Process flow mapping of consumers in a high involvement service purchase process: an exploratory study

Robert G. Grant
*University of Wollongong*, rgrant@uow.edu.au

Elias Kyriazis
*University of Wollongong*, kelias@uow.edu.au

Follow this and additional works at: [https://ro.uow.edu.au/commpapers](https://ro.uow.edu.au/commpapers)

Part of the Business Commons, and the Social and Behavioral Sciences Commons

**Recommended Citation**
Process flow mapping of consumers in a high involvement service purchase process: an exploratory study

Abstract
This paper reports on an exploratory study undertaken to deal with the intricacy of consumer behaviour in a buying process for a complex high involvement service bundle spanning both offline and online channels. A key finding is that consumers switch repeatedly between online and offline channels and between different types of information source to satisfy their search needs. This offers a challenge for communications management if organisations wish to add customer value by minimising their customer time and effort search costs. Prior online channel research has not acknowledged off-line information complementarity for complex high involvement search. Travel agents and principal service providers, for example, are likely to need reintermediation rather than disintermediation in the form of alternative information sources to add customer value as they move through a buying process. The study finds that for complex hedonic services in particular the current frameworks are inadequate for model construction and suggests some other areas for inclusion in this research stream.

Keywords
Process, flow, mapping, consumers, high, involvement, service, purchase, process, exploratory, study

Disciplines
Business | Social and Behavioral Sciences

Publication Details
PROCESS FLOW MAPPING OF CONSUMERS IN A HIGH INVOLVEMENT SERVICE PURCHASE PROCESS: AN EXPLORATORY STUDY

Robert Grant and Elias Kyriazis, University of Wollongong

Abstract
This paper reports on an exploratory study undertaken to deal with the intricacy of consumer behaviour in a buying process for a complex high involvement service bundle spanning both offline and online channels. A key finding is that consumers switch repeatedly between online and offline channels and between different types of information source to satisfy their search needs. This offers a challenge for communications management if organisations wish to add customer value by minimising their customer time and effort search costs. Prior online channel research has not acknowledged off-line information complementarity for complex high involvement search. Travel agents and principal service providers, for example, are likely to need reintermediation rather than disintermediation in the form of alternative information sources to add customer value as they move through a buying process. The study finds that for complex hedonic services in particular the current frameworks are inadequate for model construction and suggests some other areas for inclusion in this research stream.

Introduction
Consumer use of the internet to purchase products and services has fallen short of expectations that arose with commercial access to the internet. Research studies have sought reasons for the low take up of online purchasing in areas like personal characteristics and product characteristics such as relative product involvement and standardisation within product categories. What does not seem to have been studied is the progression of customers through the buying process from information sourcing through to decision making and on to the purchase of a product or service. Clickstream analysis shows that behaviour patterns within a website give some predictive ability for future behaviour but this does not include behaviour beyond direct interaction with a supplier organisation. Mapping consumer search behaviour across external as well as internal information sources may add predictive capability and facilitate online purchasing for complex as well as standardised products.

Research into predictive modelling for consumer purchasing online has focussed on a number of factors such as demographics, technology adoption (Vijayasarathy 2004) and clickstream modelling Moe and Fader (2004 b). More inclusive approaches such as Lohse, Bellman and Johnson (2000) suggest that behaviour in information gathering and decision making stages of the buying process offer improved predictive capability. Combining these approaches offers even better predictive ability as per studies by Senecal, Kalczynski and Nantel (2005) and Van den Poel and Buckinx (2005). The confounding factor is that consumers live in an offline world and turn to online information and vendors when these seem more useful. Predicting consumer behaviour based on prior activity should therefore account for activity and influences offline and online from organisation and independent sources. Noble, Griffith and Weinberger (2005) studied recall of information search and buying across channels for durable products but their research was limited in not accounting for consumer behaviour differences based on product type and relative category experience. Also, while identifying the importance of channels used for information search, they were not able to offer clues for information utility or factors driving consumer behaviour in the process.

This paper reports on a qualitative study to map reported offline and online activity of consumers in a buying process for a high involvement service bundle with varying levels of
hedonic characteristics. The study explores personal factors and levels of category experience in offline and online information use for buying a bundle of hedonic and utilitarian services enabling comparison and contrasting of behaviour.

The Exploratory Study
The study examines a situation common to many forms of complex buying behaviour online and offline by using a long haul recreational travel experience purchase as an example with hedonic and utilitarian components in the desired experience delivery. To maximise information needs we investigate behaviour for an unfamiliar long haul destination taking utilitarian services as air tickets, car hire and chain hotels. Services such as themed lodgings, touring and other experiential destination services are taken as more hedonic in character. We expect big differences in buyer behaviour for these two types of service product (Babin, Darden and Griffin 1994; Chaudhuri 2000; Laurent and Kapferer 1985 and following) showing contrasts in buying behaviour for each service type as well as bundling effects. This research aims to uncover consumer information source choice motivations and sequences for information gathering, decision making and purchase of the two types of service in a complex service bundle. Because of their intangibility, services require extensive problem solving by consumers (Berry 1975) and also differ in customer information needs (Murray 1991). Behaviour also varies with levels of service experience and involvement with higher levels of hedonism increasing levels of involvement (Laurent and Kapferer 1985). Services higher in utilitarian values are likely to fit Assael’s (1998, p. 67) dissonance reduction behaviour while more hedonic services are likely to involve complex decision making (Assael 1998, pp. 66-67).

