Office of Rail and Road

Research into Passengers' Experience of Ticket Vending Machines

Report of Findings

February 2017





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1. Introduction

1.1 Background

Ticket vending machines (TVMs) should provide passengers with the opportunity to make quick and easy rail ticket purchases at stations. There are concerns that the quality of information provided to passengers using TVMs is insufficient to enable them to make purchasing decisions appropriate to their journey needs.

In its 'Measuring Up' report of June 2016, Office of Rail and Road (ORR) stated that it would undertake a mystery shopping exercise to gain a more detailed understanding of the problems passengers are experiencing and the resulting detriment they are potentially exposed to. The 'Measuring Up' report highlighted five key areas of concern regarding TVMs:

- The use of jargon
- Information on the range of products
- Information on ticket restrictions
- The timing of off-peak sales
- The filtering of fares

ORR identified a requirement for research to be undertaken to investigate the extent to which TVMs are meeting the needs/expectations of passengers, and to examine whether TVM-based transactions lead to the purchase of a more (or less) expensive ticket than is required for their journey needs. This exercise would form a key element of ORR's wider project to understand whether, and to what extent, train operators have made progress to improve TVMs so that they meet the needs of rail passengers.

In order to understand more fully the nature of the issues identified, ORR commissioned ESA Retail to complete a programme of TVM mystery shopping in which trained mystery shoppers undertook a wide range of TVM ticket purchase scenarios.

As part of the research, ORR sought to gain a more detailed understanding of the resulting detriment that consumers are potentially exposed to while making TVM transactions.



1.2 Research Objectives

The prime objective of the research was to determine passengers' ability, when using TVMs, to make the most appropriate purchase decision for their journey.

In particular, the exercise sought to examine the five areas highlighted in ORR's 'Measuring Up' report:

- 1. Use of jargon terminology;
- 2. Provision of information about available products;
- 3. Provision of information about ticket restrictions and validities;
- 4. Timing of off-peak sales; and
- 5. Filtering of search results, for example on the basis of price.

The research also aimed to identify, for different customer groups, the extent to which consumer detriment exists, i.e. cases where the cost of the ticket the passenger proposed to purchase to meet their journey needs, exceeded the price that the passenger should have paid for the ticket; or where an inappropriate ticket was selected, which could have led to a penalty fare.



2. Executive Summary

Objectives and Survey Method

The mystery shopping exercise set out to determine passengers' ability, when using TVMs, to make the most appropriate ticket purchasing decision for their journey. The research also examined each of the five key areas identified in ORR Measuring Up report of June 2016 with an aim to gain a more detailed understanding of the problems passengers are experiencing and the resulting detriment they are potentially exposed to.

The research sample incorporated a representative spread of TVM transactions encompassing the majority of train operators with the number per train operator varied to reflect TVM sales volumes, and covered the most popular journey routes and ticket types on TVMs for each train operator. Mystery shoppers were given a range of travel time and priority scenarios providing the cheapest ticket, flexibility of route or train operator, and flexibility for time of return.

The mystery shoppers undertook a range of ticket purchase scenarios at TVMs, completing all stages of the purchase but terminating the transaction prior to making payment. The age, gender, and experience of using TVMs varied across the mystery shoppers. 721 mystery shops were completed.

Key Findings

Use of Jargon

5% of the mystery shoppers reported finding the wording or terminology used, either in the ticket option wording or the TVM instructions, to be difficult to understand or confusing. The majority (95%) had no difficulty with the wording or terminology employed.

Information About Available Products

Almost two thirds (65%) of mystery shoppers reported not seeing any information on the TVM regarding the types of tickets that could or could not be purchased via the TVM.

The majority (86%) of shoppers did not see any information on the TVMs indicating that other fare options might be available from the ticket office.

Information About Ticket Restrictions and Validities

Almost a third of mystery shoppers (32%) reported that no information on ticket restrictions and validity was provided alongside the ticket prices on the TVM.

Timing of Off-Peak Sales

When asked how easy it was to obtain information on the TVM about on and off-peak travel times, the responses varied greatly. Although 29% of mystery shoppers felt this information was 'very easy' to locate, 24% did not feel strongly either way, and a total of 37% found obtaining this information either 'fairly difficult' or 'very difficult'.

57% of shoppers reported that the TVMs did not explain the times that on and off-peak tickets could be used for travel, and almost a quarter (23%) reported difficulties in understanding the related restrictions on travel.

Filtering of Search Results

Almost three quarters of mystery shoppers (74%) responded that ticket options were listed in price order (with cheapest tickets listed first) but filtering in any other way (for example by fastest journey) was rarely an option.

Consumer Detriment

The research found that 80% of mystery shoppers ended their transaction with the most appropriate ticket. The remaining 20% of mystery shoppers selected a ticket that could potentially have seen them receive financial detriment either in the form of overpaying, or underpaying by not receiving the most appropriate ticket and being susceptible to a penalty fare. Of those 20% mystery shoppers:

- 13% have not selected the cheapest ticket;
- 7% chose a ticket that did not provide the required flexibility, either by route or TOC (2%), or by time (5%).
- Of the 7% mystery shoppers that did not purchase a ticket with required flexibility, 6% would have paid less than the required amount for their journey, meaning that they ran the risk of incurring a penalty fare when travelling.

The degree of detriment appears to be influenced by certain factors:

- For example, mystery shoppers using railcards or travelling off-peak were somewhat less successful in obtaining the most appropriate ticket for their requirements, as were those whose objective was to obtain a ticket offering flexibility in the time of return travel.
- While there is no clear correlation between TVM experience and selection of the most appropriate ticket, there appears to be a stronger link between the user's previous

experience of a particular journey requirement and their ability to obtain the most appropriate ticket.

However, there was little variation in the likelihood of detriment according to the category of TOC, indicating that mystery shoppers purchasing long-distance tickets were no more likely to suffer than those buying tickets for shorter journeys.

Finally, mystery shoppers were more likely to purchase the most appropriate ticket if:

- The TVM was jargon free (81% of shoppers purchased the most appropriate ticket where there was no jargon on a TVM. In comparison, only 66% purchased the most appropriate ticket when the jargon was present on the TVM.
- The ticket information was available on the TVM (84% of shoppers selected the most appropriate ticket when the information on available products was provided as opposed to 78% shoppers where ticket information wasn't available).
- The information about ticket restrictions and validities was available from a TVM. Where shoppers found it very easy to obtain ticket information on restrictions/validity, they selected the most appropriate ticket 82% of the time. This percentage was 70% for those who found it very difficult to obtain the ticket information.
- There was no clear link between shoppers being able to select the most appropriate ticket when being able to filter the fares in price order or by their interpretation of the peak vs. off peak information on the TVM.

Customer Experience

The majority of mystery shoppers (88%) were confident they had selected the most appropriate ticket, however, this figure drops to 66% when distinguishing between those who were totally confident rather than those who were only fairly confident in their selection (22%). 9% of the mystery shoppers were unsure about their ticket selection.

39% of shoppers said they would have abandoned the process and gone to the ticket office if they had been a genuine customer. In 41% of these cases the mystery shopper did not select the most appropriate ticket. 60% of mystery shoppers found that there was no help available (for example station staff), had it been required during their TVM purchase.

More than three quarters of the mystery shoppers (77%) were satisfied with their TVM experience in comparison with other rail ticket purchase methods. 13% of the shoppers felt dissatisfied, with 4% 'very' dissatisfied with their TVM experience.

3. Methodology

3.1 Survey Method

This exercise involved members of ESA Retail's trained mystery shopper panel conducting visits to stations to assess the majority of Train Operating Companies (TOCs) in Great Britain.¹ The mystery shoppers were briefed in detail on the specific aspects they were required to evaluate but carried out the assessments covertly in the role of genuine consumers.

