

A b s t r a c t

This qualitative research examines propinquity across two grocery shopping situations – real (in-store) and virtual (online). Examining how the same consumers shop for the same or similar commodities provides quasi-experimental conditions to examine differences in shopping behaviour. Convergent interviews with 15 respondents identified that consumer reasons – expectations of convenience, trust and satisfaction – for choosing online over in-store shopping fall into three categories of propinquity: physical, temporal and relational. The main reason consumers chose online shopping was convenience, to save time. To maximize trust and satisfaction, consumers seldom changed brand in online grocery shopping situations. The analysis also identified four distinct online shopper types – occasional, nasties, speciality and dependent – based on perceptions of convenience and trust and satisfaction associated with virtual situations.

Keywords: propinquity, online retailing, shopper type

A u t h o r s

Grant Robertson

(g.robertson@murdoch.edu.au) is a lecturer in management at Murdoch University and a PhD candidate at the University of Western Australia. His research focuses on consumer perspectives of distance in light of new communications technologies.

Jamie Murphy

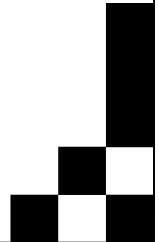
(jmurphy@biz.uwa.edu.au) is an Associate Professor of Electronic Marketing with the University of Western Australia School of Business. His research focuses on the effective use of new communication tools (mobile phones, WWW, email) by individuals and organizations.

Sharon Purchase

(spurchas@biz.uwa.edu.au) is a lecturer at University of Western Australia School of Business. Her research focuses on the development of interorganizational relationships and the use of electronic commerce.

Distance to Market: Propinquity across In-store and Online Food Retailing

GRANT ROBERTSON, JAMIE MURPHY AND SHARON PURCHASE



INTRODUCTION

Geertz's (1996) study of a millennia-old Moroccan bazaar highlights the importance of relationships and information exchange in markets. Commenting on English retail in the seventeenth century, Stobart and Hann (2004: 180) note how markets 'shaped the spatial and temporal landscape of retailing'. In the early twentieth century, supermarkets' migration of mass-production efficiencies to grocery stores further transformed markets (Shaw *et al.* 2004). Similarly, in the mid-1990s grocers such as the ill-fated Webvan sought to harness Internet efficiencies through online grocery shopping and virtual markets (Mahajan *et al.* 2002).

Historically, distance to market constrains and costs suppliers and consumers. Suppliers must transport goods to the market and consumers must transport goods home. At the onset of the dot.com boom, however, a common mantra extolling Internet virtues was the death of distance (Cairncross 1997). New communication technologies extended market reach effortlessly (Burke 1997; Saeed *et al.* 2003) – a global marketplace available to large and small businesses alike (Commonwealth of Australia 2001). Yet, 'In stark contrast to

unbridled enthusiasm for frictionless global markets is an alternative view that geography and physical space' are relevant in electronic commerce (Steinfeld and Klein 1999: 1).

The Internet is no panacea but will become ubiquitous in developed countries and play a substantial role in consumer behaviour (Watson *et al.* 2002), possibly increasingly so in a pervasive consumer activity – grocery shopping. AC Nielsen reports that half of the world's population produces, distributes or sells food products (De Kare-Silver 2000). Noting a paucity of research in the field, Doherty *et al.* (1999) found that few UK retailers had ventured online. Using an economic geography perspective, Murphy (2002, 2003) concluded that distribution networks are key to efficient supply-chains in online grocery fulfilment. Unlike the previous authors' business focus, examining consumer perspectives of online grocery shopping (OGS) provides complementary insights, in this under-researched field.

Peasant bazaars have survived for millennia and comparatively recent innovations, grocery stores and supermarkets, have endured for over a century. Yet despite cutting-edge communications technologies, most virtual supermarkets failed in less than a decade. Traditionally, markets

bring consumers and physical goods together, facilitating relationships between proximate buyers and sellers (Krackhardt 1994). In short, markets provide proximity (Bentham 1823) or closeness. This study examines the role of proximity across in-store and online grocery situations and highlights reasons why online shopping has not met the lofty expectations of a decade ago.

LITERATURE REVIEW

The location of producers and consumers, and the concomitant interest in distance, has captivated academics for centuries. Similar to Slade (2003), Ottaviano and Thisse (2004) trace analysing a firm's location to Fermat early in the seventeenth century. Blainey (1966) noted the time and cost required to tame the tyranny of distance led to Australia producing impractical goods based on out-of-date information.

