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REQUIREMENTS FOR A COMPUTERISED RAIL PASSENGER SERVICE INFORMATION SYSTEM

Summary of Results and Conclusions from the Project

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Abstract

GHAHRI-SAREMI, F AND NASH C A (September 1985) Requirements for a Computerised Rail Passenger Service Information System. Summary of Results and Conclusions from the Project. Working Paper 208, Institute for Transport Studies, University of Leeds, Leeds.

This paper consists of three main sections. In the first, we summarise the results of surveys of enquiries made at railway stations and telephone enquiry bureaux. These have been presented in detail in Working Papers 206 and 207. Then we consider the accuracy of the replies given to enquiries in a sample of 252 cases. There appear to be 9 clear errors, with a number of possible futher ones. By contrast, the pilot computerised system developed on behalf of BR made 4 mistakes, of which 3 appear to be explicable as database errors or lack of walk links. The following section gives details of a survey of users of the Prestel terminals provided for direct use by the public at Kings Cross. Most users were able to find the information they required, although there was some criticism on grounds of slow response and complexity. Users tended to be male and on average younger than enquirers at the information desk; some if the latter were resistant to the idea of obtaining information from a computer rather than from a person. Finally, we present our overall conclusions from the project. It appears to us that the benefits of a computerised system are limited because of the simplicity of a large proportion of enquiries, and the speed and accuracy with which they are answered. Nevertheless, computerised systems do afford the possibility of providing faster, more accurate and more complete information at reduced cost in terms of manpower. These advantages would be greatest for a system which was sufficiently user friendly to be accessed directly by passengers, although for the forseeable future the proportion of people undertaking transactions that are not readily computerised or who prefer to ask someone means that this could only be a way of reducing demand on the information desk rather than of replacing it entirely.

1. Introduction

This paper presents the overall results and conclusions from a project examining the requirements for a computerised rail passenger information system. It falls into three main parts. The first summarises the findings from a set of surveys of the questions asked and replies given at railway enquiry offices and telephone enquiry bureaux at Leeds, Doncaster, Woking, Euston, Gatwick Airport (enquiry office only) and Halifax (booking office only). The way in which the surveys were undertaken and the details of the results have already been presented in Working Papers 206 (Introduction and Results of the Leeds data) and 207 (Results of Surveys at Doncaster, Woking, Euston, Halifax and Gatwick). The next part considers the accuracy of the replies given, and compares them with the answers generated by a computer-based system access to which was provided by BR. The third main part discusses a small survey undertaken of users of the Prestel terminals supplied for direct public use by BR at Kings Cross station. This is covered in some detail since the results have not been presented elsewhere. Finally, we draw together our conclusions from the project as a whole.

2. Surveys of enquiries made

(a) Background

At the time when we were developing this project, British Rail were considering their strategy regarding the use of computers to provide information to passengers. They were aware of some commercially produced passenger enquiry systems for answering anywhere-to-anywhere enquiries, and were carrying out developmental work on both mainframe and micro-based systems themselves. The general expectation was that such a system would, initially at least, be provided to assist - rather than replace - the enquiry clerk, although there was also an interest in whether simple user-friendly systems accessed by customers directly could handle the more straightforward enquiries.

However, there appeared to be very little information about the enquiries handled at current BR station enquiry offices and telephone enquiry bureaux. For instance, did they mainly concern train times, or was information on fares or totally different issues equally important? How far ahead do people make enquiries and what proportion of enquiries relate to Sundays, when engineering work tends to render the published timetable of limited use? How quickly and efficiently are enquiries currently dealt with? Obviously, these sorts of question are important in designing a cost-effective system that is able to handle the majority of enquiries, and in determining whether it will yield sufficient benefits to justify its cost.

The objective of our study then was to contribute to an understanding of the potential for computerised rail passenger enquiry systems by providing evidence on the range of enquiries, and the efficiency with which they were handled, at a sample of

stations and telephone enquiry bureaux of different characteristics.

(b) The Surveys

The most satisfactory way of collecting data would have been by means of tape recording. However, it appeared from discussions with British Rail that we would be unlikely to receive permission to use this approach in BR telephone bureaux; its extension to enquiry offices on stations would be even more problematic. We therefore concluded that the only way we could obtain the information would be by placing a member of staff next to an enquiry clerk to enter details of the enquiries made and the answers given on a carefully designed sheet. Pilotting suggested that adequate detail could be obtained in this way.

