Off Their Trolley -- Understanding Online Grocery Shopping Behaviour

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Abstract. The artefact or object-based models commonly used in interaction design for describing users are inadequate for understanding the complexity and variability of online consumer behaviour, while traditional models of consumer behaviour do not reflect the user's ability to shape their shopping experience online. To address this gap a framework has been developed for modelling online consumer behaviour and in this paper this framework is used to develop a survey of online grocery shopping in the UK. Analysis of the survey reveals several issues of concern, particularly dissatisfaction with product search capabilities and a conflict between the online consumer's desires for both empowerment and experimentation.

1 Introduction

It is axiomatic that interaction design begins with a thorough understanding of the user, and this understanding is often developed and communicated through conceptual models of the user that are grounded in specific activities or artefacts [4-6, 13]. The task of user modelling becomes particularly difficult in the context of online shopping systems. Consumer behaviour itself, regardless of venue, is highly complex in nature [14, 15], varies greatly for different demographic groups and can vary even for the same consumer depending on context [12]. This level of complexity and variability cannot be adequately reflected in models that are grounded to a particular task or artefact, and reliance on single-aspect models leads to neglect of the whole sphere of online consumer behaviour [1, 20]. Adding to these difficulties is the fact that online consumers differ from "terrestrial" ones in that they are also able to initiate and shape their shopping experiences through the use of interactive shopping systems [7, 9, 17]. Consequently, traditional models of consumer behaviour are also insufficient for modelling online consumer behaviour as these traditional models rely on the premise of a primarily passive and reactive consumer [10, 11, 18].

Therefore in order to develop the understanding of online consumer behaviour needed for effective interaction design, we need a way of modelling users that facilitates identification and exploration of the various aspects relevant to online consumer behaviour.

To address this need, we have developed a framework for modelling online consumer behaviour and demonstrated its use in developing design personas, identifying behavioural patterns, and illuminating potential interaction problems. In this paper we will examine how this framework can be used to further explore the diversity of online consumer behaviour by developing and administering a framework-based survey designed to examine the behaviour of online grocery shoppers in the UK.

2. The e-Consumer Framework

In Clark & Wright [2] we presented the e-Consumer Framework (e-CF) as a structure for conceptual modelling of online consumer behaviour. The e-CF, which was derived from existing literature and research into both online and general consumer behaviour, is based on seven parameters of online consumer behavioural (Fig. 1).

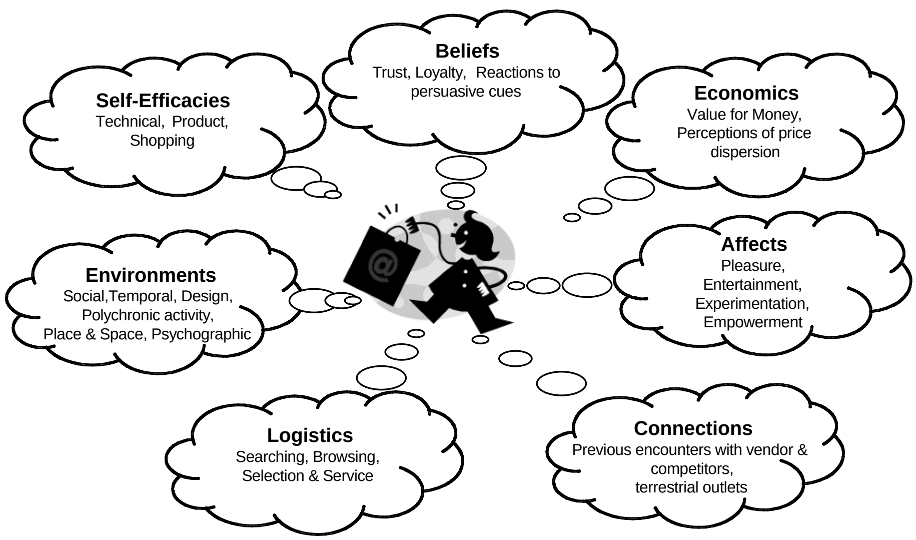

Fig. 1. The e-Consumer Framework (e-CF)

This multi-dimensional framework provides a comprehensive yet practical platform for conceptual modelling of online consumer behaviour, facilitating identification, description and prioritisation of relevant behavioural aspects while recognising the complexity and variety of online consumer behaviour. To date, we have demonstrated how the e-CF provides a structure for collecting and processing qualitative data and subsequent design persona development. In addition, e-CF based summaries of qualitative data can be used to develop insight into usage patterns and identify potential interaction issues both within and across domains.

