak Day Single	£34.00
BRISTOL AIR BUS	Bus Day Single	£6.0
LONDON TERMINALS	Super Off-Peak Return	£48.8
LONDON TERMINALS	Super Off-Peak Single	£28.0
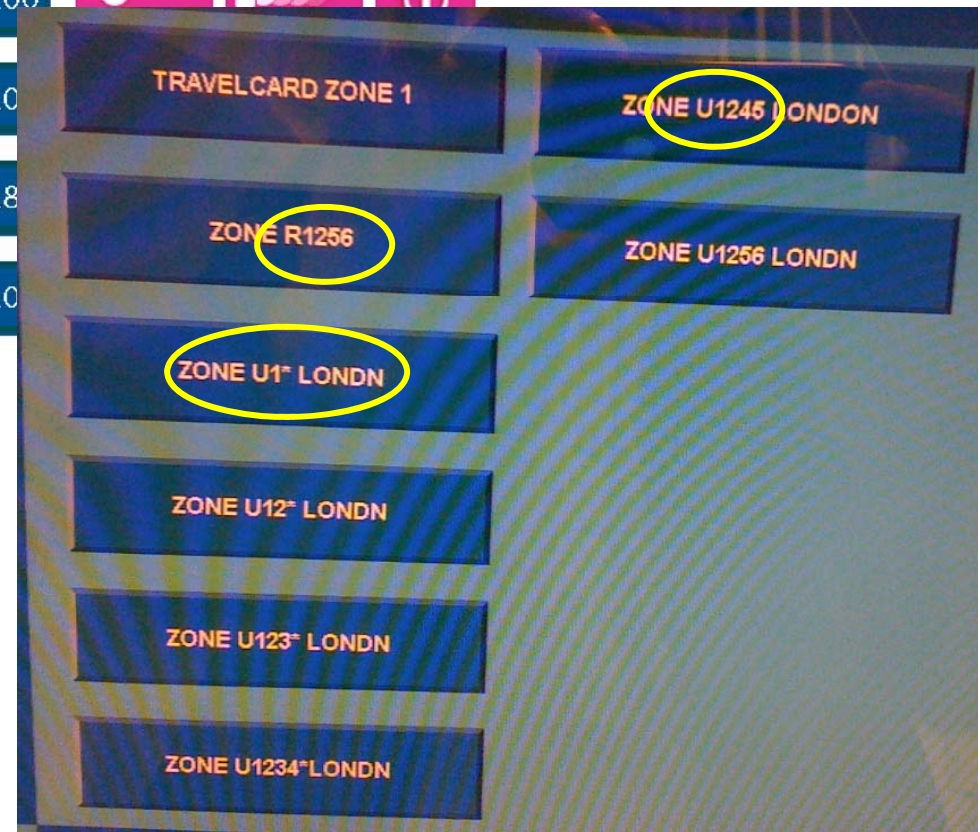
TRAVELCARD ZONE 1

ZONE U1245 LONDON

ZONE R1256

ZONE U1256 LONDN

ZONE U1* LONDN

ZONE U12* LONDN

ZONE U123* LONDN

ZONE U1234*LONDN

A-Z Destination finder

Video – HS1 (4mins)

Selecting ticket options

Select your preferred route

ANY PERMITTED

NOT VALID ON HS1
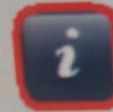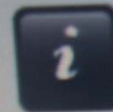
ROUTE NOT VALID ON HS1 - excluded locations: EBBSFLEET INT SE, STRATFORD INT SE

Standard Super Off-Peak Return	£ 72.70	Outward journey is made on date shown on ticket and Return within 1 calendar month. Travel time restrictions apply.
Standard Off-Peak Return	£ 88.00	Outward journey to be made on date shown on ticket and Return within 1 calendar month. Travel time restrictions apply.
Standard Anytime Return	£ 216.00	Outward journey to be made on date shown on ticket and Return within 1 calendar month. No time restrictions apply.
First Anytime Return	£ 332.00	Outward journey is made on date shown on ticket and Return within 1 calendar month. No time restrictions apply.

Changing Details

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Confirmation

Disabled Passengers

- Screen glare (windows / lighting) cause problems

- Functional buttons need to be bold and clear

- Text, background colour and contrast impact on usability

- Processing information/route maps is a particular problem

- **Even DDA compliant machines can be difficult for some wheelchair users**

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Recommendations (1)

Sequencing:

1. Consider more screens with simplified steps
2. Consider A-Z destination finder as first step (with preset hot destinations as an option if required)

Layout:

1. Reduce volume of information on screens
2. Use colour contrast
3. Highlight one step / screen back option
4. Extend time-out option
5. Simplify the basket function

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Recommendations (2)

Information and language:

1. **Improve labeling and terminology**
   - **1st Class (rather than 'First')**
   - **5 – 15 on Child ticket button**
   - **London Zones**
2. **Help button to provide information / assistance on:**
3. **Provide a clear confirmation summary (especially what is <u>not</u> included)**
4. **Provide staff / Floor Walkers for help and reassurance**

Other :

1. **Give further consideration to the needs of disability groups**

WHAT NEXT?

Questions?