We therefore undertook surveys ourselves at Leeds enquiry office and telephone enquiry bureaux on a variety of days of the week and at varying times of the year (July, late August and late October). We commissioned Transmark to undertake similar surveys in October/November at Doncaster, Euston, Woking and Gatwick Airport, whilst we ourselves covered Halifax. Of these, Gatwick Airport has no telephone enquiry bureaux, whilst Halifax also had no separate enquiry office - enquiries were handled in the booking office. We felt these gave a reasonable mix of station types, from the main London terminal to the small provincial station.

(c) Summary of Results

c.1 Range of information (Tables 1,2)

Around 87% of all enquiries concerned timetables or fares; the rest concerned a multitude of subjects such as whether there was a tourist information office nearby, where one could get bed and breakfast cheaply and so on. Only these 87% are included in subsequent analysis. Of these, the largest single category of enquiry related solely to timetable information, but nearly half required fares information either in isolation or together with information on train times.

c.2 Range of origins and destinations (Table 3)

Here, there was a greater variation between locations. At Leeds, only about 25% of enquiries related to journeys wholly within the area served by local train services from Leeds. The biggest single category of journeys related to long distance journeys from Leeds, but there was a wide range of destinations. Altogether, over 400 stations - some 20% of the total number of stations on BR - featured in the 1,155 Leeds enquiries.

The pattern at Doncaster and Halifax was very similar to Leeds. But at Woking, Gatwick Airport and Euston, a large proportion of enquiries - something like a third in the first two cases - did not relate to the local area at all. The reason for this was

partly that at Woking and Gatwick Airport, many enquiries were for journeys from London. At Euston, some enquiries were about how to reach stations served by other London termini. With a perception of geography coloured by railway organisation rather than common sense, we had coded these stations as not being in the Euston area. Clearly all London termini need to be able to provide information on all stations served from London, regardless of which is the actual terminal used.

c.3 Number of changes of train (Table 4,5)

The advantages of a computerised system are undoubtedly greater, the more changes of train are involved in a journey. For it is with the more complicated enquiries that clerks are likely to be slower, more likely to give incorrect times and more likely to fail to find the best option.

We were most surprised to find that at all stations except Halifax roughly two-thirds of enquiries (80% at Halifax) related to journeys involving a through train. Many of these enquiries, where the enquiry was made in person and fares information was not requested, could have been answered from the printed departure sheets if the passenger had confidence in his ability to extract the correct information. Only around 8% of enquiries required more than two changes, and none more than four (for this purpose, crossing London was treated as a single change).

c.4 Day and date to which enquiry refers (Tables 8,9)

We were interested in knowing how far ahead enquiries are made, since this provides evidence on how far ahead details of timetable amendments need to be available to the system. The proportion of the enquiries relating to Sundays is particularly relevant in this context, given the problem of engineering work.

Nearly half of all enquiries related to the same day, whilst some 95% related to a period of up to 14 days ahead. We found no enquiry more than 28 days ahead. The day to which the enquiry refers may be somewhat biassed by the fact that we only surveyed certain days of the week. However, excluding enquiries relating to the same day, some 17% of all enquiries related to Sundays.

c.5 Mean time taken to answer enquiries (Table 10)

The average time taken to answer enquiries at Leeds was 50 seconds. Some 10% of enquiries were answered entirely from memory, and these took an average of 35 seconds. Thus it appears that interacting with the customer is a considerably more time-consuming part of the process of answering enquiries than is looking up times and fares. In fact, fares enquiries were slightly slower than timetable enquiries; enquiries involving both were naturally slowest of all. Partly, this is because passengers were often comparing alternative fares.

Enquiries at other locations were somewhat slower, and at Gatwick

Airport in particular were much slower. One reason for this was that at Leeds, enquiries are completely separate from advance reservations, whereas elsewhere the two were often dealt with simultaneously; where a single passenger asked for both, it was not possible to identify the time spent separately on each.