The focus of the research was solely on TVM sales, with Ticket Offices excluded from the scope of the research. The research covered all TVM types and these were not distinguished due to the difficulty of a typical passenger / mystery shopper recognising a particular TVM type.

The mystery shoppers undertook a range of ticket purchase scenarios at TVMs, completing all stages of the purchase but terminating the transaction prior to making payment. On completion of their assessment, the mystery shoppers submitted their results for subsequent checking and data processing.

On receipt of results from the mystery shoppers, ESA's internal Data Quality team validated the results and cross-checked the proposed ticket purchases versus the Avantix fares database, to determine how the cost of the planned ticket purchase compared with the best (most appropriate) ticket for that journey, and the extent of any detriment suffered.

Weighting was not applied to the data at the analysis stage, since the sample had been designed to reflect national TVM ticket purchase patterns.

The mystery shopping took place throughout October and November 2016.

3.1.1 Ticket Purchase Scenarios

The mystery shoppers were provided with the time at which to travel and customer priority scenario² to use for their ticket selection, with these then matched against each specific journey requirement. A range of travel time and customer priority scenarios were covered:

- Cheapest ticket required,
- Flexibility of route or TOC required,

²Customer priority scenario refers to the priority for the mystery shoppers' journey in terms of flexibility of time (e.g. Anytime vs Off Peak) or Route (e.g. Any route vs specific routes/TOCs)



¹TOCs assessed as part of the research: Arriva Trains Wales, c2c, Chiltern, East Midlands Trains, Gatwick Express, Govia Thameslink Railway, Great Western Railway, Greater Anglia, Heathrow Express, London Midland, LOROL, Merseyrail, Northern Rail, ScotRail, South West Trains, Southeastern, Transpennine Express, Virgin Trains East Coast, Virgin Trains West Coast. (Crossrail, DW Metro were also considered for exercise but excluded due to small volume of TVM sales for these TOCs).

• Flexibility required for time of return

A summary of the scenario types is provided below:

- 1. Before 9am outward travel time / Cheapest ticket required
- 2. After 10am and before 4pm outward travel time / Cheapest ticket required
- 3. Before 9am outward travel time / Flexibility of Route or TOC required

4. After 10am and before 4pm outward travel time / Flexibility of Route or TOC required

5. Before 9am outward travel time / Flexibility required for time of return (can travel back at any time)

6. After 10am and before 4pm outward travel time / Flexibility required for time of return (can travel back at any time)

7. Cheapest Season ticket required

Alongside the above, shoppers were provided with other key pieces of information, as below:

- Whether a railcard was to be used/selected
- If and when a return ticket was required
- Whether a First Class or Standard ticket was required

On/off-peak travel times were conveyed indirectly to shoppers, i.e. they were asked to travel outbound either before 9am or between 10am and 4pm, but mystery shoppers were not specifically told to travel during on or off-peak hours.

Once all elements were combined for each assessment, the shoppers were provided with a summary of the key elements and priorities for their scenario, as per the example below:

You are leaving Bridgend before 9am, travelling to Cardiff Central. You require a standard class ticket and you have a 16-25 railcard. You will be returning on the same day. You are looking to buy the ticket that gives you the most freedom in terms of routes and trains that can be travelled on.

The full list of scenarios can be found within the annex of this document.

3.1.2 Mystery Shopping Approach

The mystery shoppers undertook the exercise in the role of normal passengers requiring tickets...

- They were briefed on their ticket scenario requirements and on the aspects of the ticket transaction to report back on...
- ... <u>but</u> they did not 'audit' the TVM purchase process, i.e. their views on whether information was provided etc. reflected those of typical TVM users in normal ticket purchase situations

3.1.3 Fieldwork

The Mystery Shoppers

Mystery shopping was undertaken by members of ESA Retail's panel of trained mystery shoppers. Key to collecting comprehensive and accurate mystery shopping data were the fieldworkers themselves, the training they received and the support processes used to manage and monitor their work.

To ensure a robust and realistic set of data was generated for this research, mystery shoppers with a range of TVM purchasing experience, including first-time users, infrequent users and experienced TVM users were recruited for these assessments. Shoppers also covered a range of demographic profiles (age and gender).

The Assessment Process

Mystery shoppers went through the process of purchasing a ticket for their given scenario on the TVM, but terminated the purchase at the point where payment was requested. In addition to recording details of the intended ticket purchase and cost in their questionnaire, the mystery shoppers were also instructed to photograph (using their smartphone app) the TVM screen which confirms their intended purchase, and to submit this image along with their survey data. Alongside this key image, shoppers were instructed to take and submit photographs of each different page that was displayed on the TVM throughout their transaction. Advice and example photographs were provided to the shoppers to mitigate problems such as glare from the TVM screen impacting on the quality of images collected, but in the large majority of instances there was no significant impact on our ability to read the relevant ticket details. In cases where the image quality was less than perfect (although this is also applicable to all results), the ticket details and cost were also recorded in the questionnaire.

ESAs Data Quality team referred to both the details recorded within the questionnaire and the screen images in order to confirm if the ticket the shopper intended to purchase was the most appropriate for their journey.

The mystery shoppers complete an online questionnaire which not only recorded the factual details of their intended ticket purchase, but also asked them to provide feedback on the various elements highlighted in the ORR's 'Measuring Up' report. In the case of these topics, mystery shoppers were asked to provide more qualitative feedback to support their pre-coded responses regarding the issues in question, such as jargon, provision of information etc.

Fieldwork Management

The mystery shoppers received detailed online briefing instructions for their assessment. Once fieldwork was assigned to the shoppers, the field management team monitored the project throughout the fieldwork period. When allocated an assessment, shoppers provided a date on

which the assessment would be undertaken. An agreed time limit was then set for the shopper to submit their data and any related attachments.

3.1.4 Data Collection

The mystery shoppers were equipped with the *ESAMobile* smartphone app, which enables them to enter their results during the course of their assessment and submit each individual questionnaire immediately after completing it, for example, each assessment questionnaire could be completed and submitted prior to them leaving the station at which their assessment took place. Mystery shoppers therefore completed each survey questionnaire on their smartphone immediately, while the details were still fresh in their mind.

The questionnaire app also facilitates easy uploading of images, so the shoppers were prompted within the questionnaire to take any required photographs.

General Data Quality Checks

On receipt, all questionnaires were checked in detail by ESAs Data Quality department prior to being approved for reporting. These checks included tests for internal consistency between questions, checks between comments and pre-coded answers, checks on any images collected by the mystery shopper and general validation of the overall submitted questionnaire.

Any queries arising during this checking process were raised with the mystery shopper and only when the checks were complete and any queries resolved was the data approved for reporting.

Ticket Purchase Checks

The Data Quality team cross-checked the ticket purchases chosen by the mystery shoppers (both the images of the TVM screen showing the ticket details, and the recorded ticket details on the questionnaire) with the most appropriate ticket for the journey, to determine whether the chosen ticket purchase matched the best (most appropriate) ticket for their given journey scenario.

In order to determine what the ticket costs for each scenario should have been, the validation team referred to the Avantix fares database. To undertake this check, the Data Quality team entered the required details for the ticket in question, e.g. origin & destination stations, any applicable discounts such as railcards, the number of adults & children travelling, and the date of travel. The database then provided the price information for the most appropriate ticket for the journey and allowed the Data Quality team to determine whether the TVM outcome was correct in each instance.

