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How Do Firms Present Choice to Consumers?
Some Unusual Decision Constructs Along the B2C Transaction Process

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INTRODUCTION

Certain features amongst some online retailers are atypical of ‘good’ design; the transaction process presents consumers with optional extras that not only slowed the process down, but also stressed and agitated consumers. An established norm is that web design, employing human computer interaction (HCI) principles, develops applications that are easy to use and make the consumer experience positively engaging and productive (Rogers et al., 2011; Shneiderman and Plaisant, 2010; Sklar, 2006). This norm is in question today, as many points in commercial Business-to-Consumer (B2C) transactions are riddled with pitfalls intended to slowdown, confuse or trick consumers (Barry and Torres, 2009). This paper offers a taxonomy of decision constructs encountered throughout online B2C transactional processes. The findings make an incremental contribution in theorising, identifying and categorising new and established decision constructs, as well as reporting on whether the decision constructs are used and examining them in terms of factors such as opacity, clarity and user frustration.

PRINCIPLED MARKETING PRACTICE

As a means to achieving organisational success, marketing’s central premise is to satisfy customer needs and wants more effectively and efficiently than the competition (Kotler and Armstrong 2007). However, marketing is often considered as an area where firms can lose their core values in the pursuit of increasing sales at any price (Wicks et al., 2010). Firms must pursue a delicate balance between satisfying customers’ needs by creating more value, while simultaneously achieving organisational objectives such as
accruing profits. Care therefore must be taken to ensure firms ethically satisfy the full spectrum of customer interactions in an online B2C transaction process.

RESEARCH FOCUS - THE TRANSACTION PROCESS

Central to the work presented is an examination of the transaction process between a business and a consumer, which is comprised of a number of decisions, typically across a number of pages, until payment is made and the process concluded. This study is not concerned with the decisions core to the actual product or service, such as quantity, shoe size or colour. It is the decisions that involve some element of optionality that are of more interest. Specifically, the authors are interested in the part of the interaction after which consumers become psychologically committed to purchase, for example when a consumer presses a ‘Buy’ button. From this point onwards the consumer is sometimes presented with choices not central to the product or service being purchased and which are difficult, if not impossible, to avoid because of website design. While many businesses seek to offer a satisfying consumer experience and treat consumers fairly, not all firms are so minded. Whether through benign incompetence or wilful intent, some retailers pepper the transaction processes with design elements forcing consumers to slow down, stop or accidentally select options they did not intend. To understand why consumers are experiencing these intermittent junctures, it is first necessary to categorise the types of decisions encountered in the transaction process.

REGULATING OPTIONAL CHARGES AND PRICING

The EU aims to protect consumers against unscrupulous practices that may result in inadvertent purchases. They assert additional options may only be purchased on an ‘opt-in’ basis while for all other distance contracts, the consumer’s express consent is required and the vendor may not use default options that require the consumer to reject the option. EU regulation states “optional price supplements shall be communicated in a clear, transparent and unambiguous way at the start of any booking process and their acceptance by the customer shall be on an ‘opt-in’ basis” (Article 23(1) of Regulation No. 1008/2008). In relation to distance and off-premises contracts, which would include e-commerce transactions, the EU directive on consumer rights (European Union, 2011) states additional payments above and beyond the minimum cost of the transaction require the explicit consent of the consumer. However, neither piece of legislation defines what is meant by ‘opt-in’ or what type of constructs is allowed where the consumer must make a decision on an optional extra. It is therefore at the discretion of the vendor to determine the most suitable method of obtaining the consent.

THE PRESENTATION OF CHOICE

Ahmetoglu et al.’s (2010) study on the impact of pricing tactics on consumer behaviour described ‘drip pricing’, where online retailers present consumers with an element of the price up front and subsequently present additional components as ‘drips’ throughout the buying process. The drips can be either compulsory, where they are inherent to the product (e.g., shipping cost) or optional (e.g., an optional warranty). These ‘drips’ can be presented in a variety of ways including as opt-ins and opt-outs.

The manner in which options are presented significantly impacts consumer choice. Research has been conducted to determine whether consumers are more likely to
participate when an option is framed as an opt-out rather than an opt-in (McKenzie et al., 2006; Junghans et al., 2005; Johnson and Goldstein, 2003; Madrian and Shea, 2001). The research concludes an individual is more likely to retain the default option than to change it, even if the decision is detrimental to them. That is, they are more likely to participate if an option is presented as an opt-out, rather than an opt-in. There is little difference in acceptance rates between an opt-out and a must-opt (Johnson and Goldstein, 2003). The reasons identified for this negligible difference are participant inertia and a perception the presentation of a default is a recommendation. McKenzie et al. (2006) take that conclusion further and maintain those presenting the choice are more likely to do so in a way that indicates their beliefs or attitudes towards the choice. Belman et al. (2001) and Lai and Hui (2006) examined the impact of question framing on consumer decisions. They found consumers were more likely to accept an option when the language was expressed in an acceptance format rather than a rejection format for both opt-in (e.g., ‘Please send me newsletters’ with the checkbox un-ticked versus ‘Please do not send me newsletters’ with the checkbox ticked) and opt-out (e.g., ‘Notify me about more health surveys’ with the ‘Yes’ button pre-selected versus ‘Do not notify about more health surveys’ with the ‘No’ button pre-selected).