3. Accuracy of replies

We checked back on a sample of 252 enquiries selected randomly from all locations for accuracy. Now it is a disadvantage of the way in which we undertook the survey that we cannot say for certain when the clerk made a mistake. It may be that in fact the information was wrongly entered on the record sheets. However, in the 252 enquiries, there seemed to be 9 clear errors, with a number more where we thought that probably the error was in recording the data (usually, these were where an intermediate arrival time was recorded instead of a final arrival time). In a further 9 cases, the clerk had failed to find the quickest route, but the customer may have preferred the option which he gave. Usually, the clerk had given a cheaper route, or a route with fewer changes of train.

The method of checking accuracy of replies will be of interest. BR made available to us on-line access to the computerised passenger enquiry system developed on their behalf by a firm of consultants. We ran the 252 enquiries through this system, and compared the answers with those given by the clerk. Where a discrepancy occurred, we checked manually using the published timetable which answer was correct; we also checked for coding or punching errors in the data on file. In addition to the errors committed by the clerk, there were occasions on which the computerised system failed to provide the correct answer. Of these, 3 appeared to be data base errors or lack of walk links in the data. The fourth was an inexplicable failure of the algorithm to find the direct route from London to Chilham via Ashford; the answer given involved changing at Chatham, Faversham and Canterbury (with a 1200 metre walk from Cantebury East to West station)!

4. The Kings Cross Prestel Terminals

a. Background

During the course of this project, we learnt that BR had installed three terminals at Kings Cross station for direct use by passengers. These terminals displayed selected BR pages from Prestel, which contain fare and timetable information from and to Kings Cross station. After discussion with BR, we undertook a small survey by means of interviews of people using the terminals and those who chose to go instead to the inquiry desk on a single day in January. Our aim was to discover how acceptable this approach to the provision of information was to the public and what information such a system would need to contain. The survey forms used are reproduced in Appendix 1.

b. Results

This section is devoted to the analysis of replies of those inquirers using the terminal.

b.1 Range of inquiry

Overall 92 inquirers using the terminals have been interviewed; the frequency and relative frequency of these by range of inquiries are presented in table 11.

As expected most inquirers were seeking timetable information and around 32 percent of them were making inquiries about fares or a combination of timetable and fares.

b.2 Purpose of visit

Table 12 shows the classification of inquirers by their main purpose of visit to Kings Cross.

Thus most people were either inquiring about their current journey or taking the opportunity to make an inquiry whilst passing through Kings Cross for another reason. Just over 20% had come specifically to make an enquiry.

b.3 Is the terminal easy to use?

The frequency of inquirer by how easy they found the terminal to use is given in table 13.

It does not appear that most users had any difficulty in using the machine, although there may have been some reluctance to admit such difficulties. Twenty-three respondents volunteered further comments, which were critical of the speed (7), clarity (3) and up-to-dateness (3) of the information.

b.4 Experience

In this paragraph we examine whether the inquirer had any experience of using a similar sort of terminal. Table 14 gives detailed information about the total frequency of each category of experience.

Thus nearly half of the users had no relevant previous experience.

b.5 Adequacy of Information Obtained

78% of enquirers at the terminal obtained all the information they wanted, whilst 12% obtained most and 9% little or none. Usually, the latter was because they were making enquiries regarding stations not covered on the available pages. Of the 81 people who obtained all or most of the information they wanted, 76 said they trusted the information, whereas 5 would ask or consult printed material. 74% prefer to receive a printed copy

of information on the screen.

When asked how important it was that the machine should contain additional information other than times and fares, a considerable number thought that information on platform numbers, local transport and hotels was very or quite important (Table 15).

A further question asked about the route on which information was required where a choice was available. Obviously, the question is simplistic, for instance, most respondents who replied that they wanted the fastest route would have some fare at which they would switch to a cheaper one (they were, however, allowed to specify more than one option). Nethertheless, it is instructive that 59% wanted information on the fastest route, 45% on the cheapest route and 35% on the route with the minimum number of changes (Table 16).

c. Comparison of Terminal and Information Desk Users

Although we did not ask age, our interviewer judged that no-one using the terminals was over 65 years old; 35 per cent of them were judged to be under 25. 83 per cent were male. By contrast those using the information desks were on average older and were equally divided between the sexes.