3. Rationale For An e-CF Based Survey

In our previous study we examined online grocery shopping behaviour by observation and interview of eight participants who identified themselves as regular users of online supermarkets. In addition to demonstrating how personas could be built from individual e-CF based descriptions of each participant, we also aggregated the results for all online grocery participants into an e-CF based summary which enabled identification of various behaviour patterns common to most or all of the participants and uncovered some potential issues of concern to interaction designers including conflicts between the participants' desire for empowerment and their desire for experimentation, a lack of loyalty to terrestrial outlets of the online supermarket, a degree of difficulty in finding certain items, an avoidance of polychronic activity and a seeming indifference to site design.

The e-CF based ethnographic study illuminated the complexity of the online grocery shopper's behaviour, particularly the variety of aspects that influence such behaviour. By developing an e-CF based survey of online grocery shopping, we can use quantitative data to explore the diversity of online grocery shopping behaviours and identify common features and issues relevant to interaction design.

4. The Survey

To construct the survey, we developed over 60 closed questions each designed to cover one or more e-CF themes. Questions were designed to measure either perceived behaviour or attitudes, with themes duplicated with alternative wording where possible to minimise response bias [3]. The first question asked of all respondents was as follows:

Which of the following statements most closely describes your current level of grocery shopping?
I do most of the grocery shopping for my household
I share grocery shopping duties with other members of my household
I occasionally go grocery shopping
I never do the grocery shopping

In addition to exploring the themes of Self-Efficacy and Environments, this question acted as a primary filter, as those respondents who indicated that they never did the grocery shopping could then be immediately eliminated from the rest of the survey.

Respondents were then asked several questions concerning gender, age, occupation and household size so that demographic profiles could be built. The next set of questions was intended to explore various e-CF themes in general online shopping behaviour and non-Internet (terrestrial) food shopping.

e-CF Themes	**Behavioural Questions asked of all respondents**
Logistics Environments	Are there particular religious, ethical or health considerations that affect your grocery shopping? (Y/N)
Connections	Where do you do most of your non-Internet food shopping?
Connections	On average, how often do you buy your groceries from a supermarket, grocer or any place other than the Internet?
Self-Efficacies	Aside from groceries, have you ever bought any of the following types of products online?: Books, Music/Films, Travel, Electronics, House/Garden, Clothing, Toys/Gifts, Computer Hardware/Software, I have never bought anything online

The next set of questions was intended to explore the extent of various behaviours manifested in food shopping and terrestrial food shopping in particular. For these questions, a 5-point Likert scale was used for responses.

e-CF Themes	**Questions on general Food Shopping Behaviours** **(Never, Rarely, Sometimes, Frequently, Almost Always)**
Beliefs	Do you store your credit/debit card details at your favourite online shopping sites?
Self-Efficacies	Do you every find online shopping confusing?
Self-Efficacies	How often do you cook means from scratch?
Affects Logistics	Do you tend to buy the same brands or types of groceries over and over?
Economics	How often do you compare prices before deciding where to buy your groceries?
Logistics	How often do you study the label on a new item before purchasing?

