

## **Electronic Government - Customer Demand Analysis**

### **Background:**

The UK Government, European Union and G8 nations all support a move towards electronic delivery of public information and services to citizens. The UK government has set a target of 100% of all appropriate public services being capable of electronic delivery by 2005.

This paper looks at research which has been carried out nationally and in Norfolk on the potential demand for services via various electronic means: call centre/telephone; kiosk; internet; digital television etc. This should then help public services – especially local government – develop strategies for e-government. In particular it will be used as part of the Norfolk Connect work to develop a strategy for the county.

Most recent research in Norfolk is attached as appendix 1.

Details of the sources of information are at the end of the paper, referenced by footnote number after each statement.

### **Typology:**

An examination of the research allows us to roughly divide customers into two groups and types of transaction into two groups. These are then combined into four “boxes”. The boxes are:

**A1: Easy to reach Customers/ simple transactions**

**A2: Easy to reach Customers/ complex transactions**

**B1: Hard to reach Customers/ simple transactions**

**B2: Hard to reach Customers/ complex transactions.**

**Easy to reach customers** are those who have access to multiple channels – phone, car and computer owners who are better off (A,B,C social class) better educated, and live in urban, suburban, or market town areas.

**Hard to reach customers** are those who for reasons of ability, location, income, or choice (i.e. 16-25 year olds) are hard to reach. They include social classes D,E, older people, those in rural areas, those on benefit, those with disabilities and those with less skills.

**Simple Transactions** are those where people largely know what they want, and where a single transaction to a single agency, multiple transactions to the same agency (paying your council tax and booking a housing repair) or a single transaction to multiple agencies are needed. The last includes things like change of address or notification of a change of state – retirement, births, deaths, unemployment, employment, starting or leaving education.

**Complex transactions** are those where an emotionally charged life episode involves multiple agencies in order to be addressed, or where the citizen or business does not know exactly what they need, never mind who can provide it. An example may be someone starting a business or going through a marital break up.

**1.Simple Transactions (80%)**

**2.Complex(20%)**

<b>B. Hard</b>	<b>1.Simple Transactions (80%)</b>	<b>2.Complex(20%)</b>
	<b>Face to Face, kiosk(10% between), Phone (90%)</b>	<b>Face to face</b>
<b>A. Easy to reach</b>	<b>Internet, TV(20% between but growing), Phone (80%)</b>	<b>Face to Face (65%), Phone(30%)</b>

Henley have split the market into five segments: @home (active users in the home) ; @ll (current users outside the home) ; Ne@rly (using PCs and video games but not currently internet) ; M@ybe (not likely to adopt at home within 5 years but use in other locations); Not @ll (highly unlikely to adopt).<sup>15</sup>

Current proportions are 24%, 14%, 33%, 11%, 18% - meaning 61% of people could have access to the internet at home within the next five years with another 11% having access at work or in libraries etc. However PC home use is expected to peak at 50% of households with the growth in internet use being via digital TV, WAP phones, game consoles etc.<sup>15</sup>

The vast majority of Not @lls are aged over 60 (70%). 15-18 year olds are mostly in the first two categories with more having access in school or elsewhere than at home. 19-24 year olds are in the first three categories – with the smallest number in the @home group. Most of the first group are aged 25-44 with slightly more in the @home group. The ne@rly group has an even age spread except for 15-18 year olds.<sup>15</sup>

As you may guess, a large proportion of the Not @ll group are retired with another large segment being other not working. Similarly the “still studying” group is largest in the first two categories. The proportions of those in full time employment reduces as you move to the less adoptive categories.<sup>15</sup>

Social class is in direct proportion across the segments – most ABs are the @home group with most DE in the Not @ll. However there are the same proportion of C1C2 at the extremes with more of both in the middle.<sup>15</sup>

The Foresight retail e-commerce task group report “Clicks and Mortar” divides e-consumers into six categories:

Realistic Enthusiasts (15%) – will use internet for purchases over £500 and will buy from unknown companies. They value convenience over price. Want to see before buying.

Confident Brand Shoppers (16%) – will spend over £500. Tend to use well known brands but shop around for the best price

Carefree Spenders (15%) – buy from unknown companies and do not want to see before they buy. Spend 55% more than average.

Cautious Shoppers (21%) – won’t buy goods via auctions, want to see before they buy and have a cautious approach.