Distance and the inexorably related concept of space have multiple perspectives. Graham and Healy (1999: 626) note that 'space and time are objective, external containers within which human life plays out' and 'the frictional effects of distance and the time it takes to travel' between them separates two points. Yet media, past and present, bridge space, distance and time. These communication technologies change human cognitions and perceptions (Sui and Bednarz 1999) of seeing and interacting with their world (Turkle 2004). Until recently, space applied to the physical world but electronic technologies are transforming society by adding an intangible and increasingly important virtual world (Castells 2000).

In the virtual world, information moves rapidly and easily across vast distances at low cost (Negroponte 1996), a feature particularly suited to a major market element – information exchange. As businesses migrate towards the Internet to exchange information, research suggests that hybrid – physical and online – entities offer commercial advantages over online only entities (Mahajan *et al.* 2002; Steinfield 2002; Steinfield and Klein 1999). Steinfield and Klein (1999) advocate that hybrid operations give vendors operational synergies, including enhanced customer relationships.

Despite early euphoria over changes that online shopping might deliver, initial projections failed to eventuate and many dot.com companies, including online grocers Webvan and PeaPod, failed (Mahajan *et al.* 2002). Major reasons for the failure of online grocers included high distribution costs and low consumer uptake. These two reasons rendered online shopping uncompetitive compared to in-store shopping (Ring and Tigert 2001). Rather than consigning the concept of communications technology bridging the last mile from store to household to the scrap-heap, Mahajan *et al.* (2002) suggested that businesses and consumers were

not yet ready for the new technology and that their perceptions and usage were likely to change over time.

Non-store shopping, such as catalogue shopping, has been possible for decades (Brown *et al.* 2003). Telephone shopping is probably even older. Both modes demonstrate consumer demand for out-of-store shopping. Unlike these previous non-store shopping platforms, the Internet's enhanced multimedia capabilities markedly alter the traditional relational, spatial and temporal aspects of food retailing. The consumer is a major constituent in these changes and altered shopping situations influence consumer shopping behaviour (Brown *et al.* 2003).

Shopping situations

After 40 years researching personality and pioneering the interactionism approach, Mischel (2004: 3) reflected 'that the same individual will show substantial variation as the situations vary has become a widely accepted truism'. Modern interactionism, with its roots in field theory (Lewin 1936), suggests that characteristics of the individual, stimulus object, and situation influence a person's reaction to a stimulus (Gehrt and Yan 2004). Situational influences – important determinants of consumer behaviour rather than being noise in the purchase process – are independent of the consumer (who has personal attributes), the product (which has defining attributes), and wider environmental characteristics such as state of the economy (Belk 1974).

In a study of the situation, consumer and stimulus object, Gehrt and Yan (2004) framed: retail format (physical versus virtual store) as the stimulus object; personal aspects including demographics and Internet usage as consumer factors; and time availability, shopping task and product type as situational factors. They found that situational factors influence retail format selection. Rather than treating retail format as the stimulus object, however, in-store and online shopping are different shopping situations (situational factors) that should lead to variations in consumer behaviour (Mischel 2004).

Consumers differ in shopping orientation, and Brown *et al.* (2003) found, in what they believed to be the first research into Internet shopper types, seven Internet shopping orientations: personalizing shoppers; recreational shoppers; economic shoppers; involved shoppers; convenience oriented, recreational shoppers; community-oriented shoppers and apathetic, convenience-oriented shoppers. Steinfield and Klein (1999: 5) argue that 'There is growing evidence that customers are developing differentiated buying patterns,' and suggest price, quality, trust and store reputation as variables leading to different buying patterns.

Brands may reduce the variables that consumers consider and ensure product consistency across shopping

situations. Using grocery checkout data from both shopping modes Danaher *et al.* (2003) found that online shoppers infer quality from brands, associate less risk with known brands, and use electronic lists for repeat purchases and thus not change brands. How individuals shop for similar or identical groceries in-store and online should provide insights into consumer behaviour due to situational variation rather than consumer or product differences.

Conceptual development with propinquity

Independent from the consumer and product attributes, situational factors also influence shopper behaviour. Propinquity is central to the shopping situation and experience. Furthermore, despite the core role of distance and space in online shopping, neither concept adequately captures their complex effects. Propinquity helps account for these effects.

The father of utilitarianism, English philosopher Bentham (1823: 29), used propinquity and its antonym, remoteness, as variables associated with the pleasure or pain resulting from legislative or judicial actions. Propinquity implies presence or nearness, while its contrary state implies uncertainty or remoteness (Bentham 1823: 48). In local communities, propinquity can deliver pleasure – convenience, benefits and advantage – while remoteness associates with pain such as inconvenience, fewer community benefits and disadvantage (Bentham 1823: 31–2).