The next set of questions was intended to measure attitudes towards food and food shopping in general, using a 5-point Likert scale.

e-CF Themes	**Questions on Attitudes** **(Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree)**
Self-Efficacies	I am comfortable using my computer to access the Internet
Self-Efficacies	I like to try new things out on the computer myself, rather than ask someone to help me
Environments	Being able to grocery shop at any time of day is important to me
Environments	Buying organic or Fair Trade products is important to me
Affects	Food shopping is boring
Affects	I enjoy cooking for my family and friends
Environments	Grocery shopping is easier to do if I'm on my own
Affects	I don't like someone else picking out my groceries for me
Affects	I enjoy food shopping
Affects	I like to try different places to buy my groceries

Through a filtering question, respondents were then split into two groups -- those who currently did any part of their grocery shopping online (OGS) and those who did not currently do so. The OGS were then asked questions about their online grocery shopping behaviours and attitudes as follows:

e-CF Themes	**Questions on Behaviour when shopping for groceries online**
Beliefs Connections	Where do you do most of your online grocery shopping?
Connections	Overall, where do you buy most of your groceries? (Online, From a Supermarket, From a Grocer or other local shop, Other)
Environments	On average, how often do you buy your groceries online?

e-CF Themes	**Questions on Behaviour when shopping for groceries online** **(Never, Rarely, Sometimes, Frequently, Almost Always)**
Beliefs Connections	If you need to go to a supermarket, do you go to the same vendor that provides your online grocery shopping?
Beliefs Environments	How often do you check out Special offers or items on sale?
Environments	How often do you do your online grocery shopping from your home computer?
Economics Logistics	How often do you time your online grocery shopping to take advantage of cheaper delivery charges?
Logistics Environments	How often do you use the Search box to find an item?
Logistics Environments	How often do you scan or browse categories to find an item?
Logistics	How often do you use the “Notes” or “Instructions” feature?
Logistics	How often do you use the “My Favourites” or “Last Order” feature?
Logistics	How often do you have problems finding items?
Affects Logistics	How often do you try new products or brands?
Beliefs Affects Logistics	How often do you buy something on impulse?
Environment	How often do you do your online grocery shopping alone?

e-CF Themes	**Questions on Respondent Attitudes** **(Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree)**
Economics	Buying Groceries online saves me money
Environments	I don’t like being interrupted when grocery shopping online
Affects	I feel more in control of my grocery shopping when I do it online
Environments	I don’t mind talking to people while doing my online grocery shopping
Connections Logistics	Buy groceries online hasn’t affected the types of things I buy
Environments	My favourite online grocery site is easy to use
Affects Connections	I’m more likely to buy something new if I see it in a supermarket or shop than online
Economics Connections	The best thing about buying groceries online is that I spend less money than I would in a supermarket
Affects	I miss being able to pick out my own produce when shopping online
Affects Connections	If I had the time, I would prefer to buy my groceries in person rather than online

e-CF Themes	Questions on Respondent Attitudes (Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree)
Environments	I prefer not to be distracted when online grocery shopping, as I need to concentrate on what I'm doing

e-CF Themes	Thinking about the last time you bought groceries online, please rate the vendor on… (Excellent, Good, Acceptable, Below Average, Poor)
Environments	Ease of use
Logistics	Quality of Products
Logistics	Product Selection
Logistics	Quality of Service
Environments	Web Site appearance
Economics	Price

e-CF Themes	Thinking about the last time you bought groceries online…
Beliefs	Do you store your credit/debit card details on that site?
Beliefs	Do you store your login details for that site?
Environments	Do you have the web address of the site stored in Bookmarks or Favourites?

While the intent of this phase of the survey was not to build a specific e-CF based profile of those who did not currently do any part of their household grocery shopping online (NOGS), several questions were developed for this group in case more comparable information was required.

e-CF Themes	Questions on frequency of Respondent Behaviour when shopping for groceries online (Never, Rarely, Sometimes, Frequently, Almost Always)
Beliefs	How often do you use credit or debit cards to pay for your food shopping?
Beliefs	How often do you check out Special offers or items on sale?
Logistics	How often do you use the supermarket nearest your home?
Environments	Do you try to do your grocery shopping at a particular time of day?
Environments	Do you try to do your grocery shopping on a particular day of the week?

e-CF Theme	
Connections	Have you ever tried to buy your groceries online?

5. Administering The Survey

The survey was built and administered online using the QuestionPro platform (www.questionpro.com) and ran from February to April 2006. Respondents were solicited from within the UK, and the opportunity to win a £50 gift certificate was offered in order to encourage participation and valid responses, as respondents needed to identify themselves to be eligible for the prize draw. The results from the survey are detailed in Appendix A.