Bargain Hunters (16%) – won’t spend more than £50 but will buy from any website as long as it is the cheapest

Unfulfilled (17%) – find the whole process frustrating and don’t trust it.

48.5% of internet users are predicted to buy online by 2003.<sup>19</sup>

### **Channels**

- People prefer different mechanisms for accessing services in different circumstances – telephone is first choice, in person is for emergencies or complex issues, letter is for complex “official” issues, kiosks are for getting quick information, internet is for gathering information. However the last two issues are partly because of current levels of penetration and use as much as informed preferences. <sup>5</sup> People have higher expectations of new technology than existing<sup>12</sup>

	Call centres	teletext	email	web	kiosks	atm	Direct banking	Digital TV
General info	Good	G	Medium	G	G	M		G
Personal info	G	Bad	G	G	G	G		G
Advice	G	G	M	M				
Applications	G	G	G	G	G	G		G
Money deliver						G	G	

y								
Money collection	G		G	G	G	G	G	G

Detailed breakdowns of demand for out of hours services via different channels for different services from the 2000 People’s Panel fourth wave are in appendix two. Cost is also a relevant factor. A call centre costs 40% of the cost of a face to face transaction and the internet 10%.<sup>8</sup>

Preferred channels for accessing government were in writing (29%), face to face (27%), by phone (26%), internet (10%). However 24% of @Homes and 12% of @lls preferred the internet with @homes being least likely to prefer the telephone and most likely to prefer writing. Face to face was chosen most by the M@ybes and Not @lls. Lack of understanding of the technology was the biggest barrier to e-government for the last three groups with lack of access close behind.<sup>15</sup>

Post Offices were singled out for praise as a centre of the community and were highest in terms of citizen trust and places to deliver the new services (trusted by 59% of people compared to 17% for local government and 16% for central).<sup>15</sup>

**Face to Face**

- Older people prefer face to face contact. Prefer to fill in forms face to face.<sup>14</sup>
- For Citizenship (i.e. welfare rights etc) information, 60% plus of clients make face to face contact, 35% by phone, 7% by letter. Preference is 95% wanting face to face with 51% wanting a timed appointment. Number of enquiries per head of population varied from around 1:1 for prosperous areas to 2.2 for areas of deprivation and 1.5 for mixed areas.<sup>1</sup>
- Benefits advice and consumer advice make up 40-50% of all citizenship queries with the proportion between them depending on the area’s prosperity. Client group bias towards deprivation indicators. Reasonable age spread.<sup>1</sup>
- The key selling points for Post Offices and Banks and weaknesses of Libraries and Council Offices is frequency of use. Key selling points for libraries are staff and convenience of location. Key point for council offices is they already do official business.<sup>7</sup>
- 1998 survey had Post Office as most attractive place to access government services and transactions by 67%, council offices 64%, library 59%, bank 56%, supermarket 41%, Boots 31%<sup>7</sup> This ranking has stayed in place with some variation in numbers for a number of years.
- CAB is seen as possessing expert knowledge but not offering the ease of access to general contact information that can be more easily gathered elsewhere.<sup>10</sup>

**Phone**

- When using the phone people want to speak to an operator not an electronic system.<sup>5</sup>
- Telephone number is the single most vital piece of information in directories etc. On balance, participants felt that key emergency services should offer a

freephone service, while other services should be provided at lo-call rates, using an '0345' number. They felt that call costs should be kept low to ensure that cost did not restrict access to services.<sup>10</sup>

- A named contact was seen as important, but not essential. Several group members felt that Central and Local Government should be focusing on training the staff who handle telephone enquiries to be more polite and professional, and that this was more vital than having a named contact.<sup>10</sup>
- Mobile phone use is evenly split from 22 to 29% across social classes.<sup>12</sup>
- Only 10% do not have access to a land line phone, of whom half have access to a mobile phone. Those who have no access are mostly in social classes DE.