The Latin roots of propinquity provide two current English uses (Merriam-Webster Inc. 2005): nearness in place or time with proximity as a synonym, and nearness of blood or alternatively, kinship. Thus, rather than simply a synonym for distance, propinquity has physical, temporal and relational dimensions that resemble Belk's (1975) physical, temporal and social facets used to classify purchase and consumption situations. Figure 1

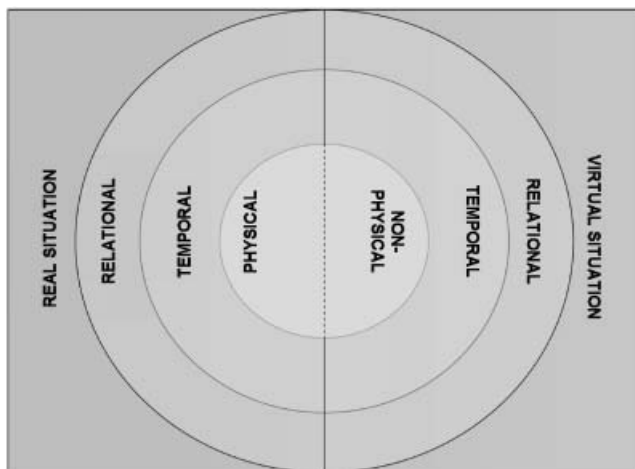


Figure 1. Dimensions of propinquity

proposes a classification of propinquity that incorporates these three elements across real (physical dimensions) and virtual (electronic reality) situations.

Physical propinquity is the physical distance between objects. In grocery shopping for example, physical propinquity represents the distance between fresh apples and the consumer in the fresh produce section. A virtual store has no physical propinquity. *Temporal propinquity* in a real situation might represent the short time it takes a customer to grab a bag of apples. In a virtual situation, the online shopper achieves temporal propinquity with instant information from the store website following a query. Finally, *relational propinquity* represents personal interactions between the parties. In a real situation, this could be the relationship between the customer and store personnel. In a virtual situation, human–computer interaction and email exchanges facilitate relational propinquity.

In a real shopping situation, the customer is physically propinquitous to the store and its products. Temporal propinquity gives customers immediate access to the goods in stock. Close contact between store personnel and the customer enhances relational propinquity. The requirement to be physically present delivers both benefits – immediate access to goods, sense of in-store conditions, and enhanced relationship – and disadvantages such as goods not physically present and absence of many factors that influence trust.

Virtual shopping also has advantages and shortcomings. Instead of physical propinquity, the consumer is remote and relies upon telecommunication technologies as an alternative to physical presence. Yet, the consumer and store achieve temporal propinquity and relational propinquity without physical propinquity.

METHOD

'Online consumer behavior is a young and dynamic academic domain characterised by diverse variables and multiple theoretical perspectives' (Saeed *et al.* 2003: 2). Investigating online grocery shopping (OGS) and propinquity in this young field justifies a qualitative approach (Cooper and Schindler 2001; Doherty *et al.* 1999; Gribbins and King 2004).

Qualitative interviews seek information through the personal, in-depth accounts of the respondents. Questions tend to be open-ended (Yin 1994), unstructured (Sekaran 1992) and with minimal interviewer influence. Yet, non-directed interviews can generate copious amounts of poor data and analytical complexity (Easterby-Smith *et al.* 1991). Semi-structured interviews with relevant prompt questions supplemented by themes uncovered during previous interviews, however, reduce these data-related problems (Dick 1998).

This research used semi-structured convergent interviews (Hastings 2000), which are useful with uncertainty

regarding what is important (Dick 2000). Perry and Jensen (2001) suggest that the technique is similar but simpler than a grounded theory and quasi-inductive approach. The interviewer identifies issues with early respondents for further exploration with later respondents. Subsequent interviews eventually converge into common issues. Dick (2000) posits that the sample size depends on the issues and additional interviews continue until convergence occurs and no new issues arise.

Selection and profile of respondents

Patton (1990) suggests snowball sampling – existing respondents recommend other respondents – when there is little awareness of the research topic. Informal interviews with non-respondents and formal interviews with respondents yielded 15 respondents – 13 consumers, an OGS consultant-consumer who had shopped online for groceries and an online grocer (see Table 1). Seven respondents shopped for households with children; five households were couples; and two respondents were single. Eleven online shoppers were female and three were male. Respondents were from Perth in Australia, Durban in South Africa, and London in the UK. All respondents lived within five minutes of shopping centres.