6. Implications For Interaction Design

In conducting this survey, our goal was to explore the diversity of online grocery shopping behaviours and identify common features and issues relevant to interaction design. To achieve this goal we transformed the survey results shown in Appendix A into an overall profile of the 46 respondents who identified themselves as OGS follows.

e-CF OGS Profile
Self-Efficacies (Technical, Product, Online Shopping)
Good levels of technical and product knowledge. Experienced online shoppers.
Beliefs
Evenly divided on financial trust, but somewhat more likely to trust online supermarket than other online vendors. Loyalty to vendor's terrestrial outlets weak (but pull-thru not measured). Less than half look at online promotions, impulse buying drops dramatically online.
Economics
Little propensity to comparison shop, many perceive online grocery shopping as cost effective and spend less than in supermarket. Last site viewed as having good-excellent prices, and many prefer to time their shopping for cheaper delivery slots.
Affect
See online grocery shopping as gaining control over time, but losing control over selection, and most would prefer to shop in person if they had the time despite rating both online vendor's product selection and quality as good or better. Food shopping (regardless of venue) and cooking viewed as pleasurable activities. While there is a marked tendency to repeatedly buy the same products/brands regardless of venue, the inclination to experiment with product purchases decreases when online, with only a weak correlation between online and terrestrial behaviours. Experimentation with vendors was rated slightly higher
Connections
Slightly less than half the grocery shopping done online, as most continue to terrestrial shop on a regular basis (bi-weekly or more). The terrestrial environment strongly seen as the platform for product experimentation. Online shopping not perceived as having much impact on the types of products bought, slightly less than half use the same grocer for online and terrestrial and a third like to vary their vendor.
Logistics
Tendency to make a shopping list decreases somewhat online, My Favourites/Last Order is the strong preference for driving selection process. Browsing slightly preferred to Searching, no correlation between selection methodology and likelihood of encountering problems, but most report encountering at least some problems finding items. Despite concerns about controlling selection, very few use the Notes or Instructions features. More likely to store login/registration details with vendor than card details.
Environments
Mostly shop from home, once a month or less. Variable attitudes towards distractions, but half prefer not to be interrupted. Grocery shopping viewed as being easier to do alone, and more likely to online shop alone. Half saw Fair Trade/Organic as important, a third had religious, ethical or health considerations that affected their food shopping. Most perceived their online grocer's site as easy to use and rated site appearance highly.

From this profile we can identify and explore a number of issues relevant to interaction design.

Self-Efficacies: There was little diversity in the levels of Self-Efficacy (skills, knowledge and confidence) amongst the OGS, a result that would encourage the development of online supermarket interactions based on a relatively high level of experience and expertise in online shopping, grocery purchasing and Internet usage. However these results may present a biased picture as those less familiar with the Internet are less likely to respond to an online survey in the first place. In fact, our previous ethnographic study of online grocery shopping behaviour uncovered a greater level of diversity in the levels of technical self-efficacy than in this survey, suggesting that design based on high levels of technical expertise can present barriers to both existing and new users who are less skilled in these areas.

Loyalty: Respondents often used different vendors for online and terrestrial shopping, an issue that would at first glance not seem relevant to interaction design. However, given the continued frequency of terrestrial shopping amongst the respondents and the fact that the major online shopping sites in the UK are run by the supermarket chains, this lack of loyalty would naturally concern vendors who would in turn develop marketing activities taken to encourage vendor loyalty. Such activities will naturally need to be reflected in interaction design considerations, such as promotion of loyalty card schemes.

Searching and Browsing: Category browsing was more popular with respondents than use of the search facility. While there was no correlation between product location strategy and frequency of online shopping, there was a reasonably strong correlation between use of the search facility and the Notes/Instructions feature. This could suggest that use of the Search facility is more common for those shoppers particularly concerned about controlling product selection. It should also be noted that there was little correlation between browsing or searching activity, or between either activity and the likelihood of encountering problems in locating items. However, over half the respondents reported that they sometimes encountered problems finding items, and 15.6% said these problems were frequent. These results imply that regardless of product selection method used, finding items may be an issue for many online grocery shoppers and interaction designers need to consider how to improve search and scan facilities.