Where the ticket the shopper intended to purchase differed from the best ticket for that journey, the difference between the prices was recorded in order to quantify the extent of the consumer detriment, be that an instance where a shopper would have overpaid and been unnecessarily out of pocket, or where they would have underpaid and risked setting off with an invalid ticket that left them susceptible to a fine.

3.2 Sample

3.2.1 Sample Design

An important part of the design of the project was developing a sample that was representative of actual TVM purchase patterns in the UK³. The sample included coverage of the following:

- TVM sales patterns by TOC and by individual station;
- Types of tickets sold via TVMs (e.g. Singles & Returns, Peak & Off-Peak travel times etc);
- Journey routes of tickets bought from TVMs;

The sample was designed in two stages:

- 1. Overview sample plan, detailing the number of mystery shops to be carried out within each of the above scenario categories;
- 2. Individual scenario creation (i.e. ticket purchase scenarios, detailing the station at which the scenario should be conducted, the type of ticket, the journey route, time of travel etc.) for each mystery shop.

The sample incorporated a representative spread of TVM transactions, covering:

- The majority of TOCs (see footnote on P.6), with sample sizes varied to reflect TOCs' TVM ticket sales volumes
- The types of tickets sold via TVMs (including Singles & Returns, Standard & First Class tickets, Season tickets, Railcard users⁴)

The most popular Origin-Destination journey routes sold via TVMs for each TOC were selected for the purpose of the assessments.

The mystery shoppers themselves included:

- a mix of genders and ages,
- individuals with varying degrees of rail travel and TVM purchase experience, ranging from those who purchase from a TVM more than 3 times a week, to those who never use a TVM.

Data for the percentage of TVM sales transactions per TOC was analysed in order to provide proportionate TOC samples for the research. However, rather than matching samples to the percentage of TVM sales exactly, a minimum and maximum sample level was applied to individual TOC samples. For example, having 20% of TVM sales attributed to one TOC did not result in that TOC receiving 20% of the mystery shopping assessments (although they did

³Lennon 2015-16 data was used in the sample planning and project research

⁴ Research scope included16-25 and Senior Railcards.

receive an appropriately high amount) as this would have conversely meant that any TOCs with a very small share of TVM sales would have been assigned too small a sample. Instead, the TOCs were categorised by TVM sales volumes into one of six size categories, with those in the largest size category having the largest sample size, but with those in the smallest size category still receiving a sample of more than ten mystery shops.

In order to ensure the overall sample targets were met within the project timings, an oversampling approach was employed to allow for cases where mystery shoppers were assigned mystery shops but were subsequently unable to complete the task due to problems such as illness, broken TVM's etc. Over-sampling by circa 5% ensured the target of 750 assessments were carried out within the required timeframe, although as detailed on page 14 of this document the total number of assessments included within the detailed findings is 721, due to specific results being excluded so as not to skew findings (e.g. when the requested ticket for a specific journey was not available from the TVM that was assessed).

3.2.2 Sample Exclusions

This report is based on a sample size of **721** completed mystery shops. A further **42** mystery shops were conducted but were excluded from the analysis and results because these scenarios required the shopper to purchase tickets that were found to be unavailable from the TVM.

We have not included these cases in the analysis due to the possibility that the absence of the required ticket may have skewed the opinions of the shopper regarding the ticket purchase process.

However, there is still interesting insight and learnings from the absence of certain tickets (Groupsave tickets for example) as these could result in consumer detriment due to not being available on certain TVMs.

3.2.3 Final Survey Sample by TOC

A total of 721 assessments were completed, with each TOC's sample based on the proportion of TVM sales.

4. Findings by Issue Area

4.1 Use of Jargon Terminology

The mystery shoppers were asked to record whether there were any aspects of the wording/terminology on the TVMs that they found difficult to understand.

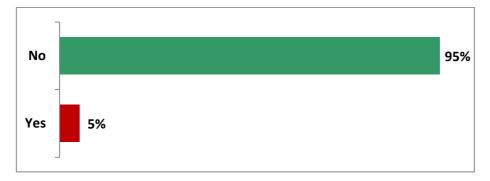


Figure 1 – Were there any aspects of the wording (terminology) used, either in the ticket wording or the TVM instructions, that you did not fully understand or you found confusing? (Base: Total Sample: 721)

5% of the mystery shoppers reported finding the wording/terminology used, either in the ticket wording or the TVM instructions, to be difficult to understand or confusing. The majority (95%) felt that no jargon was used.

As illustrated below, there was a slight (but significant – 4% difference) increase in the number of shoppers who felt that no jargon was used when journeys commenced at off-peak times, in comparison to journeys during peak hours.

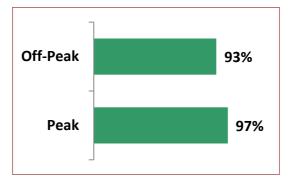
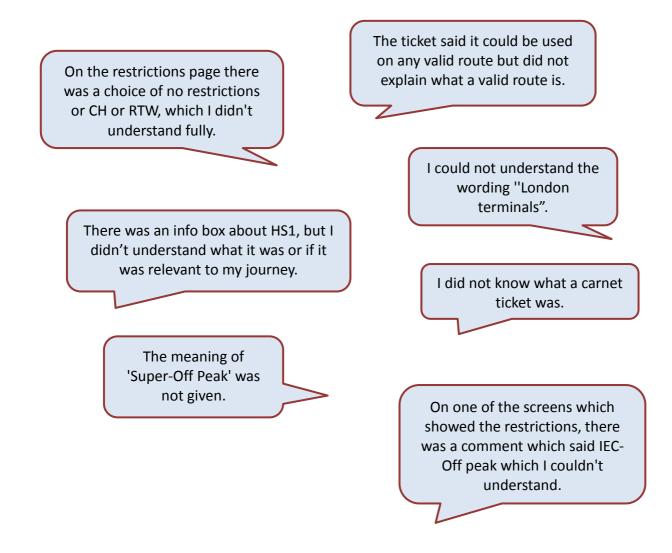


Figure 2 – TVMs free of jargon (Base: Total Sample: 721)



Examples of Jargon

Examples of jargon included acronyms, lack of detail around the differences of various offpeak tickets, and a lack of explanation around what a 'valid' route is. Comments from mystery shoppers included:

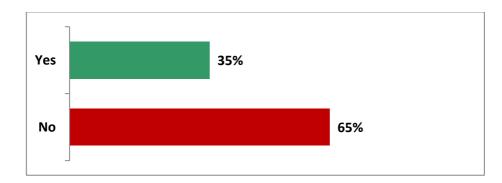


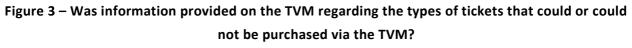


4.2 The Provision of Information about Available Products

Tickets Available from TVMs

Shoppers were asked if there was information provided on the TVM regarding the types of tickets that could or could not be purchased via the TVM.





(Base: Total Sample: 721)

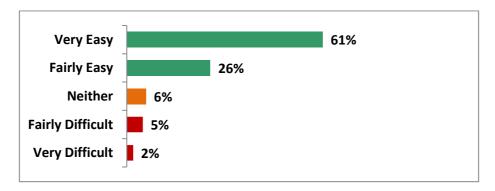
Almost two thirds (65%) of the mystery shoppers reported not seeing any information on the TVM regarding the types of tickets that could or could not be purchased via the TVM, suggesting two thirds of consumers may not be getting this information before completing their TVM transactions.

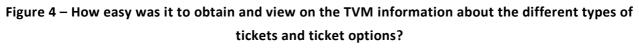
Feedback from some mystery shoppers suggested that a member of staff would be required to clarify this information. For example, only being certain of which ticket types could or could not be purchased from the TVM when speaking with a staff member, rather than the information being clearly available on the TVM itself. An example mystery shopper comment is below:

A member of staff could see me trying to find the button, but informed me that I could not do Groupsave on the machine.