Table 1. Respondent profile

Respondent	Gender	Household		Shopper type
		type	Location	
R1	F	Children	Perth	Specialty
R2	F	Children	Durban	Nasties
R3	M	Online Grocer	Perth	NA
R4	F	Children	Perth	Dependent
R5	F	Couple	Perth	Occasional
R6	M	Children	London	Nasties
R8	M	Children	Durban	Nasties
R9	F	Couple	Perth	Nasties
R10	M	Couple	Durban	Occasional
R11	F	Couple	Durban	Occasional
R12	F	Single	London	Specialty
R13	F	Children	Perth	Dependent
R14	F	Couple	London	Nasties
R15	F	Single	London	Specialty
R16	F	Children	Durban	Nasties
Data Summary	4 M 11 F	2 Singles 5 Couples 7 Children 1 Grocer	6 Perth 5 Durban 4 London	3 Occasional 3 Specialty 6 Nasties 2 Dependent 1 NA

Data collection and analysis

After introductions, the interviewer invited respondents to share their experiences and opinions about OGS, including comparisons with in-store shopping. Taped interviews lasted between 40 minutes and 100 minutes; the transcripts provided the foundation for analysis.

The data analysis followed a two-staged inductive approach (Thomas 2003; Thomas *et al.* 2001). Primary analysis utilized progressive interpretations – updating the report after analysing each interview for existing or emerging themes in order to focus on emerging themes and save time discussing established themes (Hastings 2000). The second stage entailed coding transcript segments according to the identified themes and relating these segments to proximity. Comparing the online grocer and OGS consultant-consumer's responses with the 13 consumers helped triangulate the results.

RESULTS AND ANALYSIS

Analysis indicated that reasons for choosing online shopping over in-store shopping fell into three categories of proximity: physical, temporal and relational. Tables 2 and 3 categorize online and in-store shopping behaviour according to purchase cycle phases (Engel *et al.* 1978; Kalakota and Whinston 1996) and along these categories of proximity.

The transcripts showed that respondents described proximity in many terms including convenience, satisfaction, relationships, time, communication and distance. An expectation of convenience was the primary motivator for OGS over in-store shopping yet was insufficient to cause the switch. Most respondents highlighted the importance of trust, and eventually satisfaction, in the switching decision. Furthermore, differences in perceived convenience and trust related to four types of shopping behaviour.

Proximity and convenience

Grocery shopping is an unavoidable activity, consuming copious amounts of time in time-constrained schedules: both partners working, raising young children; ferrying older children; social activities, etc. The aim of grocery shopping is groceries into the pantry but in-store shopping consumes time and energy. A key reason shoppers choose OGS, temporal proximity, relates to convenience. They wish to save time and to save energy.

R11 reflects that OGS 'saves me having to open the eggs to see if they're broken, check when is this sell-by date, that's all done for me; it saves an enormous amount of time'. Online shoppers expect to save time avoiding in-store shopping, yet expect online outcomes to mimic in-store shopping. R4, living 500m from her

Table 2. Virtual situation – Online grocery shopping (OGS)

<i>Phase/steps</i>	<i>Propinquity dimension</i>	<i>Online</i>	<i>Commentary</i>
Prepurchase			
Compile shopping list	Non-physical/Temporal	• items in electronic aisles – easy access	• convenient
	Temporal	• e-lists save time	• reusable
	Relational	• e-lists ensure accuracy	• online lists more trustworthy and convenient than memory
Store interface	Non-physical/Temporal	• anytime shopping – even in pyjamas	• convenient
	Non-Physical/Physical	• more bandwidth – better experience	• bandwidth constrains virtual experience
	Physical/Temporal/Relational	• trust Internet Service Providers for 24/7 access • self-trust to use technologies • fake stores	• reliance on 3rd parties in addition to self • need physical reassurances
	Non-Physical/Temporal/Relational		
Pick goods	Non-Physical	• electronic list – no confusion	• increased range in-store confusing – less an issue with e-lists
		• anywhere access: in-store conditions inconsequential	
	Physical/Temporal	• nominated substitutes save time if stock-out	• physical availability – key issue
	Non-Physical/Temporal	• graphics assist ordering; supplier codes may confuse • web interface critical	• interface must deliver time-saving benefits
	Physical/Relational	• if stock-out, picker may substitute incorrectly	• onliners unaware of stock-outs until delivery – no capacity for last minute changes • onliners go in-store to check goods
	Non-Physical/Relational	• online quality rating difficult • don't change brand without offline testing • unaware of new products, don't trust without seeing • unaware of brand/quantity used – e-lists assist	• onliners expect shopping 'proxy' • less perceived opportunity to manipulate online shoppers, particularly using e-lists
Purchase consummation			
Negotiation	Non-physical	• impulse buying reduced	• physical goods not available virtually
	Non-Physical/Temporal/Relational	• delivery time negotiated – trust goods delivered as 'promised'	• trust and convenience
	Physical/Relational	• trust online store to offers fair prices /good range	• trust concerns
Payment	Non-Physical	• trust online payment – cannot 'see' what happens to payment card details • credit cards often required	• trust concerns
	Non-Physical/Relational	• order may be completed but payment may fail	• affects order, trust, relationship