Empowerment: Respondents clearly had concerns about the level of control they had over their grocery shopping. On one hand, 73.9% agreed that being able to shop at any time of day was important, over 40% saw online grocery shopping as more cost-effective than terrestrial and levels of reported impulse purchasing dropped substantially online. However, the vast majority of respondents agreed they missed the experience of picking their own produce, half did not like having their grocery items picked out by other people, and over half said they would prefer to do their grocery shopping in person if time allowed. Unsurprisingly, less than a quarter of the respondents agreed with the statement that online grocery shopping gave them increased control. It is clear that the current methods of product selection in online supermarkets are working against the online consumer's need to feel in control of their shopping experience.

Experimentation: While levels of reported new product purchasing activity decreased only slightly online, the number of those claiming they never or rarely did so rose substantially and over three-quarters of the respondents agreed they were more likely to try new products in a supermarket than online. These results suggest that customers feel their ability to experiment is constrained when shopping online.

Polychronic Activity: While the survey did not specifically ask what other activities respondents engaged in while online grocery shopping, 52.2% of the respondents said they did not like being interrupted when online grocery shopping, and 31% said they preferred not to be distracted as they needed to concentrate when online grocery shopping. 30.3% said they minded talking to others while shopping. These results support our earlier observations that online grocery shoppers do indeed view their activities as requiring a degree of concentration, with some degree of tolerance for interruption.

Site Usability and Appearance: A large majority of the respondents gave positive ratings to the appearance and particularly the ease of use of their favourite online grocery site. The site features "My Favourites" and "Last Order" were particularly popular with respondents. Product search tools and Special Offers features were less popular while use of the "Notes" and "Instructions" feature was very limited, despite respondent concerns about controlling their product selection. This would seem to indicate that online grocery shoppers do not have any particular concerns about site design or usability, but are not making full use of site features, even those that could address their product selection issues.

7. Conclusions and Suggestions for further research

Online grocery shopping in the UK has been particularly successful to date [8, 19], however it is clear there is still considerable room for improving the user's experience, especially their perception of control over their grocery shopping. Consideration needs to be given to helping online shoppers locate products through more intelligent search functionality and/or more intuitive taxonomies (a search for "rice pudding" should not produce the same results as "pudding rice") and barriers to use of site features that enhance control (such as the ability to provide specific product instructions to the vendor) needs to be examined. Addressing the online grocery shopper's need to experiment is a more difficult challenge, especially as presenting the user with extra information or displays is quite likely to conflict with their desire to control their shopping experience. One possible way to address both the user's desire to experiment and to control their grocery shopping experience is through Virtual Reality interfaces that can enhance product perception through telepresence [16].

Administering any type of consumer survey online needs to be carefully considered. Schiffman and Kanuk [14] point out that the anonymity of the Internet-based survey provides an environment where respondents can on one hand be more forthcoming in their responses but on the other hand also invent fictional profiles. To these concerns we should also add the self-selecting nature of an online survey in that it will naturally attract respondents who are comfortable with the Internet and have a reasonable level of engagement with the topic in question. Consideration should therefore be given to administering future iterations of this survey terrestrially as well as on the Internet, ideally with the cooperation of one or more UK supermarkets.

Several intriguing trends and correlations appeared in the survey results that were outside the scope of this particular study but certainly warrant further investigation. For instance, an e-CF model of those respondents who did not currently buy groceries online (the so-called NOGS) could be developed. Such a model, especially if compared to online grocery shopper models, could provide additional insights into those factors that inhibit or encourage online shopping behaviours.