## Internet

- 42% of companies recently surveyed had no access to any ICT facilities. Although 48% of companies now do have access to the Internet only 20% use it for trading and e-commerce. 34% of companies have their own web site. 48 % of companies have access to the internet for their employees. 50% of firms had an email facility. This ranged from 35% in Yarmouth to 56% in Norwich and 57% in Broadland and South Norfolk.<sup>2</sup>
- People starting in business want to access info and services at home via internet. <sup>6</sup>.
- Overall business thought electronic transactions with government would make life easier. Slight majority felt was likely to use it for information and forms with slightly less making payments. Existing small users go up to 80%, higher among accountants. Departments contacted most often were Inland Revenue (32%) Local Authority (21%) Customs and Excise (18%) Contributions Agency (6%) TECS etc. (5%) HSE (4%). Most frequent dealings were making payments (monthly) submitting forms (quarterly) receiving information (annual) requesting information (annual)
- Most thought government should offer more information over the Internet and 49% thought government had information that would help their business.<sup>11</sup>
- The Household Survey in 1997 showed 39% of people in Norfolk used a computer (Nch. 42%). At that point only 5% to access the internet, 25% used them for work, 10% for study and 21% at home.<sup>3</sup> In the Citizen's Panel survey (1999) only 37% of people did not use PCs. 43% use at home and 40% at work with education facilities 12% and libraries 8%. 42% access the internet.<sup>4</sup>
- Those who had used electronic means of access liked it. <sup>5</sup>
- Computer penetration by income rises steadily from 10% at £10k income to 60% at £80k income. <sup>8</sup> Computer ownership goes from 9% of social class DE, to 14% C2, 35% C1 and 43% AB.<sup>12</sup> This applies globally with a 7% rise in home computer ownership for every \$10k rise income.<sup>19</sup>
- Men still dominate internet use and teleworking by around 60%. Also dominate e-banking (80%) and also curve towards younger people. However also growth in "silver surfers" and US has now started to level out in age range use. <sup>8</sup>

- 18 Million people in the UK use the internet and another 15 million will go online soon. Even the 20% of the population who are technophobes have not ruled out learning to use ICT in the future.<sup>15</sup>
- 72% of people think access to the technology will be a barrier to e-government<sup>15</sup>
- There was strong support for government providing free access to the internet to access government services and the idea they did not want to “pay twice”.<sup>15</sup>
- People could see the benefit of the internet for accessing information but preferred more familiar channels for problems.<sup>15</sup>
- Services people spontaneously mentioned they wanted to use over the internet were:
  - Library catalogues
  - Booking doctor’s appointments
  - Reporting minor crimes and accessing crime prevention information
  - Benefit information
  - Voting
  - Legislation
  - Travel informationTax, passport and other application forms<sup>15</sup>
- 75% of people wanted to access government services over the internet with local council and events being top (30%) followed by Job centre adverts (27%), guidance on benefits (26%), college/university courses (26%), guidance and taxation (23%), school/college performance tables (22%), hospitals (16%), crime rates (15%), how to start/run a business (15%) and contact details for MPs (13%). Over half are happy to fill in forms online and are comfortable with the idea of voting online in a general election.<sup>14</sup>
- Use of the web rather than phone to contact call centres will rise to 20% of all contacts by 2001 in UK. <sup>8</sup>
- 45% want to access services via internet or digital tv by 2003. Men happier than women with electronic services. 29% have internet access at home, 26% at work and 15% both. By 2003 predicts 63% will be online. <sup>9</sup> However People’s Panel in 2000 showed one in seven want electronic access, with less demand among over 55s and social class C2DE<sup>13</sup>
- Older people tend to treat internet with suspicion and are concerned about the security risk of supplying personal information in this way. Younger people are more open to it as a method of communication.<sup>5</sup> However a more recent survey showed that 20% of people over 50 now have a computer and spend an average of 9 hours a week on it. 81% find it easy to use and their favourite internet sites are educational and learning ones – visited by 64% of those online.<sup>15</sup>
- There was support for directories to be placed on the Internet, but this was seen as an additional approach rather than the main mechanism for providing the information. It was seen as a method of information delivery that the

Government should provide, but there was an acknowledgement that it was only a convenient approach for the minority of the population who currently had access. The Internet was seen by group members as a way of finding out information for a non-urgent purpose - but not as a means of answering an immediate query, or problem requiring a short term solution. While some had used it to receive information, none had exchanged information with a service supplier, or undertaken a transaction.<sup>10</sup>

- Four out of five people wanted to use on line services in 1997 with an equal spread over computer, television and internet phone. 41% did not choose a pc, but this more of those who had a pc chose it (58% compared to 23%).<sup>7</sup>
- Higher percentages of young users (7-16) are comfortable with e-commerce than older people.<sup>19</sup>
- Currently computer hardware is the highest value sector in e-commerce followed by travel, books, software and music. By 2003 travel is expected to be top followed by hardware, books, software and music.<sup>19</sup>
- A 1998 MORI survey revealed interest in the following online services: voting (56%); paying bills (49%); buying lottery tickets (46%); banking (46%); buying shares (33%); non-grocery shopping (33%); grocery shopping (28%)<sup>19</sup>