Table 2. (Continued)

Phase/steps	Propinquity dimension	Online	Commentary	
Delivery	Physical	<ul style="list-style-type: none"> • trust goods will be delivered as ordered • rely on delivery schedule • trust conditions of carriage – freshness, cleanliness etc. 	<ul style="list-style-type: none"> • store representative at point of delivery is trust-enhancer for onliners 	
	Physical/Temporal	<ul style="list-style-type: none"> • delivery costs may hinder – fees vs effort saved 	<ul style="list-style-type: none"> • cost of convenience 	
	Physical/Relational	<ul style="list-style-type: none"> • delivery time may be inconvenient 	<ul style="list-style-type: none"> • convenience issue 	
	Temporal	<ul style="list-style-type: none"> • rely on delivery schedule 	<ul style="list-style-type: none"> • may constrain convenience 	
Post-purchase	Physical/Non-Physical/Relational	<ul style="list-style-type: none"> • trust goods will be delivered as ordered 	<ul style="list-style-type: none"> • delivered as ordered and expected is the acid test of OGS 	
	Service and support	Physical/Temporal	<ul style="list-style-type: none"> • difficulty returning items – may require journey to store 	<ul style="list-style-type: none"> • can become major inconvenience
		Physical/Relational	<ul style="list-style-type: none"> • must trust return process – return using 'reverse' delivery channel may be difficult 	<ul style="list-style-type: none"> • trust concerns
		Physical Non-Physical/Relational	<ul style="list-style-type: none"> • return may have to be negotiated via telephone/email – different response from physical presence may result 	<ul style="list-style-type: none"> • convenience and trust concerns

online supplier, commented, 'I don't think proximity to the supermarket makes a lot of difference. This is about time.' Virtual shopping saves time by requiring physical propinquity only at the end of the purchase cycle, delivery of the goods.

Convenience is shopping with minimal time and effort: 'I love food shopping. It's just a matter of time for me. It's convenience and trying to figure it into my day' (R1). Respondents sought to minimize shopping time for groceries and the freedom from fixed shopping hours by shopping online. R11 commented, 'online shopping ... purely because of the convenience of it. You can do it at any time of the day or night and do it when you feel like doing it at home. And you don't have to carry the bags, they get brought to you.'

A major time saver was using electronic lists from previous purchases. R14, who no longer needs to travel to the store, only had to complete and submit the electronic order: 'it's really convenient, because I go into my new order, I press my favourites, and I can just scan my list of favourites, and just tick off the items ... it literally can take me ten minutes'(R14). Online grocer, R3, noticed the benefits of having an electronic list with little effort: 'You might go in with a list, very rarely would the list be organized ... [but] on the net, in a sense you apply computing power to it.' Electronic lists simplify selecting items.

Rather than increasing choice, an advantage suggested by Internet proponents (OECD nd), OGS decreased time and effort required to choose items. Consumers sought to minimize rather than increase choice. In-store,

shelves of similar commodities – such as washing powder – confused (R9) and were a hindrance rather than benefit. R8 would not tolerate electronic lists of similar products, preferring the exact item from his previous purchases: 'I wouldn't use it if I had to sit and enter "dishwashing liquid", up come 25 varieties, choose one, then I've got to enter "Washing powder" and I'll wait for the thing ... I wouldn't use it. Not even interested.'

Given the virtual and intangible situation in earlier phases of online shopping (see Table 2), delivery of the goods is the crucial test of the online mode. All respondents expressed satisfaction with the delivery process, from timing (R16) to tabletop delivery (R10, R13) to positive personal interaction with the delivery staff (R14). Respondent 16 'couldn't believe it' when one of her first orders arrived after-hours, at 19.00.

Propinquity and Trust

Online shoppers, who lack the physical presence associated with in-store shopping, are wary about who will serve their interests and unsure they can trust the store. Trust relates to the certainty that outcomes meet expectations: 'I didn't have that trust there, I balked, so I just said "I'm not quite sure about meat". I don't know why, because I mean I used to export meat and that might be why. I know good quality meat and stuff'(R1).