Lohse, Bellman and Johnson (2000) found the single best predictor for online purchasing was the use of online or offline information sources for option identification and decision making. Clickstream analysis builds on this by using data based on a consumer’s interactions with a website to predict their future behaviour with studies by Moe and Fader (2004 a and b), Sismeiro and Bucklin (2004), Montgomery et al (2004), Senecal, Kalczynski and Nantel (2005) and Van den Poel and Buckinx (2005) confirming it’s relevance. Understanding online behaviour is fine for standardised low involvement type products such as books, music or air tickets where little search activity is undertaken (Johnson et al 2004). It will however have less relevance for the complex services (Murray 1991) investigated by this study.

We intend to identify consumer utilities for online and offline information sources, choice sequences and reasons for these sequences across information search, decision making and purchase stages (Howard 1974) of the buying process. We use Kotler and Keller’s (2006, p. 192) taxonomy of information source types, grouping them as commercial (principal service providers and travel agents), public (media, tourist guides and tourist offices) and private (personal friends and acquaintances) sources of information both online and offline.

Research Methodology
Informants (n=20) were selected from a convenience sample known to be users of both the internet and recreational travel to minimise null or speculative responses. They included members of faculty, other educators, business professionals, office workers and students. Depth interviews were used for understanding reasons for use of multiple choices within and across online and offline information source groups. Informants were talked through how they would search for options, which sources would be used for decision making and how they would make bookings for a first visit to a highly desirable destination. We used a structured interview schedule which addressed both hedonic and utilitarian service types as well as the
bundling of these for booking. The data was analysed by noting utilities of primary, secondary and tertiary choice sequences for informants at each stage of the purchase process for hedonic and utilitarian travel services. Order effects of information source cited by informants indicate relative importance (Russo, Medvec and Meloy 1996) with primary being the first choice cited, secondary being second and other choices taken as tertiary. Choice paths were then considered with internet use factors and service category experience reported by informants.

**Research Findings**

The findings of this research are reported based on the utilitarian or hedonistic values associated with services followed by internet use and category experience effects.

**Choice Sequences for Utilitarian Travel Services**

Information utilities affecting resource choices differ between stages of the buying process (Howard 1974) so we will deal with each of the stages of the buying process in turn.

**Information search and acquisition:** Consistent with theories of information utility for utilitarian services, informants preferred objective and factual sources, almost exclusively in the form of commercial information sources. Principals online (e.g. Qantas) were chosen as a primary source based on source credibility and expected currency of information. Search was limited for airlines in particular with brand preference based on loyalty scheme membership and perceived safety of operations. Without exception, informants sought secondary source confirmation from offline intermediaries (e.g. Flightcentre) looking for packaging not available online from a “local trusted” intermediary. These intermediaries also offer value in dealing with the complexity of multiple components required in travel arrangements. Where Intermediaries were selected as a primary information source, informants were evenly split between benefits of dealing with a local “known” retailer and an online retailer. The search function and ability to sort options by price with time and place independence or convenience was valued in online retailers (e.g. Zuji.com.au). Offline retailers were preferred for “insider knowledge,” offering qualified options to avoid information overload from online information search. Secondary confirmation sources were complementary with online users moving offline and vice versa. The only informant who chose to rely on a single information source for the whole process chose an offline agent based on past experience.

**Decision making:** Principal online and retail offline information were primary sources for most informants with slightly more than half finding no need for further information to select a preferred service option. Where secondary sources were used, informants typically switched from retail to principal and from offline to online, again showing complementarity effects.

**Purchase:** Where online principal service providers were primary choices for booking information, informants invariably switched to offline contact to make bookings. Most however reported preference for offline retail as their only point of contact, citing price advantage and responsiveness, communication and coordination of different components as benefits.

**Choice Sequences for Hedonic Travel Services**

As for utilitarian service elements, this section of the paper will deal with the different stages of the buying process in turn.

**Information search and acquisition:** Consistent with theories of information utility for hedonic products and services, qualitative and credible information is preferred. We found
preference for public and personal information sources against the commercial information sources favoured for utilitarian services. Some informants sought impartial, comprehensive lists for option discovery preferring online public tourist offices. Others sought subjective information from online public travel guides (e.g. lonelyplanet.com) or offline commercial retailers to avoid information overload with qualified or subjective recommendations.