The main reasons given for use of the terminal rather than the information desk were as in Table 17. Not surprisingly, the main reason was to save time, but with a large number of respondents simply interested in the novelty of the terminal. The main reason given by those using the information desk for not using the terminal is that 73 of the 79 claimed to be unaware of its existence. Of the remaining 6, 4 were either making reservations or seeking information not on the terminal, one found the desk quicker and one only was baffled by computers.

Of the 73 who were unaware of its existence, 68 responded to a question as to whether they would have used it had they known the terminal was available. 30 would still have come to the desk, and their reasons for doing so are summarised in Table 18. If these responses are taken at face value (and obviously respondents may have been reluctant to admit their inability to cope with the terminal), they suggest the existence of a pocket of people who require personal contact, but that it may not be a large proportion of the population.

5. Implications of the Project

Obviously, we have not quantitfied all the costs and benefits of alternative computerised systems, so that our conclusions must be tentative and judgemental. Nevertheless, we would conclude the following:

Ideally a computerised system should be able to handle anywhere to anywhere enquiries, although for some (but not all) stations a system which could handle journeys from, to or between stations within a limited area around the location in question could answer 95% of the enquiries. We believe it to be as important to provide computerised assistance in answering fares questions as in answering timetable enquiries. Nearly half of all enquiries include fares information, and these enquiries take longer to anser than pure timetable ones. Given the interaction between fare, route and time of travel, fares and times need to be on the same - rather than separate - systems.

It appears to us from these surveys that the likely benefits from the use of a computerised system to aid enquiry clerks are less than we would initially have thought. The reason for this is that the majority of enquiries relate to relatively simple journeys, and are answered quickly and accurately by BR staff using exisiting methods. Nevertheless, there are clearly occasions when BR staff make errors, and - whilst the possibility of errors, for instance in inputting questions, remains with a computerised system - we should certainly expect an improvement in accuracy to result. Similarly, there may be some scope for saving time, particularly on the more complicated enquiries, leading to a better service and - in some circumstances - the possibility of staff savings. Assessing whether these benefits would be adequate to justify installation of a system in the near future (at a cost of several million pounds, if every enquiry clerk is to have access to it) will not be easy, but our data has put BR in a better position to take this decision.

In the longer term, a more user friendly system could be operated by the passenger himself. This would afford the possibility of much greater cost savings and longer hours of service (ultimately, speech recognition and speech synthesis may extend the same service to the telephone). It would need to be able to provide appropriate advice on the range of fares, routes and departure times available, rather than simply producing the fastest journey (which may involve an enormous cost penalty to save a few minutes). It may thus enable the customer to explore options more fully than with the current system, where the clerk tends to select a single option to give the customer unless pressed on what alternatives are available. We strongly recommend continuing development work on such user-friendly systems. Nevertheless, both the fact that many passengers appear to seek confirmation from a person of information displayed on departure boards, and the preference shown by some passengers at Kings Cross for getting information from people rather than from machines, suggest that for the foreseeable future any such system

will be a way of siphoning off some of the demand from the enquiry clerk rather than of replacing him entirely.

Despite the impressive performance of existing systems, we do not consider them to be suitable for direct passenter access for the following reasons:

a) Existing input/output procedures are not particularly user-friendly.

b) Existing systems do not incorporate fares. This is not simply a case of adding an additional (large) data base to the system, as additional information about the passenger (to check ownership of or eligibility for a railcard) and his preferences on time of travel is required to provide an accurate answer.

c) The computerised system we tested allows the user to specify a desired departure or arrival time, a maximum number of changes of train and a wish to avoid particular stations (e.g. crossing London). Subject to these constraints, it minimises journey time. This is a commendable degree of flexibility. Nevertheless, it is rare for the constraints to be absolutely binding, and the untrained user needs prompting to investigate the consequences of a slight easing of constraints. For instance, one can often save considerable amounts of money by travelling cross-country rather than via London in return for a modest increase in journey time or a slight adjustment of departure or arrival time. Sometimes the most attractive route is neither the fastest nor the cheapest. (An example which arose in the study is Leeds to Swansea, where the fastest route is via London; the cheapest via Shrewsbury but most passengers prefer to travel via Birmingham).

Discussions with staff on a parallel project at Leeds - on the use of expert systems in the transport sector - suggested that these new computer methods may have a contribution to play in solving these problems and producing a really user-friendly, flexible passenger enquiry system. Consequently, the Institute is now developing proposals - together with Wootton Jeffreys and Partners and Software Sciences - for a Community Club in this area under the Alvey Directorate scheme. We believe that the data provided by the current project on the requirements that such a system would have to meet provides a sound basis on which to take forward such future research and development work.