Mystery shoppers were asked how easy it was to obtain and view information about the different types of tickets and ticket options on the TVM.





(Base: Total Sample: 721)

61% of mystery shoppers found it very easy to obtain and view information about the different types of tickets and ticket options on the TVM. A total of 87% found it either very easy or fairly easy to obtain and view this information, and 7% found it either fairly difficult or very difficult.

Information Provided that Other Tickets were Available at the Ticket Office

The mystery shoppers were asked if information was provided on the TVM indicating that other fare options, including cheaper fares, might be available from the ticket office.

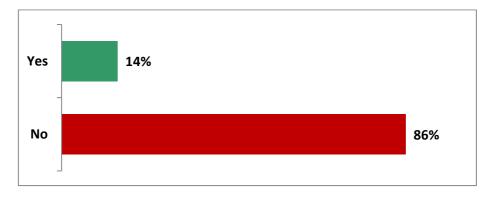


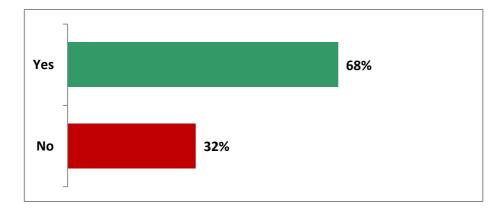
Figure 5 – Was information provided on the TVM, indicating that other fare options, including cheaper fares, might be available from the ticket office? (Base: Total Sample: 721)

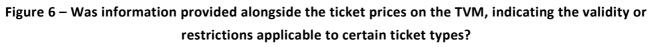
The majority of shoppers (86%) did not see information on the TVMs around other fare options possibly being available from the ticket office.



4.3 The Provision of Information about Ticket Restrictions & Validities

The research also looked at whether information was provided (alongside the ticket prices on the TVM) indicating the validity or restrictions applicable to certain ticket types.





(Base: Total Sample: 721)

Almost a third of mystery shoppers (32%) reported that no information was provided alongside the ticket prices on the TVM.

Ease of Viewing Information on Ticket Restrictions and Validity

The shoppers were also asked how easy they found obtaining and viewing information about ticket restrictions and validity on the TVM.

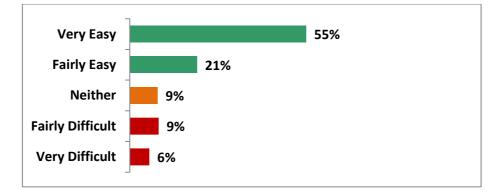


Figure 7 – How easy was it to obtain and view on the TVM information about ticket restrictions and validity?

(Base: Total Sample: 721)

More than half of the shoppers (55%) recorded the ticket restriction and validity information as being very easy to obtain and view. Almost a quarter of the shoppers (24%) did not find this information easily, with 15% reporting that information was difficult to obtain and view.

Example Comments from Shoppers

Examples of comments from shoppers who were unclear as to the impact of restrictions on their journey included the following:

I was concerned whether restrictions on the return (which were not clear) would negate the flexibility required. I wondered whether, on this basis, I perhaps should have purchased two singles, but did not know.

There was no text indicating what restrictions there were on the cheaper ticket, so I wasn't 100% confident.

However, as the following comment illustrates, some shoppers found the information easy to obtain:

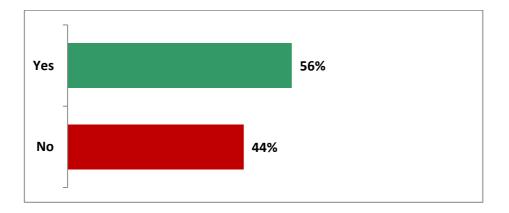
The travel restrictions were in smaller writing underneath the ticket types. Information was also available by clicking on the 'i' button beside each ticket type.

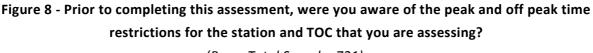
4.4 Sale of On- and Off-Peak Fares

Shopper Awareness of On- and Off-Peak Travel Times (Prior to the Assessment)

To provide further context to the findings around on and off peak travel information and restrictions when using a TVM, the shoppers were asked whether prior to completing the assessment they were aware of the peak and off peak time restrictions for the station and TOC they were assessing. As displayed in the chart below, there was a range of responses, with 44% of the shoppers assessing a station/TOC were unaware of the relevant peak and off peak time restrictions, with 56% already aware of the restrictions prior to their assessment.

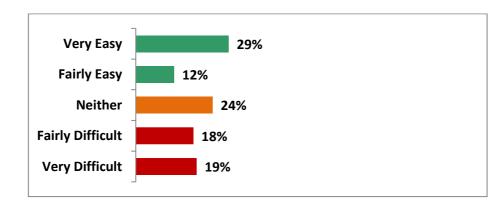






(Base: Total Sample: 721)

The mystery shoppers were asked how easy it was to obtain the information on the TVM about on- and off-peak times.



Ease of Finding Information on On- and Off-peak Times

Figure 9⁵ – How easy was it to get information on the TVM about on and off-peak times? (Base: Total Sample, excluding season ticket scenarios: 703)

When asked how easy it was to get information on the TVM about on and off-peak times, the responses varied greatly. Although the most common answer was 'Very Easy' (29%), almost a quarter of the shoppers (24%) didn't feel strongly either way, and a total of **37% found obtaining this information on the TVM to be either 'Fairly Difficult' or 'Very Difficult'.**

Did TVM Advise you about On- and Off-peak Travel Times

The mystery shoppers also recorded whether the TVM told them at which time they could travel/use on and off peak tickets.



⁵ The figures do not add up to 100% due to rounding.

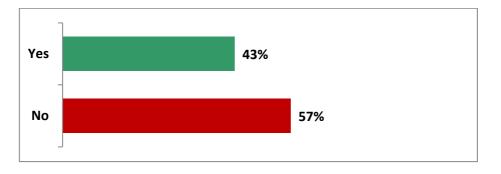


Figure 10 – Did the TVM tell you at what time you could travel/use on/off peak tickets? (Base: Total Sample, excluding season ticket scenarios: 703)

57% of shoppers reported that the TVMs did not explain the times at which on and off peak tickets could be used for travel.

Ease of Understanding Restrictions relating to On- and Off-Peak Travel Times

The shoppers also looked for information around the restrictions of their travel regarding onand off peak times.

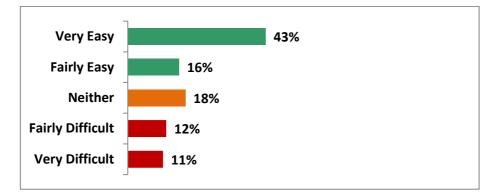


Figure 11 – How easy was it to understand the restrictions on your travel regarding on/off-peak times?

(Base: Total Sample, excluding season ticket scenarios: 703)

The most common response when asked how easy it was to understand the restrictions related to on and off peak times was 'Very Easy' (43%), however, **almost a quarter of the mystery shoppers (23%) reported difficulties in understanding the related restrictions on travel.**



Example Comments from Shoppers

Examples of comments from shoppers who found difficulty in understanding the information relating to peak and off-peak travel times included the following:

There was a terrible lack of information in relation to peak and off-peak times. I had no confidence whatsoever about which ticket to buy and would think the chances of getting a penalty fare as a result were extremely high.

There was no information on the TVM about on and off-peak times. There was a QR code on the journey details screen with the details of the National Rail website for information on ticket types and restrictions.