Despite concentration in the primary sources selected, secondary sources used to cull options for compilation of a consideration set were massively fragmented. Perceived value was derived from the detail of online principals, to subjectivity and credibility of media and tourist guides and comfort derived from interacting with “ordinary” people. Most informants sought multiple, diverse sources using all three information types both online and offline. Values of detail, credibility, subjectivity and authenticity are further complicated by format expectations such as hardcopy and softcopy availability, photo and audio visual representations at varying levels of information realism. The big surprise was the value of personal sources online where lack of trust in online interactions (Peterson and Merino 2003) was outweighed by expected common values in special interest chat room and bulletin board interactions.

In summary, hedonic service purchasing seems to involve a wider range of information sources and far more complex process paths than utilitarian services. Notably however the few people who nominated offline information sources as prime differed between the hedonic and utilitarian service types.

Decision making: Preferences for public information sources over personal and commercial information sources carried through strongly from the information search stage. There was however a shift to offline sources, suggesting Peterson and Merino’s (2003) propositions relating to the internet’s communication limitations have more effect in selecting preferred options. Online interactivity was also seen as less effective for option clarification, lacking the direct personal contact (Murray 1991) required in high risk service decisions. While most informants chose offline personal contacts as their primary information source they still turned to other sources for information corroboration.

Purchase: As with utilitarian services, a majority reported preferences for offline retailers rather than principal service providers for hedonic service reservations. This was not however a discrete choice with a number of informants seeking confirmation from online principals before booking with a local retailer. The value offered by local retailers was compounded by destination advice on visas, health requirements and local customs. The value offered by offline retail intermediaries was evident in half of the informants seeing this as a discrete choice with no need to consult other sources in the purchase process. Some informants however chose to book with principal service providers online as local retailers were seen to lack expertise in specialised elements of a distant destination. A small number of informants sought lower costs from a principal direct followed by contact with a local retail intermediary for comparison of relative prices on offer.

Personal Characteristic Effects on Information Source Choices
With fragmentation of choices beyond primary sources chosen by informants for each part of the process we limit our consideration to primary source choices given their relative importance as shown by Russo, Medvec and Meloy (1996). Informant characteristic data relating to internet and computer use and service category use and familiarity was gathered.
The 2 informants who used either online or offline interactions (unimodal) for at least one of the service types had no obvious technology use profiles. Only one of these was unimodal for both service types but used offline sources for utilitarian and online sources for hedonic services. This person was one of the least experienced internet users but cited an extended search behaviour for hedonic services and a minimalist approach to utilitarian services.

Similarly while some informants stood out clearly as recent and frequent users of long haul recreational travel, the variance in their purchase processes was beyond technology use and/or reported need for control of information in the purchase process. Despite established theory in these areas, personal characteristics may not be a significant factor in behaviour. One exception in personal characteristics was relative category experience which seemed related to less activity for utilitarian services and more for hedonic services.

**Conclusions, Limitations and Future Research**

This study confirms expectations of information source utility for the high involvement service types considered but also massive diversity in customer preferences and utilities. This suggests a very difficult task for intermediaries trying to move their business online or for principals wanting to disintermediate and do business direct with their customers. The apparent need for both online or offline information sources across both service types suggests that integration between principals, intermediaries, independent public sources and private forums will be required on electronic and bricks and mortar networks. While there was far less complexity in utilitarian services, which seem a better prospect for online purchase (as with sales of air tickets), this is a means to an end and the consumer’s motivation derives from the hedonic elements of the service bundle. As a result, unless there are substantial price benefits for booking direct with a principal online, the consumer is likely to turn to an offline agent for utilitarian elements of the travel experience. While this research was qualitative and cannot be generalised we note that personal technology use or category experience characteristics had no apparent bearing on the two instances where online or offline information resources were used exclusively for a single service type. As importantly these unimodal processes were reported by different respondents with neither of them applying to both service types.

Ultimately the variety of sources used did not enable identification of any patterns of behaviour or utility which suggests need for a far larger qualitative study to identify patterns of behaviour and utilities that can form the basis of modelling. As part of this study it may also be beneficial to look beyond the current research framework used for this paper and engage a wider research framework. This might include going back to the roots of consumer behaviour and adopting the perceived risk management framework developed by Conchar et al (2004) as a parallel to the behavioural base developed by Howard (1974). As part of this we may find it useful to identify personality factors individually as suggested by Conchar et al (2004) or in aggregate as done by Vermeir and van Kenhove (2005). Another possibility is using transaction cost economics as done by Teo, Wang and Leong (2004) to deal with the complexity arising in consumer behaviour across channel options. The ultimate conclusion of this research is that is we wish to seriously undertake modelling of online consumer behaviour we will require a far wider conceptual base for framing a much more extensive qualitative study. In the event that such a study is able to identify common utilities and process paths it will then be possible to move to choice modelling and other econometric approaches to develop definitive models of consumer behaviour.
References