Station	Total	Timetable only	Fare only	Timetable and Fare
Leeds	1155	640	257	258
Doncaster	409	207	85	117
Woking	236	122	59	55
Euston	626	394	97	135
Halifax	111	59	14	38
Gatwick	76	45	18	13
Total	2613	1467	530	616

Table 1: Frequency of range of information by station.

Station	Total	Timetable only	Fare only	Timetable and Fare
Leeds	100	55.41	22.25	22.34
Doncaster	100	50.61	20.78	28.61
Woking	100	51.69	25.00	23.31
Euston	100	62.94	15.49	21.57
Halifax	100	53.15	12.62	34.23
Gatwick	100	59.21	23.68	17.11
Total	100	56.14	20.29	23.57

Table 2: Relative importance of range of inquiries by station.

Table 3: RANGE OF ORIGIN AND DESTINATION

STATION		TOTAL	STATION TO LOCAL	LOCAL TO STATION	STATION TO OTHER	OTHERS TO STATION	LOCAL TO LOCAL	LOCAL TO OTHERS	OTHERS TO LOCAL	OTHERS TO OTHERS
LEEDS	F	1155	120	36	643	177	24	78	30	4.7
	%	100	10.39	3.12	55.67	15.32	2.08	6.75	2.6	4.07
DON-CASTER	F	4.09	55	6	279	48	0	8	0	13
	%	100	13.44	1.47	68.22	11.73	0	1.96	0	3.18
WOKING	F	236	4	3	59	8	7	52	16	87
	%	100	1.7	1.27	25	3.39	2.97	22.03	6.78	36.86
EUSTON	F	625	20	11	361	83	0	9	2	140
	%	100	3.19	1.76	57.67	13.26	0	1.44	0.32	22.36
HALIFAX	F	111	27	3	57	11	1	8	1	3
	%	100	24.32	2.7	51.35	9.92	0.9	7.21	0.9	2.7
GATWICK	F	76	4	2	44	1	0	0	0	25
	%	100	5.26	2.65	57.89	1.34	0	0	0	32.86
TOTAL	F	2613	230	6L	1443	328	32	155	49	3L5
	%	100	8.8	2.33	55.22	12.55	1.23	5.93	1.88	12.06

Station	Total	Number of changes				
		0	1	2	3	4
Leeds	848	574	206	55	8	5
Doncaster	324	216	86	20	2	0
Woking	177	124	39	14	0	0
Euston	529	388	108	28	4	1
Halifax	97	77	10	7	3	0
Gatwick	58	36	12	8	2	0
Total	2033	1415	461	132	19	6

Table 4: Frequency of number of changes by station.

Station	Total	Number of changes				
		0	1	2	3	4
Leeds	100	67.69	24.29	6.49	0.94	0.59
Doncaster	100	66.67	26.54	6.17	0.62	0.0
Woking	100	70.06	22.03	7.91	0.0	0.0
Euston	100	73.35	20.42	5.29	0.75	0.19
Halifax	100	79.38	10.31	7.22	3.09	0.0
Gatwick	100	62.07	20.69	13.79	3.45	0.0
Total	100	69.60	22.68	6.49	0.94	0.29

Table 5: Relative frequency of number of changes by station.

Location	Total	Dep	Arr	Thr	Dep & Arr	Dep & Thr	Arr & Thr	No constraint
Leeds	848	558	90	31	3	84	13	69
Doncaster	324	195	35	13	4	15	2	60
Woking	177	97	29	3	1	6	2	39
Euston	529	331	40	4	5	12	1	136
Halifax	97	61	6	1	0	2	0	27
Gatwick	58	36	3	3	0	3	0	13
Total	2033	1278	203	55	13	122	18	344

Table 6: Frequency of constraint by station.