### **Kiosks**

- Preferred kiosk location for people accessing citizenship information is Libraries (47%), CAB/advice centres (38%), shopping malls (38%), surgeries (36%), supermarkets (30%), bus stations (24%), neighbourhood/community centres (22%), Town halls (20%)<sup>1</sup>.
- People want access electronic services in places they go anyway – supermarkets, council offices and libraries. They also want information in the places they currently look for it as well as new places. Frequency of visits is Supermarkets- more than weekly; Post Offices and Banks – weekly, Libraries either monthly or hardly ever and council offices hardly ever.<sup>5</sup>
- In short term business feels kiosks are ok and want them in : libraries, Post Offices, business support, banks, supermarkets in that order. <sup>6</sup>
- Public kiosks good for marginal groups. <sup>8</sup>
- Only one or two individuals had made use of an electronic kiosk of any description (for travel details, or tourist information). Those who had used an electronic kiosk found it helpful - with the key aspects being that the language used is clear and easy to follow, and attractively presented. The key drawbacks were the need to leave the home to access the kiosks, and the possibility of vandalism. When considering where kiosks should be positioned for greatest use, and ease, respondents felt that it should be a location that you currently visit on a regular basis, and that preferably it offers 'out of hours' access. For example, there was strong support for locating kiosks in supermarkets. Participants felt that as they would be going to the supermarket at least once a week, they could build the kiosk into their shopping list if they needed to find out a specific piece of information. Other locations mentioned were Council offices and local libraries. Although some participants acknowledged that although not regular visitors, these were convenient town centre locations. They also suggested that the offices or libraries could have secure 24 hour foyers - like

some banks - that residents could access using a Council swipe card. GPs surgeries, tourist information offices and Cinemas were also suggested as convenient locations. It was suggested that electronic kiosks would be more valuable if the information provided was more focused on the information salient to the location. For example, locating kiosks in GPs surgeries and providing details of local clinics, or basic health care advice.<sup>10</sup>

- Would like to use internet but want free terminals in libraries etc to do so. Quite like touch screen kiosks as they are easier to use than computers<sup>12</sup>
- Not much current demand for kiosks and digital TV.<sup>13</sup> C2DE want public access kiosks<sup>14</sup>

### Digital TV

- Upscale males will dominate digital tv in the future <sup>8</sup> Currently digital tv is split 26% DE, 20% C2, 29% C1, 25% AB<sup>12</sup>
- Almost one household in five has digital television in a report published by OFTEL on August 17 2000. These are currently biased towards higher income families (31% of households) falling to 14% for lower income groups and 10% of older people.<sup>18</sup>

### Directories

- Directory enquiries were more likely to be mentioned as the best source of information on public services by the female members of the group. They saw it as the easiest option, with no need to leaf through a weighty directory to track down the relevant entry. They were not deterred by cost, as these calls were frequently made during work time, or they considered that the convenience outweighed the cost<sup>10</sup>
- Information which was mentioned as being essential in directories was:
  - telephone number
  - named person
  - list of services offered by given departments and organisations
  - address
  - appearance
  - hours of business
  - web details<sup>10</sup>

### Timing of service

- Most people only want health services available 24hours, but big demand for extended weekday service until 8 or 10pm. Most demand for extended hours services from younger people and well paid professionals, but not vastly different for everyone else. Biggest demand is for access to information out of hours, with not much demand for accessing services *except local councils*<sup>13</sup>

### Smart Cards

- Majority of people happy to use a smart card for driving licence (70%), identity card (70%), passport (66%), benefit card (58%) <sup>7</sup>

1. Citizenship information service provision: Rita Marcella and Graeme Baxter
2. 1999 employers survey
3. 1997 household survey
4. 1999 Norfolk Citizen's Panel
5. People's Panel Third Wave (1999)
6. Open for Business East Anglia research (1998)
7. Post Office tracking research 1997-1999
8. Citizen's Preferences – Kable, 2000.
9. KPMG survey 2000
10. People's Panel directory focus group 1999.
11. View from the queue – Small business attitudes to electronic government (1999)
12. Government Portal research 2000
13. Wave 4 People's Panel Quantitative research 2000
14. People's Panel Qualitative 2000
15. e Government: Ready or Not? . Henley Centre/Mori 2000
16. British and Technology Report. Motorola/Mori 2000
17. Computers and Older People. Age Concern/Microsoft 2000
18. Digital TV Survey. OFTEL, 2000
19. Clicks and Mortar. *Foresight* May 2000