There was no information present on the TVM, I assume I would have had to have visited the website. On and off peak times were not published on the TVM and I would have had to go to the ticket office to find this information out.

4.5 Filtering of Search Results

As part of the assessments the mystery shoppers recorded whether the ticket options listed on the TVM were in price order, with the cheapest tickets listed first.

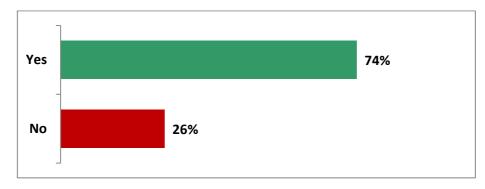


Figure 12 - Were the different ticket options listed on the TVM in price order, with the cheapest tickets first?

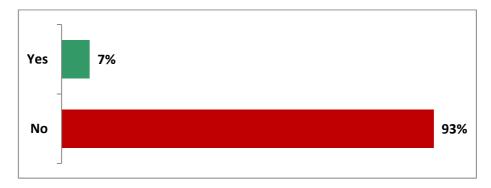
(Base: Total Sample: 721)

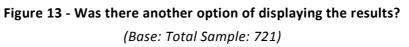
Almost three quarters of the shoppers (74%) recorded that the ticket options were listed in price order (with cheapest tickets listed first), the remaining 26% found this not to be the case.

Where ticket options were displayed in price order, in a small number of instances more expensive options were displayed ahead of some of the cheaper options.

Other Options for Displaying Results

The mystery shoppers were also asked to look for any other options for displaying the results.





7% of mystery shoppers did record there being other options for filtering results, for example by the most popular route. However, these were the cases when specific dates for travel were selected, rather than the TVMs giving the consumers the option of filtering all ticket options in various ways on the screen.



5.1 Appropriateness of Ticket

The research found that **80% of mystery shoppers ended their transaction with the most appropriate ticket**. The remaining 20% of mystery shoppers selected a ticket that could potentially have seen them receive financial detriment either in the form of overpaying, or underpaying by not receiving the most appropriate ticket and being susceptible to a penalty fare. Of those 20% mystery shoppers:

- 13% have not selected the cheapest ticket;
- **7% chose a ticket that did not provide the required flexibility**, either by route or TOC (2%), or by time (5%). Of the 7% mystery shoppers that did not purchase a ticket with required flexibility, 6% would have paid less than the required amount for their journey, meaning that they ran the risk of incurring a penalty fare when travelling.

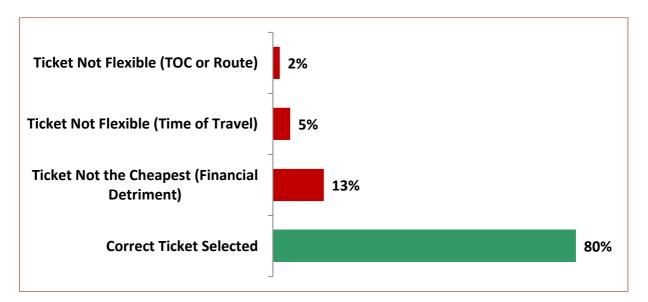


Figure 14 – Was the most appropriate ticket selected for the shopper's requirements? (Base: Total Sample: 721)



Example Comments from Shoppers

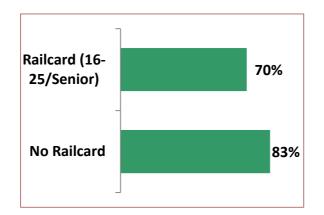
Examples of comments from shoppers who **did not** select the most appropriate ticket included:

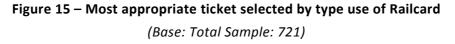
It wasn't clear to me that this was the only way to get a ticket to London. I thought there must have been the option to get a ticket without the travelcard option, but there didn't appear to be. I was confused as to whether I should choose any permitted route or not via Reading as my preferred route option.

I selected the Railcard option, but the ticket with the railcard was more expensive than without.

Impact of Railcard Use & Time of Travel on Ticket Selection

The results were analysed for correlations between specific journey requirements (e.g. railcard vs no railcard, peak vs off-peak) and whether the most appropriate ticket for the journey(s) was selected.







Where shoppers were asked to add a Railcard to their journey only 70% selected the most approproriate ticket, versus 83% of the shoppers that did not select a Railcard.

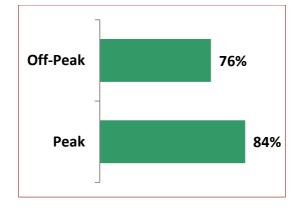


Figure 16 – Most appropriate ticket selected by Time of travel (Base: Total Sample: 721)

Fewer shoppers (76%) selected the most appropiate ticket when travelling at off-peak times than those traveliing during peak periods (84%).

Impact of Customer Travel Priority on Ticket Selection

Further analysis was carried out around the most appropriate tickets being selected versus the customer priority for their journey, ranging from the preference being for the cheapest ticket available, the most flexible ticket by time, and the most flexible ticket by route/TOC.

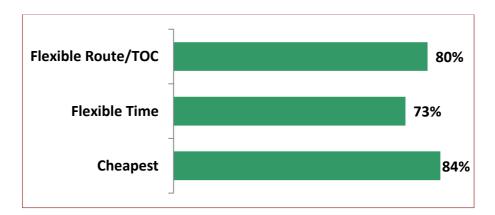


Figure 17 – Most appropriate ticket selected by Customer priority (Base: Total Sample: 721)

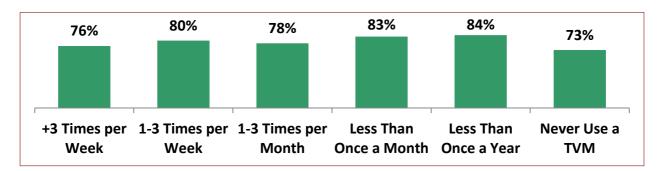
The above chart demonstrates that those **shoppers requiring flexible time of travel for their journey were less likely to select the most appropriate ticket**. 84% of the shoppers requiring the cheapest ticket selected the most appropriate ticket for their journey, but this figure drops

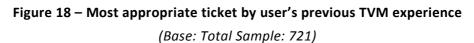


to 80% for the shoppers requiring the most flexible route, and drops significantly further to 73% for those shopper requiring flexibile time of travel for their journey.

Impact of Mystery Shopper Experience on Ticket Selection

As the following chart illustrates, there is **no clear correlation between TVM experience and selection of the most appropriate ticket** – mystery shoppers who never used a TVM were almost as likely to purchase the most appropriate ticket as those who use a TVM over three times a week (73% versus 76%).





There appears to be a stronger link between the user's previous experience of a particular journey requirement and their ability to obtain the most appropriate ticket, as illustrated in the following chart.

84% of the shoppers who were already very familiar with their assigned journey requirement selected the most appropriate ticket for the journey, while only 67% of the shoppers who were very unfamilar with their journey requirement selected the ticket most appropriate to their needs.

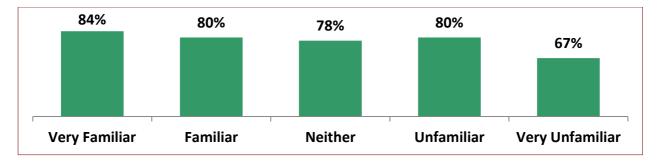


Figure 19 – Most appropriate ticket by user's familiarity with this journey requirement (Base: Total Sample: 721)

5.2 Financial Detriment - Overpaying

The major cause of financial detriment experienced by mystery shoppers was the Groupsave option, with 63% of mystery shoppers tasked with selecting a Groupsave ticket from the TVM over-paying. The rate of detriment was also notably high with First Class Same Day Return tickets, as almost half of the shoppers selecting this ticket type for their scenario experienced financial detriment.