Consumer trust of online payments is a typical online concern (Hanson 2000), yet no respondent raised

Table 3. Real situation – In-store grocery shopping

<i>Phase/steps</i>	<i>Propinquity dimension</i>	<i>In-store</i>	<i>Commentary</i>
Prepurchase			
Compile shopping list	Physical	<ul style="list-style-type: none"> shopping lists not organized to store layout aisles provide cues 	<ul style="list-style-type: none"> cognitive effort – inconvenience
	Physical/Temporal	<ul style="list-style-type: none"> rely on memory – forgotten items, collected next visit 	<ul style="list-style-type: none"> many shoppers don't compile physical lists – time issue; forgetting item is inconvenient
Interface with store	Physical	<ul style="list-style-type: none"> lack of parking can abort trip possible bad weather, ill health or car trouble 	<ul style="list-style-type: none"> inconvenience
	Temporal	<ul style="list-style-type: none"> shopping hours limit opportunities 	<ul style="list-style-type: none"> inconvenience
	Physical/Temporal	<ul style="list-style-type: none"> increased travelling time to large discount grocers – increased irritation 	<ul style="list-style-type: none"> inconvenience
Pick goods	Physical/Relational	<ul style="list-style-type: none"> physical presence of bricks and mortar store assuring 	<ul style="list-style-type: none"> enhances trust
	Physical	<ul style="list-style-type: none"> crowded stores and shopping malls unpleasant – picking difficult, especially with big trolley many items ('nasties') bulky or heavy – shelf to trolley to counter to car to pantry unwanted products at children's eye-level rows of similar commodities – finding brand difficult 	<ul style="list-style-type: none"> convenience; overall shopping experience issue
	Physical/Temporal	<ul style="list-style-type: none"> physical distance in-store can be daunting, especially larger superstores aisles often rearranged – time wastage immediate changes based on product availability 	<ul style="list-style-type: none"> convenience – effort and time
	Physical/Relational	<ul style="list-style-type: none"> multi-sensory: seeing is believing assess conditions of quality easily chat with store personnel/other shoppers for information see new products – change brand after physical assessment brand recognition problems 	<ul style="list-style-type: none"> enhances trust
Purchase consummation			
Negotiation	Physical	<ul style="list-style-type: none"> little negotiation but can select best goods available can buy specials – risks impulse buying 	<ul style="list-style-type: none"> get best available; best prices with specials
	Physical/Temporal	<ul style="list-style-type: none"> seldom opportunity for bargaining – what you see it what you get 	<ul style="list-style-type: none"> assured of price, time-saver
Payment	Physical	<ul style="list-style-type: none"> various options – including cash and debit card 	<ul style="list-style-type: none"> convenience
	Physical/Relational	<ul style="list-style-type: none"> trust physical check-out can monitor card/details use 	<ul style="list-style-type: none"> enhances trust
Delivery	Physical/Temporal/Relational	<ul style="list-style-type: none"> goods acquired in person – no time delay 	<ul style="list-style-type: none"> trust own purchases, delivery
Post-purchase			
Service and support	Physical/Temporal	<ul style="list-style-type: none"> goods returned – next trip 	<ul style="list-style-type: none"> convenience
	Physical/Relational	<ul style="list-style-type: none"> physical store for returns 	<ul style="list-style-type: none"> enhances trust

concerns about using credit cards online. Concerns related to trust in other areas, all directly or indirectly related to physical propinquity, which is absent in a virtual situation. If there is no trust then the consumer is unlikely to consider online shopping. R1 agrees. 'So I think what you do offline ... that gave me the trust to

deduct that I can try online shopping for fruit and veg.' Reinforcing the impact of physical propinquity in developing trust, Reichheld and Scheffer (2000: 107) posit that in place of in-store cues, online customers must 'rely on images and promises'. R2 reflected that online one misses 'the visual, tactile experience'.

Trust was in greatest demand with picking goods. R1 hoped for ‘a John Edwards’ (a popular psychic) to select her goods, suggesting she was seeking ‘a proxy’. R4 lamented that a replacement picker, filling in for the regular picker, substituted chocolate pudding for her healthy lifestyle choice, yoghurt.

Brands played a strong role for several respondents. R6, a retail industry consultant and regular online grocery shopper, commented that ‘most people are going to ... have some interaction with those brands in an offline context ... because obviously when you’re talking about a brand you’re talking about familiarity.’ All respondents reported that most shopping was brand oriented. They stuck with trusted products, avoiding similar but untried products. Brand-loyal customers commented: ‘I’m completely satisfied with the quality I get, which is that brand thing’ (R12); ‘I’ll just go with the brands I know and that’s it’ (R16). R4 had not changed brands in all four years of shopping online and observed that, online, competing brands had little chance. ‘I’m probably more loyal to the brand online because ... yes less ... less tempted by other brands.’

This brand loyalty links with relationship marketing’s promise concept. Grönroos (1994) suggests that when service exceeds consumer’s expectations, consumers may be less price sensitive. None of the nine respondents commenting on prices was price sensitive; they were loyal brand shoppers with little concern for slightly elevated prices. Danaher *et al.* (2003) found that online shoppers were more brand loyal than in-store shoppers. This study found brands to be an important relational issue, creating trust in the absence of physical proximity.