Location	Total	Dep	Arr	Thr	Dep & Arr	Dep & Thr	Arr & Thr	No constraint
Leeds	100	65.80	10.61	3.66	0.35	9.90	1.55	8.13
Doncaster	100	60.19	10.80	4.01	1.23	4.63	0.62	18.52
Woking	100	54.83	16.38	1.64	0.56	3.39	1.12	22.03
Euston	100	62.57	7.56	0.76	0.94	2.27	0.19	25.71
Halifax	100	62.89	6.19	1.03	0.0	2.06	0.0	27.83
Gatwick	100	62.07	5.17	5.17	0.0	5.17	0.0	22.42
Total	100	62.86	9.98	2.70	0.65	6.01	0.88	16.92

Table 7: Relative frequency of constraints by station.

Location	Total	Same day	next day	Within 2-4 day	5-7 day	8-10 day	11-14 day	15+ day
Leeds	616	182	129	131	71	33	21	49
Doncaster	108	29	20	39	10	3	3	4
Woking	100	26	38	25	6	0	3	2
Euston	261	228	9	14	6	1	1	2
Halifax	60	27	14	9	7	1	0	2
Gatwick	33	27	2	1	0	0	0	3
Total	1176	519	212	219	100	38	28	62
				531		66		

Table 8: Frequency distribution of categories of time ahead by station.

Location	Total	Same day	next day	Within 2-4 day	5-7 day	8-10 day	11-14 day	15+ day
Leeds	100	29.55	20.94	21.27	11.53	5.26	3.41	7.95
Doncaster	100	26.85	18.52	36.11	9.26	2.78	2.78	3.70
Woking	100	26.0	38.0	25.0	6.0	0.0	3.0	2.0
Euston	100	87.36	3.45	5.36	2.30	0.38	0.38	0.77
Halifax	100	45.0	23.33	15.00	11.67	1.67	0.0	3.33
Gatwick	100	81.81	6.06	3.04	0.0	0.0	0.0	9.09
Total	100	44.06	17.99	18.59	8.49	3.23	2.38	5.26
				45.07		5.61		

Table 9: Relative frequency distribution of categories of time ahead by station.

Location	Total		Timetable		Fare		Timetable & Fare	
	F	T	F	T	F	T	F	T
Leeds	1155	0.73	640	0.67	257	0.74	258	0.82
Doncaster	409	1.46	207	1.01	85	1.53	117	2.06
Woking	236	1.75	122	1.39	59	1.78	55	2.45
Euston	626	1.03	394	0.87	97	1.37	135	1.26
Halifax	111	0.47	59	0.44	14	0.57	38	0.49
Gatwick	76	3.32	45	1.83	18	4.43	13	7.68
Total	2613	1.07	1467	0.87	530	1.22	616	1.42

Table 10 : Frequency and time taken (mins) for each category by station.

Range of inquiry	F	%
Timetable only	55	59.8
Fare only	8	8.7
Timetable & fare	21	22.8
Other	8	8.7
TOTAL	92	100

Table 11: Range of information

Purpose	F	%
To make an inquiry	21	22.8
To meet someone	5	5.4
Current journey *	37	40.2
Another journey **	23	25.0
Train spotting	1	1.1
Changing Ticket	1	1.1
Purchase Ticket	2	2.2
Seat Reservation	1	1.1
Other	1	1.1
TOTAL	92	100

TABLE 12: Purpose of visit.

* In course of Journey to which inquiry relates
** In course of another journey.

	F	%
Easy to use	86	93.5
Not easy	6	6.5
Difficulty		
Operating the machine	2	1.17
Finding right information	2	1.17
Finding initial index	1	1.08
Other	1	1.08

Table 13: Is Terminal easy to use?

Category	F	%
Computer at work	22	23.9
Computer at home	6	6.5
Prestel at work	15	15.3
Prestel at home	4	4.3
Combination of above	5	5.5
No experience	40	43.5

Table 14: Frequency of category of experience

	Very Important	Quite Important	Un Important
Platform numbers of connecting trains	39	34	27
Bus & underground services from Kings Cross	19	38	44
Connecting bus services at other end of journey	23	32	46
Hotels near Kings Cross	12	32	57
Hotels at other end of journey	16	30	53

Table 15: Additional Information Required (% of respondents)

The fastest route	22 (32)
The cheapest route	13 (19)
The route with the minimum number of changes	12 (18)
Fastest and cheapest	9 (13)
Fastest and minimum changes	3 (4)
Cheapest and minmum changes	2 (3)
All three	7 (10)

Table 16: Routes on Which Information Required
(% in brackets)

Save time (quicker, easier, no queue)	36
More convenient	5
Interested in machine	14
Novelty	16
Checking information	4
Other	16
	91

Table 17: Reasons for Using Terminal

Prefer personal contact	8
Machine unfamiliar, confusing, easier to ask at desk	6
Requiring leaflets, information not on machine	6
Faster, depending on length of queue	4
Other	3
Missing	3
	30

Table 18: Reasons for Using Information Desk

APPENDIX

PASSENGER INFORMATION SURVEY AT KINGS CROSS

INFORMATION DESK

Q1. What information are you seeking?