Ticket Type	Total Sample	Cases of Financial Detriment	% Cases of Financial Detriment
Std Single	219	31	14%
Std Return Same Day	413	46	11%
Std Return Week Later	28	3	11%
1 st Single	11	0	-
1 st Return Same Day	15	7	47%
1 st Return Week Later	1	0	-
Groupsave	16	10	63%
Weekly Season	18	0	-
Total	721	97	13%

As the table below illustrates, there was little variation in the likelihood of detriment according to the category of TOC, indicating that **those purchasing long-distance tickets were no more likely to suffer than those buying tickets for shorter journeys**.

TOC Category	Total Sample	Cases of Financial Detriment	% Cases of Financial Detriment
Long Distance	193	27	14%
London & South East	416	57	14%
Regional	112	13	12%
Total	721	97	13%



5.3 Financial Detriment – Underpaying

Another key element of financial detriment to consumers is the risk of a penalty fare due to inappropriate tickets selected resulting in them underpaying for their journey(s). Mystery shoppers found to not have selected the most appropriate ticket due to TVM not offering the required flexibility, by time of travel and/or route, highlighted that these cases had seen the shoppers underpay for their tickets, as displayed in the following table.

Ticket Type	Total Sample	Cases of Under- payment	% Cases of Under- payment
Std Single	219	3	1%
Std Return Same Day	413	35	8%
Std Return Week Later	28	1	4%
1 st Single	11	1	9%
1 st Return Same Day	15	1	7%
1 st Return Week Later	1	0	-
Groupsave	16	0	-
Weekly Season	18	0	-
Total	721	41	6%

There were 41 cases of mystery shoppers underpaying, which equates to 6% of the overall sample being susceptible to invalid tickets and penalty fares.

As Figure 14 illustrated, **7% of the mystery shoppers did not select the most appropriate ticket for their scenario** requirements as the ticket selection did not allow the necessary flexibility, either by time of travel or route.

Of the 41 cases highlighted above at 4.7.3, **30 shoppers selected a ticket that lacked the required flexibility for time of travel, while 11 shoppers selected a ticket that did not give them the flexibility they required for the TOC and/or route they would be travelling on**. In every case the shoppers selected a ticket that would have resulted in them underpaying and potentially incurring difficulties (e.g. a penalty fare or not being able to reach their destination without purchasing a further ticket) when commencing with their journey.

5.4 Inappropriate Tickets – Causes

The mystery shopping results were analysed to explore links between the financial detriment and the five elements of the 'Measuring Up' report, i.e.

- 1. Use of jargon terminology;
- 2. Provision of information about available products;
- 3. Provision of information about ticket restrictions and validities;
- 4. Timing of off-peak sales; and
- 5. Filtering of search results, for example on the basis of price.

Elimination of Jargon Terms

The chart below illustrates whether the most appropriate ticket was selected by the mystery shoppers in relation to those who recorded the TVMs as being free from jargon terminology versus those who reported that jargon was present.

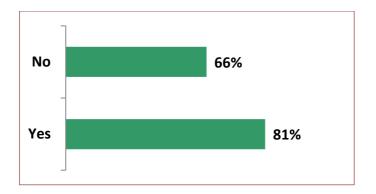


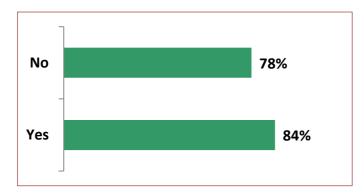
Figure 20 – Most appropriate ticket selected by Lack of jargon (Base: Total Sample: 721)

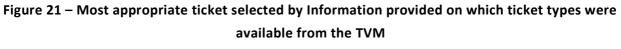
Of the mystery shoppers who felt that the TVM process was free of jargon terms, **81% decided to select the most appropriate ticket for their journey(s)**. Where shoppers recorded that there was jargon present, **66% selected the most appropriate ticket for their requirements.** There is therefore a clear link between the ability to select most appropriate ticket and elimination of jargon terms.



Information on Available Products

As shown in figure 21 below, where clear information was present on the TVMs regarding the different ticket types, **84% of the mystery shoppers selected the most appropriate ticket. This figure falls to 78% for those shoppers who recorded the TVMs as not displaying information on the ticket types**, displaying a link between clear information around available products being present on TVMs and mystery shoppers selecting the most appropriate ticket for their journey requirements





(Base: Total Sample: 721)

When information was not provided on TVMs around other tickets and fares being available at the ticket office, fewer mystery shoppers (79%) selected the most appropriate ticket for their journey(s) than those who recorded this information as being available (85%).

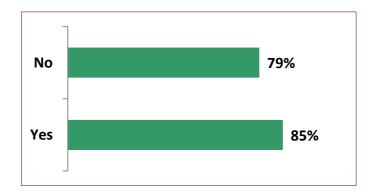


Figure 22 – Most appropriate ticket selected by Information provided on the TVM indicating that other, cheaper, fares might be available at the ticket office

(Base: Total Sample: 721)



The following charts shows that the most appropriate ticket being selected is not related to provision of information on the TVMs around the validity of the ticket types.

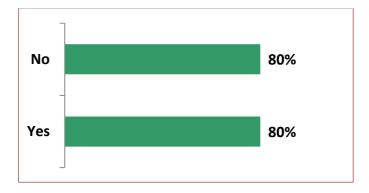
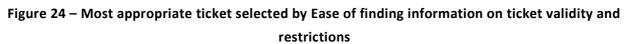


Figure 23 – Most appropriate ticket selected by Information provided on the TVM regarding validity of ticket types (Base: Total Sample: 721)

As illustrated above, there was **no clear link between information around ticket restrictions and the most appropriate ticket being selected**. However, the chart below shows that those shoppers who found it difficult to find information on restrictions were more likely to select the inappropriate ticket. **When shoppers found it 'Very Difficult' to locate such information 30% of them selected the inappropriate ticket, in comparison to 18% of shoppers who found this information 'Very Easy' to locate.** A clear link is demonstrated between shoppers finding it very easy to locate relevant information on ticket validity and restrictions and then selecting the most appropriate ticket, with 82% of these shoppers selecting the most appropriate ticket.







Timing of Off-Peak Sales / Filtering Results

No clear correlation was found between the outcomes and mystery shoppers' ability to select the most appropriate ticket, in relation to the filtering of results on screen and available information on the timing of off-peak sales.



6. Overall Customer Experience

Mystery shoppers were also asked to comment on their overall experience as a TVM user.

6.1 Confidence in Ticket Purchase

The research checked whether shoppers felt confident that they had selected the most appropriate ticket for their journey requirements.

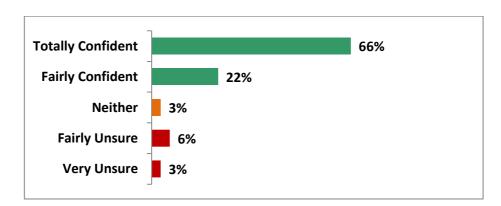
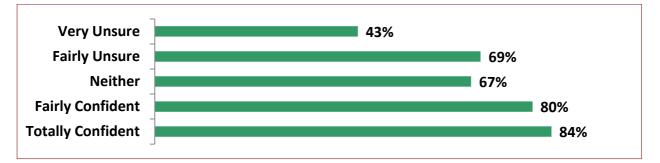


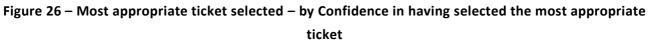
Figure 25 – If you had been a genuine customer buying this rail ticket, how confident would you be that you had selected the most appropriate ticket for your needs? (Base: Total Sample: 721)

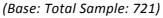
The majority of mystery shoppers (88%) were confident they had selected the most appropriate ticket, however, this figure drops to 66% when distinguishing between those who were totally confident rather than those who were only fairly confident in their selection (22%). 9% of the mystery shoppers were unsure about their ticket selection. Mystery shoppers with a standard return one week later scenario were least likely to feel confident in their choice, with only 64% of these shoppers feeling confident in their ticket choice, in comparison to 91% of the standard same day return shoppers.