Despite trusting the online mode for some, most, or all of their shopping, consumers still needed to check prices at a ‘bricks-and-mortar’ store. All 14 online shoppers visited grocery stores occasionally to compare in-store prices against online prices. The importance of hybrid shopping channels (Steinfeld and Klein 1999) and the lack of absolute customer trust in online stores demonstrate that grocery stores will not live by web alone. Reichheld and Shefter’s (2000: 107) observation that ‘price does not rule the Web; trust does’ is apt.

Trust in technology can have a negative influence on OGS yet no respondent found technology an unassailable barrier. R4 mentioned a computer illiterate friend who had failed using online technology. The Technology Adoption Model (TAM), ‘the most widely applied model of user acceptance and usage’ (Venkatesh 2000: 343), suggests that perceived usefulness and perceived ease of use relate to computer acceptance (Davis *et al.* 1989). Limited capabilities of consumers and computers decreases temporal proximity with the store interface and simultaneously limit relational proximity.

Proximity and satisfaction

Consumer satisfaction with OGS results from convenient shopping from a trusted store that delivers on expectations. Long-term, regular online shopper, R4, effused over her online grocer’s performance, ‘They are better shoppers than I am.’ She enjoyed shopping at night when her young children were asleep. In contrast, R5, with no time- or child-pressures and living close to two stores, attempted OGS only once. She conceded, ‘I didn’t find it a bad experience, but quite frankly I didn’t find it any huge advantage.’ For her, meeting the delivery van was less convenient than shopping in-store. R4, satisfied, has used OGS for more than four years while R5, not satisfied, ceased after one attempt.

A key difference between in-store and OGS is the physical, sensory rich, proximate experience that traditional grocery stores deliver. Reflecting earlier on virtual shopping highlighted the importance of physical proximity, which in a busy modern society comes at a price. As social spaces, grocery stores are crowded due to physical proximity between people and products. Navigating a crowded store increases time and effort. Difficulties with trolleys and baskets, longer queues at specialty counters and checkouts, and crowded malls, often occur at the busiest times. For example, R9 hated shopping for food, becoming even more frustrated having to spend part of her weekend grocery shopping. ‘Why is it not pleasurable? I don’t know, just the trolley banging around, and you know ... and if I’ve got to spend half a day shopping, then I really feel like I’ve been ripped off for my weekend.’

Food shopping was a chore for all respondents: experiences, such as crowding or stock-outs, rendered the occasion unpleasant (R9) while at other times, usually when less pressured in a quiet store, the grocery shopping experience was cathartic (R8).

When shoppers simultaneously supervise children, the journey around the aisles was at times intolerable. R6 was pleased that OGS reduced in-store inconveniences: ‘I certainly have reduced my time in the stores ... I haven’t got time to spend in the store doing a shop on a Saturday. You’ve got screaming kids and the store’s busy. It’s just something that I’m not prepared to do.’ R2 rarely goes into a supermarket, as ‘supermarkets are not a fun place to be with kids.’ Six other respondents held similar views about the inconvenience of in-store shopping.

Online stores however, using telecommunication media, are unable to deliver physical proximity. Regardless of time and energy savings, consumers cannot eat e-groceries. Non-delivery of ordered items, essentially a breach of trust, was the largest source of dissatisfaction in online shopping.

Meeting or exceeding expectations reinforces trust and the subsequent satisfaction. R11 highlights the elation at having the groceries arrive as expected: ‘its

actually quite fun, when the truck arrives and your groceries arrive, if you can call it a sort of festive feel about shopping.’ Online grocer, R3, believed ‘people will be more satisfied with a service that they think will allow them to more closely mirror their normal experience. If I can ask for thinly sliced ham because that’s what I want, I’ll be more satisfied with the service.’

Shopper types

In addition to consumer expectations, secondary analysis revealed four online shopper types (see Table 1 previously). Three respondents shopped infrequently (*occasional*); six shopped for basic supplies (*nasties*); three shopped for specialty items (*specialty*) and two purchased most of their groceries online (*dependent*). Across all four shopper types, convenience drove online shopping.

Six shoppers bought bulky, heavy and boring *nasties* (R9) online, such as toilet tissue and washing powder. R6 found, ‘one of the key benefits of using [OGS] is obviously to get the heavies, if you like, the waters that people buy, the washing powder, detergents, all those cumbersome things, nappies.’ At the other end of the scale, the two *dependents* bought nearly all their groceries online. These included time-sensitive goods, which if not delivered as expected, created problems. R4 recounted how the online grocer substituted and delivered a main meal item late for that night’s Christmas Eve dinner. Ironically, the ordered item was abundant in-store.