Train Times ☐

Train Fares ☐

Other: please specify .....

Q2. What are the starting and finishing station of your timetable or fare inquiry? {N.B. There may be more than a single pair; enter all}

Start ..... Finish .....

Start ..... Finish .....

Start ..... Finish .....

Q3. Are you making an inquiry about a specific journey you are planning?

Yes ☐ No ☐

Q3.1 If yes;

Q3.1a If there is a choice of alternative rail route on which do you want information? {Interviewer: make sure the respondent realises he can answer YES to more than one alternative }

The fastest route? ☐

The cheapest route? ☐

The route with the minimum number of changes? ☐

Q4. Are you aware that there are "self-help" machines capable of giving a variety of information about timetable and fares situated in this office?

Yes ☐ No ☐

Q4a If yes, did you use it?

Yes ☐ No ☐

Q4a.1 If yes then why did you come to the desks? (write in)

.....

.....

Q4b If NO, had you been aware of the terminal, would you still come to the information desk?

Yes ☐ No ☐

Q4b.1 Why? (write in).....

.....

.....

DO NOT ASK

Sex M ☐ F ☐

Age -25 ☐ 25-60 ☐ 60+ ☐

Time ..... Date .....

PASSENGER INFORMATION SURVEY AT KINGS CROSS

TERMINAL

Q1. What information are you seeking?

Train Times ☐

Train Fares ☐

Other: please specify .....

Q1.a If Timetable and or Fares: What are the starting and finishing station of your timetable or fare inquiry? {N.B. There may be more than a single pair; enter all}

Start ..... Finish .....

Start ..... Finish .....

Start ..... Finish .....

Q2. Are you making an inquiry about a specific journey you are planning?

Yes ☐ No ☐

Q2.1 If yes;

Q2.1a If there is a choice of alternative rail route on which did you want information? {Interviewer: make sure the respondent realises he can answer YES to more than one alternative}

The fastest route? ☐

The cheapest route? ☐

The route with the minimum number of changes? ☐

Q3. Why did you come to the terminal rather than the information desk or consulting printed material? (please write in)

Q4. Did you find the terminal easy to use?

Yes ☐ No ☐

Q4.a If No what gave you most difficulty?

Operating the machine ☐

Finding right information ☐

Other : please specify .....

Q5. Have you had any experience of using computers or prestel?

Computer at work ☐ Computer at home ☐

Prestel at work ☐ Prestel at home ☐

Q6. Do you prefer to receive a printed copy of the information on the screen?

Yes ☐ No ☐

Q7. Did you get the information you wanted?

Yes all ☐ most ☐ little ☐

No ☐

Q7.a If yes Do you trust the accuracy of information you have retrieved or will you seek further conformation?

Yes trust it ☐

No will ask or consult printed material ☐

Q7.b If No, why not? (write in).....

.....

Q8. What is the main reason for your visit to Kings Cross today?

To make an inquiry ☐

To meet someone ☐

In course of journey to which inquiry relates ☐

In course of another journey ☐

Other: (write in) .....

.....

Q9. How important do you think it is that the machine here should hold information on each of the following:

	Very important	Quite important	Un important
Platform numbers for connecting services when you have to change train on route	☐	☐	☐
Details of bus and Underground services from Kings Cross	☐	☐	☐
Details of connecting bus services at the other end of your journey	☐	☐	☐
Details of Hotels near Kings Cross	☐	☐	☐
Details of Hotels at the other end of your journey	☐	☐	☐

Other (write in).....

Q10. Do you have any comments?

DO NOT ASK

Sex M ☐ F ☐

Age -25 ☐ 25-60 ☐ 60+ ☐

Time ..... Date .....