A clear correlation can be seen between confidence in selecting the most appropriate ticket and the actual outcome, with 84% of the mystery shoppers who were totally confident in their decision selecting the most appropriate ticket, while 43% who were very unsure of their choice selected the appropriate ticket.

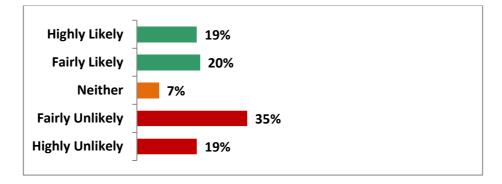


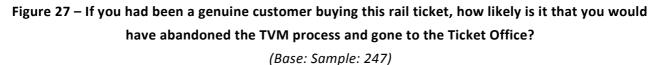




6.2 Likelihood of Abandoning the TVM Purchase

Mystery shoppers were asked how likely they would have been to abandon the TVM process and go to the ticket office had they genuinely been buying a rail ticket.





The results show that more than half of the shoppers (54%) were unlikely to have abandoned the purchase. A total of 39% felt they would have been likely to have abandoned the TVM process and gone to the Ticket Office instead. 19% of the shoppers said it was highly likely they would have done so.



Whether the mystery shoppers would have been likely to abandon the TVM process was then compared against shoppers selecting the most appropriate ticket.



Figure 28 – Most appropriate ticket selected – by Likelihood of abandoning transaction (Base: Total Sample: 721)

Of those shoppers who were highly likely or fairly likely to abandon the TVM process, 59% selected the most appropriate ticket. Of those mystery shoppers not likely to abandon the TVM process, 83% selected the most suitable ticket for their journey requirements.

6.3 Assistance Needed to Make the TVM Purchase

The following charts display aspects such as whether shoppers considered selecting a different ticket to their final choice, if they felt they required staff assistance, and if it was clear how they could gain such assistance if required.

Whether Considered Alternative Tickets to the Final Selection

The chart below shows whether any of the mystery shoppers considered selecting a different ticket from their final choice.

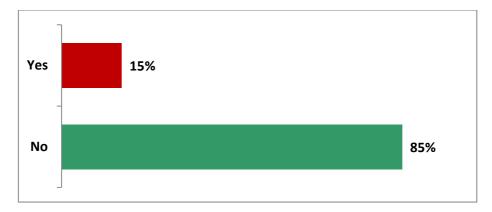
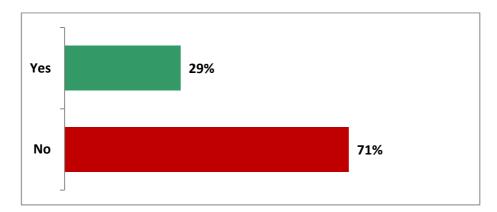


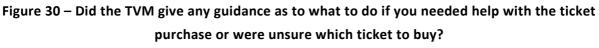
Figure 29 – Did you consider selecting a different ticket from the one you chose? (Base: Total Sample: 721)

The majority of shoppers (85%) kept their original choice of ticket without considering an alternative.



The below chart displays whether the TVM gave any guidance as to what to do if mystery shoppers needed help with the ticket purchase, or were unsure which ticket to buy.





(Base: Total Sample: 721)

For 29% of mystery shoppers the TVM provided guidance regarding help to purchase the most appropriate ticket, with 71% not being able to locate this information on a TVM.

Help Available if Required

The mystery shoppers were also asked to record whether they felt they actually needed help at any point throughout their transaction.



Figure 31 – Did you feel like you needed help at any point? (Base: Total Sample: 721)

The above results suggest that more than one in ten TVM consumers are not only uncertain of their ticket selection, but also unsure of how to seek help to clarify this. The chart below shows whether there was any help available to the mystery shoppers throughout the TVM process.

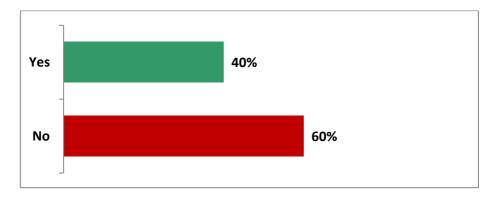


Figure 32 – Was there any help available to you throughout the whole process such as station staff? (Base: Total Sample: 721)

As illustrated above, **60% of the shoppers found that there was no help available** (e.g. station staff) had it been required during their TVM purchase.

The majority of mystery shoppers (89%) felt confident that no help was required with their transactions, the remaining 11% felt in need of assistance beyond what the TVM could offer them.

6.4 Satisfaction with the TVM Purchase Process

The mystery shoppers were asked to rate their experience of purchasing via the TVM with alternative purchase methods, such as using a ticket office, or buying tickets online.

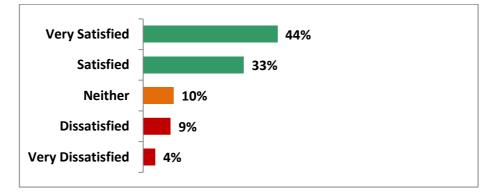
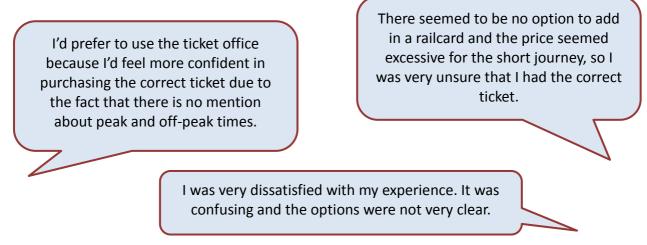


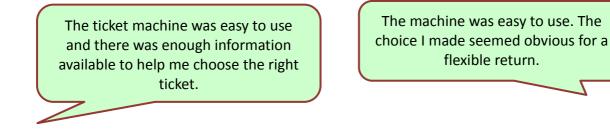
Figure 33 – How would you rate your purchase experience via the TVM, in comparison with your experience of alternative purchase methods, such as using a ticket office, or buying tickets online? (Base: Total Sample: 721)

More than three quarters of the mystery shoppers (77%) were satisfied with their TVM experience in comparison with other rail ticket purchase methods. 13% of the shoppers felt dissatisfied, with 4% 'very' dissatisfied with their TVM experience.

The following comments were made by shoppers who were not satisfied with their overall TVM purchase experience:



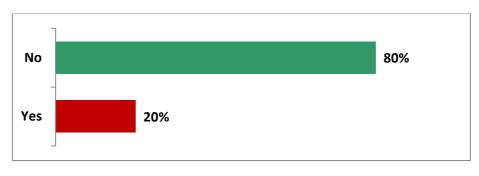
However, many shoppers were satisfied with their overall experience:

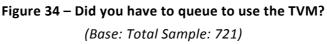


6.5 TVM Queues & Transaction Times

As part of their feedback, mystery shoppers answered questions around how long they had to queue to use the TVM, along with how easy it was to find their starting and destination stations on screen.

Did You Have to Queue?