Trust grew with repeat orders, until trusting the online grocer to deliver most or all groceries. Both dependent shoppers were women with small children. To avoid in-store shopping they purchased almost all of their groceries, including meat, fruit and vegetables, from their online grocer. They trusted that they would receive quality goods, accurately fulfilled, and according to the pre-arranged delivery schedule.

Dependent shoppers tended towards a relational approach compared with the transactional approach of the occasional, nasties and specialty shoppers. R4 enjoys a personal relationship with a particular picker: ‘I know the girl who does it, Julie. She’s great. She’s been the same one all the time. She knows us, she rings us ... and says “Oh we haven’t got Pink Ladies do you want Granny Smiths?”’ As the order size increased, the relationship became more intimate (Stern 1997). R11 notes that her online store ‘tried to call, they are very ... I would say friendly’. Relational propinquity compensated for the minimal physical propinquity (R1).

DISCUSSION AND FUTURE RESEARCH

At least two limitations apply to this research. Although efficient for data collection, findings from convergent

interviews need further triangulation with additional sources such as multiple cases, different researchers interviewing or statistical data from the situation (Dick 1998). Furthermore, while effective for identifying respondents who had shopped online, snowballing limited investigating all identified issues with all respondents. Themes emerge over time and respondents interviewed earlier cannot comment on unidentified issues.

One possibility for overcoming these limitations is stratified sampling based on shopping basket data in order to identify respondents who characterize particular shopper types. Furthermore, information such as the composition of shopping basket, frequency of online shopping, and length of time with particular online grocer, would allow filtering based on these shopping attributes.

Limitations aside, this qualitative comparison of OGS and in-store shopping suggests that shoppers in both situations rely on physical, temporal and relational propinquity. In-store shoppers experience propinquity in-person while online shoppers rely on electronic technologies for a virtual experience in all phases of the purchase cycle except the delivery and service and support phases. Real and virtual situations help frame the shopping experience, shopper expectations, and shopper behaviour. Furthermore, the focus on consumer perspectives complements prior research of business considerations of online grocery shopping and contributes to the limited body of OGS research.

Academic implications

In this study, a lack of physical propinquity prompted online consumers to buy brands they had previously purchased in-store: trust occurred in-person prior to the online purchase. Respondents changed a brand if it no longer met expectations, but the automated electronic shopping list – a major convenience factor – and lack of in-store visitation minimized switching brands. These findings concur with, and add to, those of Danaher *et al.* (2003) who found consumers unlikely to switch brands online.

If generalizable, the finding of four OGS types is important for theory building and augmenting the general Internet shopper-types reported by Brown *et al.* (2003). Future research should attempt to confirm these findings via quantitative analysis of consumer purchases and to generalize these findings through research in other online shopping domains.

Steinfeld and Klein (1999) note strong links among trust, relationships and physical presence. In an advertising context Stern (1997) proposed developing an intimate relationship between advertisers and consumers through one-way communication. Researching whether regular, two-way communication between the consumer

and the online store could lead to an intimate relationship, based on shopper types, would enhance Stern's (1997) model and provide insights into how trust in OGS might encourage users to switch shopper types, for example from nasties to dependents. Investigating whether OGS differed between countries would also provide important insights.

Industry implications

The finding of four shopper types is also important for practitioners. R3, an online grocer, noted that dependent shoppers are the most valuable and nasties shoppers are the least valuable. A lack of trust due to distance appeared a major determinant of consumers restricting their purchases to the nasties. Happy nasties shoppers are low margin customers but provide economies of scale for deliveries. Nasties shoppers who are more trusting might convert into the more valuable dependent shopper type. Unhappy nasties shoppers, though, might quit and damage a grocer's reputation through negative word-of-mouth.

This research identifies that proximity plays a major role that online grocers may have overlooked. Respondents suggest that online grocers have addressed only some of their concerns. In particular, convenience is the primary motive for respondents switching from in-store to OGS. Although all respondents could use their online store's interface, they suggested improvements including more graphics and better search facilities. Sites also confounded searches by using codes instead of product names familiar to customers. Online grocers need web interfaces that are functional, consumer friendly, fast and most importantly, convenient.

Another finding was that despite convenience as a motive for switching shopping modes, proximity underpinned a multifaceted notion of consumer trust. Trust determined (a) whether consumers would attempt OGS and (b) whether they would continue OGS. Evidence from interviews suggests that trust from physical presence has been under-estimated by online grocers and this may be one reason why early OGS stores failed. Online grocers need to assure virtual customers that they will maintain fair prices, meet customer expectations of quality and timeliness for delivered goods, and provide convenient avenues for returning defective or unwanted goods.

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