## Appendix 1.

### **Log of data collection issues and information from the Norfolk Data Collection, telephone survey, Market Town and district Best Value Access to Services reviews.**

Of 47 calls to Comms unit 17 were for districts ( 36%). Ave duration just over a minute

Spending on information production is £2.6m for “paper based” info and £0.5 for internet based.info. However clarity needs to come on whether “content creation” is included in either of these as opposed to publishing costs. Ideally this should be stripped out of both.

Libraries as one stop shops would need to cope with greater numbers of older people – their current membership has the post 55 age group under represented, while they are over represented in those wanting to access services face to face. Conversley, under 25s are over represented and these are more likely to want to access services via phone or internet.

The percentage of people who thought e-government would have no benefit was highest for over 65s – 41% and 55-64's – 36% compared to around 20% for 25-54 year olds and 8% of 16-24 year olds.

Letter contact would halve and personal visits drop by 2%.

Of the 211 external referrals in to the organisation whose source was named, 56 were from other local authorities – Kings Lynn the biggest at 21 with Broadland at 12 and the rest lower. 23 were from the NHS. In both cases they were primarily about services which could be assumed to be delivered legitimately by the first authority i.e. hospital discharge for the NHS ones, and street lighting and roads for district councils.

Cultural services already gets 75% of all face to face inquiries from the public (i.e. picking up the rest would not be a significant increase). The two biggest other ones are Social Services (13%) and Education (5%).

Note departmental multipliers for figures to get to 100% are:

CEX – got 95%; Cult got 36.5%, Edu got 27%, Fin got 46%, Soc Serv got 84%, P+T got 46% and Fire 46%.

8% of calls were from businesses, which squares with only 6% on the phone survey wanting business support info.

Need single file for each service with sheets from each of the other spreadsheets i.e mine, and three of Beth's.

No fulfilment was purely out of people's heads (i.e. none of the transactions against that service used web or leaflets) and all services which had leaflets had web references as well. Those services which had no references to leaflets or web were either referred on to others or “other” or “no” service was provided. This means all requests for information or advice being dealt with have web sites with info about them, or are being passed on to people not surveyed for fulfilment.

Those services which logged more than 50 phone calls during the week, apart from Trading Standards, Libraries and Social Services, were:

- Recruitment (83)
- Registrar's general info (205)
- Registrar's appt to see registrar (99)
- County Hall main switchboard (79)
- Archives ref info inquiries (72)
- Insurance property claims (72)
- Education general inquiries (981)
- Education personnel (142)
- School admissions (218)
- Student Support (371)
- Adult Education (392)
- Youth and Community (106)
- Traveller Education (59)
- Fire protection (80)
- Street Lighting (166)
- NRWSA in P+T (94)
- Passenger Transport Information (56) (Note, were PTU surveyed?)
- School SEN and SS transport (119)
- Countryside Conservation Advice (83)
- Highway Comments on Planning applications (67)
- Waste general inquiries (82)
- P+T general inquiries (160)

KPMG latest survey has the following info of relevance:

- 50% of adults over 16 have internet access somewhere with 44% at home
- Of those with access 60% are under 55 including 66% of 35-54s
- Lack of equipment is reason why don't use for 85% of those not having access
- 66% of over 65s prefer phone or face to face and wouldn't use internet
- 85% of those on line want interactive services compared to 42% of those with no access

- Call centres have gone from least popular way “location” to access government in 2000 (4%) to most popular in 2002 (30%). 28% prefer face to face with one stop shops most popular (15%) followed by Post Offices (10%) and libraries (3%). Internet is 19% with digital tv at 4% - down from 21% in 2000. Support for face to face and phone access is strongest amongst those not online.
- Most popular local government transactions to do online are voting (38%), notifying faults (35%), looking up schools info (32%), paying council tax (30%), and benefits inquiries (30%)
- Overall 33% of people would not use any electronic services. This falls to 11% of current internet users
- East of England and South East areas most willing to do business with government electronically. Wales, East and West Midlands and Scotland least willing.