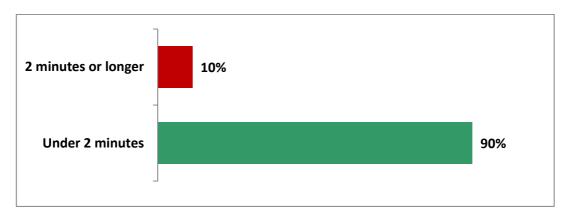


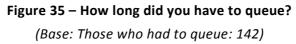
Four out of five mystery shoppers did not have to queue at all to use a TVM.



Queueing Time

The mystery shoppers were asked to record their queueing time in all instances, providing an overall picture of typical TVM queuing times.





When mystery shoppers did have to wait to use the TVM, an average queueing time was less than two minutes. **90% of the mystery shoppers queued for less than two minutes** before starting their TVM transaction.

Transaction Length

The research found an average overall transaction length of between 2 and 2.5 minutes. Overall, **68% were able to complete their transaction in less than 3 minutes.**

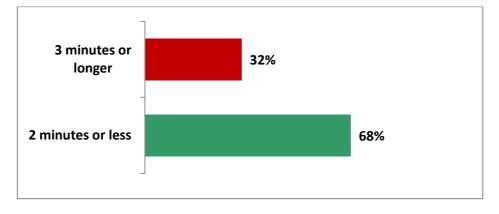
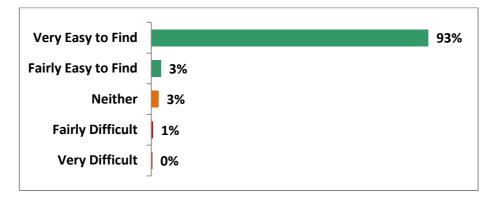


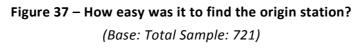
Figure 36 – Transaction Length (Base: Total Sample: 721)

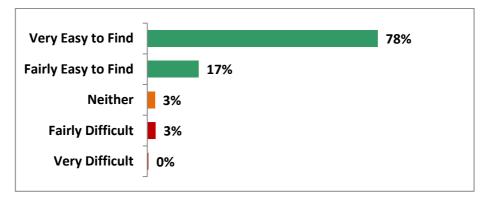


6.6 Locating Origin & Destination Stations on the TVM

Mystery shoppers were asked to record whether they felt their origin and destination stations were easy to find on the TVM.









(Base: Total Sample: 721)

93% of mystery shoppers recorded the origin station as being very easy to locate on the TVM. This fell to 78% when it came to finding the destination station.

Appendix 1 – Sample table (Part 1)

Ticket Type	Railcard	Time of Travel & Priority	No. of Assessments
Standard Class - Single	None	After 10am and before 4pm outward travel time / Cheapest ticket required	81
Standard Class - Single	None	Before 9am outward travel time / Flexibility of Route or TOC required	27
Standard Class - Single	None	After 10am and before 4pm outward travel time / Flexibility of Route or TOC required	23
Standard Class - Single	None	Before 9am outward travel time / Cheapest ticket required	58
Standard Class - Return Same Day	None	After 10am and before 4pm outward travel time / Cheapest ticket required	73
Standard Class - Return Same Day	Senior	After 10am and before 4pm outward travel time / Flexibility of Route or TOC required	10
Standard Class - Return Same Day	None	Before 9am outward travel time / Cheapest ticket required	72
Standard Class - Return Same Day	16-25	Before 9am outward travel time / Flexibility of Route or TOC required	35
Standard Class - Return Same Day	None	After 10am and before 4pm outward travel time / Flexibility of Route or TOC required	41
Standard Class - Return Same Day	None	Before 9am outward travel time / Flexibility required for time of return (can travel back at any time)	76
Standard Class - Return Week Later	None	After 10am and before 4pm outward travel time / Flexibility required for time of return (can travel back at any time)	6
Standard Class - Weekly Season	None	Cheapest Season ticket required	18
First Class - Single	None	Before 9am outward travel time / Flexibility of Route or TOC required	2
Standard Class - Single	16-25	Before 9am outward travel time / Cheapest ticket required	17
Standard Class - Return Same Day	None	After 10am and before 4pm outward travel time / Flexibility required for time of return (can travel back at any time)	46
Standard Class - Return Same Day	Senior	After 10am and before 4pm outward travel time / Flexibility required for time of return (can travel back at any time)	29
First Class - Return Same Day	Senior	After 10am and before 4pm outward travel time / Flexibility required for time of return (can travel back at any time)	2
Standard Class - Return Same Day	None	Before 9am outward travel time / Flexibility of Route or TOC required	13
Standard Class - Return Week Later	16-25	After 10am and before 4pm outward travel time / Cheapest ticket required	6
Standard Class - Return Week Later	None	Before 9am outward travel time / Flexibility of Route or TOC required	6
First Class - Single	None	After 10am and before 4pm outward travel time / Flexibility of Route or TOC required	7
First Class - Return Same Day	Senior	Before 9am outward travel time / Cheapest ticket required	8

Appendix 1 – Sample table (Part 2)

Ticket Type	Railcard	Time of Travel & Priority	No. of Assessments
Standard Class - Return Same Day	Senior	Before 9am outward travel time / Flexibility of Route or TOC required	3
Standard Class - Return Week Later	None	Before 9am outward travel time / Flexibility required for time of return (can travel back at any time)	9
Groupsave - Single (4 adults travelling together)	None	After 10am and before 4pm outward travel time / Cheapest ticket required	7
Standard Class - Single	Senior	After 10am and before 4pm outward travel time / Flexibility of Route or TOC required	11
Groupsave - Return Same Day (4 adults travelling together)	None	After 10am and before 4pm outward travel time / Cheapest ticket required	7
Standard Class - Return Same Day	16-25	After 10am and before 4pm outward travel time / Flexibility of Route or TOC required	3
Standard Class - Return Week Later	16-25	Before 9am outward travel time / Cheapest ticket required	1
Groupsave - Single (4 adults travelling together)	None	After 10am and before 4pm outward travel time / Flexibility of Route or TOC required	1
First Class - Return Week Later	None	Before 9am outward travel time / Cheapest ticket required	1
Standard Class - Return Same Day	16-25	Before 9am outward travel time / Flexibility required for time of return (can travel back at any time)	1
Standard Class - Return Same Day	Senior	After 10am and before 4pm outward travel time / Cheapest ticket required	1
First Class - Return Same Day	None	Before 9am outward travel time / Flexibility of Route or TOC required	1
Standard Class - Return Same Day	16-25	Before 9am outward travel time / Cheapest ticket required	5
Groupsave - Return Week Later (4 adults travelling together)	None	After 10am and before 4pm outward travel time / Cheapest ticket required	1
Standard Class - Single	16-25	After 10am and before 4pm outward travel time / Cheapest ticket required	2
First Class - Single	None	Before 9am outward travel time / Cheapest ticket required	1
First Class - Single	None	After 10am and before 4pm outward travel time / Cheapest ticket required	1
Standard Class - Return Same Day	16-25	After 10am and before 4pm outward travel time / Flexibility required for time of return (can travel back at any time)	2
First Class - Return Same Day	Senior	Before 9am outward travel time / Flexibility of Route or TOC required	2
Standard Class - Return Same Day	Senior	Before 9am outward travel time / Cheapest ticket required	1
First Class - Return Same Day	16-25	After 10am and before 4pm outward travel time / Flexibility required for time of return (can travel back at any time)	2
Standard Class - Return Same Day	Senior	Before 9am outward travel time / Flexibility required for time of return (can travel back at any time)	2