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Appendix A – Survey Results

	Frequency		Valid %	
	OGS	NOGS	OGS	NOGS
Gender				
Male	23	19	50	33.3
Female	23	38	50	66.7
Age:				
Under 24	2	3	4.3	5.3
25-34	24	19	52.2	33.3
35-44	13	19	28.3	33.3
45-60	6	15	13	26.3
60+	1	1	2.2	1.8
Occupation:				
Working Full-time	37	43	80.4	75.4
Student	4	11	8.7	19.3
Retired	1	1	2.2	1.8
Homemaker	0	1	0	1.8
Other	4	1	8.7	1.8
Household Size				
1	8	12	17.4	21.1
2	22	24	47.8	42.1
3	6	14	13	24.6
4	8	4	17.4	7.0
5+	2	3	4.3	4.3

	%of OGS
Which of the following statements most closely describes your current level of grocery shopping?	
I do most of the grocery shopping for my household	69.6
I share grocery shopping duties with other members of my household	23.9
I occasionally go grocery shopping	6.5
Are there particular religious, ethical or health considerations that affect your grocery shopping?	
Yes	37
No	63
Where do you do most of your non-Internet food shopping?	
Tesco	32.6
Sainsburys	15.2
Asda	6.5
Iceland	4.3
Morrisons	8.7
Waitrose	8.7
Netto/Aldi/Lidl	2.2
Other	21.7

	% of OGS
On average, how often do you buy your groceries from a supermarket, grocer or any place other than the Internet?	
Less than once a month	6.5
Once a month	10.9
Once every 2 weeks	13.0
Once a week	52.2
2 or more times a week	17.4

	% of OGS
Aside from groceries, have you ever bought any of the following types of products online?	
Books	93.5
Music/Films	87.0
Travel	78.3
Electronics	67.4
House/Garden	47.8
Clothing	60.9
Toys/Gifts	69.5
Computer Hardware/Software	67.4
I have never bought anything online	0.0

	% of OGS
Where do you do most of your online grocery shopping?	
Tesco.com	69.6
Sainsburys To You	13.0
Asda.com	2.2
Ocado/Waitrose	8.7
Other	6.5
Overall, where do you buy most of your groceries?	
Online	40.0
From a Supermarket	53.3
From a Grocer or other local shop	2.2
Other	4.4
On average, how often do you buy your groceries online?	
Less than once a month	35.6
Once a month	24.4
Once every 2 weeks	24.4
Once a week	15.6
2 or more times a week	0.0

OGS on general shopping	**N%**	**R%**	**S%**	**F%**	**A%**
How often do you cook means from scratch?	2.2	2.2	17.4	52.2	26.1
Do you every find online shopping confusing?	8.7	50.0	39.1	0.0	2.2
Do you store your credit/debit card details at your favourite online shopping sites?	32.6	8.7	23.9	2.2	32.6

(N=Never, R=Rarely, S=Sometimes, F=Frequently, A=Always)

OGS on terrestrial shopping	**N%**	**R%**	**S%**	**F%**	**A%**
How often do you study the label on a new item before purchasing?	0.0	17.4	23.9	34.8	23.9
How often do you compare prices before deciding where to buy your groceries?	10.9	41.3	23.9	15.2	8.7
Do you tend to buy the same brands or types of groceries over and over?	0.0	0.0	15.6	53.3	31.1
How often do you do your grocery shopping alone?	2.2	8.9	20.0	33.3	35.6
How often do you buy something on impulse?	0.0	15.6	46.7	37.8	0.0
How often do you try new products or brands?	0.0	11.1	66.7	20.0	2.2
How often do you make a list before shopping?	8.9	17.8	17.8	28.9	26.7

(N=Never, R=Rarely, S=Sometimes, F=Frequently, A=Always)

OGS on general shopping	**SA%**	**A%**	**N%**	**D%**	**SD%**
I like to try different places to buy my groceries	2.2	28.3	34.8	30.4	4.3
I enjoy food shopping	26.1	32.6	34.8	6.5	0.0

OGS on general shopping	**SA%**	**A%**	**N%**	**D%**	**SD%**
I don't like someone else picking out my groceries for me	6.5	43.5	32.6	15.2	2.2
Grocery shopping is easier to do if I'm on my own	39.1	30.4	19.6	8.7	2.2
I enjoy cooking for my family and friends	32.6	45.7	13.0	4.3	4.3
Food shopping is boring	6.5	19.6	32.6	30.4	10.9
Buying organic or Fair Trade products is important to me	22.2	28.9	31.1	11.1	6.7
Being able to grocery shop at any time of day is important to me	43.5	30.4	19.6	4.3	2.2
I like to try new things out on the computer myself, rather than ask someone to help me	24.4	48.9	22.2	4.4	0.0
I am comfortable using my computer to access the Internet	89.1	8.7	0.0	0.0	2.2

(SA=Strongly Agree, A=Agree, N=Neutral, D=Disagree, SD=Strongly Disagree)

OGS on online grocery shopping habits	**N%**	**R%**	**S%**	**F%**	**A%**
How often do you do your online grocery shopping alone?	6.8	2.3	9.1	27.3	54.5
How often do you buy something on impulse?	4.5	38.6	43.2	13.6	0.0
How often do you try new products or brands?	2.2	24.2	53.3	20.0	0.0
How often do you make a list before starting?	24.4	20.0	20.0	17.8	17.8
How often do you have problems finding items?	0.0	28.9	53.3	15.6	2.2
How often do you use the "My Favourites" or "Last Order" feature?	11.4	9.1	15.9	34.1	29.5
How often do you use the "Notes" or "Instructions" feature?	34.1	38.6	13.6	9.1	4.5
How often do you scan or browse categories to find an item?	2.2	15.6	37.8	37.8	6.7
How often do you use the Search box to find an item?	8.9	11.1	44.4	22.2	13.3
How often do you time your online grocery shopping to take advantage of cheaper delivery charges?	15.6	20.0	15.6	24.4	24.4
How often do you do your online grocery shopping from your home computer?	0.0	11.1	20.0	20.0	48.9
How often do you check out Special offers or items on sale?	8.9	17.8	28.9	24.4	20.0
If you need to go to a supermarket, do you go to the same vendor that provides your online grocery shopping?	4.5	15.9	38.6	18.2	22.7

(SA=Strongly Agree, A=Agree, N=Neutral, D=Disagree, SD=Strongly Disagree)

OGS on online grocery shopping	**SA%**	**A%**	**N%**	**D%**	**SD%**
I prefer not to be distracted when online grocery shopping, as I need to concentrate on what I'm doing	4.8	26.2	42.9	26.2	0.0
If I had the time, I would prefer to buy my groceries in person rather than online	19.0	38.1	21.4	21.4	0.0
I miss being able to pick out my own produce when shopping online	26.2	45.2	21.4	7.1	0.0
The best thing about buying groceries online is that I spend less money than I would in a supermarket	7.1	35.7	38.1	14.3	4.8
I'm more likely to buy something new if I see it in a supermarket or shop than online	28.6	45.2	14.3	11.9	0.0
My favourite online grocery site is easy to use	9.3	69.8	18.6	2.3	0.0
Buying groceries online hasn't affected the types of things I buy	9.3	55.8	14.0	20.9	0.0
I don't mind talking to people while doing my online grocery shopping	2.3	32.6	34.9	25.6	4.7
I feel more in control of my grocery shopping when I do it online	7.1	16.7	38.1	28.6	9.5
I don't like being interrupted when grocery shopping online	4.5	47.7	38.6	9.1	0.0
Buying Groceries online saves me money	13.6	27.3	29.5	22.7	6.8

(SA=Strongly Agree, A=Agree, N=Neutral, D=Disagree, SD=Strongly Disagree)

OGS rating of last site used	**Excellent %**	**Good %**	**Acceptable %**	**Below Avg.%**	**Poor %**
Ease of Use	4.8	57.1	35.7	2.4	0.0
Quality of Products	9.5	52.4	28.6	9.5	0.0
Product Selection	9.5	61.9	28.6	0.0	0.0
Quality of Service	21.4	52.4	23.8	2.4	0.0
Web Site appearance	19.0	52.4	28.6	0.0	0.0
Price	16.7	61.9	21.4	0.0	0.0

OGS behaviour on last site used	**Yes %**	**No %**	**Don't Know%**
Do you store your credit/debit card details on that site?	50.0	45.5	4.5
Do you store your login details for that site?	65.9	31.8	2.3
Do you have the web address of the site stored in Bookmarks or Favourites?	47.7	47.7	4.5