RESEARCH PLAN

The research plan is three-phase. Firstly, identify an exhaustive list of the various decision constructs consumers encounter when purchasing a product or service whilst online and then consider some of the more salient issues that surround the process. Secondly, an intense analysis of the presentation of the decision constructs, including an exploration of the juxtaposition between optionality and question framing. Thirdly, construct a framework, and conduct factor analysis to determine the nature of the relationships between independent variables such as industry category and decision constructs. This paper addresses the first phase and comprises of two parts. By means of theorising and analysing websites, the authors propose an exhaustive taxonomy of decision constructs. The methodology involved identifying the highest-level meta-categories and sub-dividing each logically until a series of mutually exclusive constructs were identified. A large number of retailers’ websites were explored and several products or services were studied. Secondly, 145 decision constructs across 25 websites were examined in detail. Representative e-commerce B2C websites were identified from firms listed with Retail Ireland, Ireland’s Small Firm’s Association, and analysis from Google Analytics and Google Ad Planner.

IDENTIFYING DECISION CONSTRUCTS

Fundamental Decision Types

The transaction process on each website comprises of a number of sequential webpages ending in a payments page. After the core product or service has been selected, the consumer is presented with various decisions points. Most of these decision points relate to real ‘options’ that may be selected or declined. The consumer may complete
the purchase without choosing an option, such as an extended warranty, as it is an ancillary aspect of the product or service. There are also obligatory decisions that involve some element of optionality. Such decisions are ‘essential’ to obtaining the product or service (e.g., choosing between different payment methods). The first meta-category of decisions is whether they are essential or truly optional.

**Optionality**

Although the EU stated optional price supplements should only be accepted by the consumer on an ‘opt-in’ basis (European Union, 2008), it did not define optionality or what constituted an opt-in. Definitions of optionality encompass the notions of “to choose” (Geddes and Grosset, 2004) and “not compulsory” (Merriam Webster, 2013). Hence, to ‘opt-in’ is “the property of having to choose explicitly to join or permit something; a decision having the default option being exclusion or avoidance” (wiktionary.org, 2013). Conversely, to ‘opt-out’ means, “to choose not to participate in something” (The Oxford English Dictionary, 2013) and involves “the property of having to choose explicitly to avoid or forbid something; a decision having the default option being inclusion or permission” (wiktionary.org, 2013). Most consumers purchasing on the internet are well aware an option is not always presented as an opt-in and at times they must deliberately choose to opt-out, by de-selecting a checkbox or a radio button. Thus, the optional decision may be categorised as either opt-in or opt-out.

**Un-selected and Pre-selected Constructs**

In exploring decision constructs it became clear some opt-in, opt-out and essential decisions were sometimes un-selected and sometimes pre-selected. Certain ways in which the decision is presented are quite peculiar. Opt-in decisions normally involve explicitly choosing one of a number of options, thus, an un-selected opt-in. However, a pre-selected opt-in is more ambiguous. A ticked checked box is suggestive of something having been pre-selected for the consumer. However, using rejection framing, such as ‘I do not want an email newsletter’, the action of ticking the box means the consumer opts-in. The juxtaposition of pre-selection (i.e., something appears chosen) against negative framing (i.e., something is not being received) is counter-intuitive and is unlikely to be inadvertent poor design, given the most frequently encountered opt-in is un-selected with acceptance framing.

Opt-out decisions normally appear as a pre-selected tick in a checkbox with associated acceptance framing, (e.g., ‘I wish to receive email’). However, an opt-out construct can be designed so it is un-selected, appearing like a ‘normal’ opt-in decision. This construct requires the decision be framed to imply rejection or a negation of the decision (e.g., an un-ticked checkbox accompanied by the text ‘I do not want Collision Damage Waiver’). This construct is unconventional and confusing; a consumer might safely overlook an un-selected option, assuming it to be opt-in. However, the un-selected opt-out construct is designed so a consumer must tick a box to reverse out of the decision. Drawing attention to the option in this manner may result in the consumer giving the option more consideration than they would otherwise. The same juxtaposition can be applied to essential decisions. These may also be pre-selected (e.g., a fast delivery method) or more usually un-selected (e.g., choice of a payment method).
The Must-opt Construct

From previous research, the authors identified and described a new decision construct, coined a ‘must-opt’ decision (see Table 1), in online commercial transactions (Barry et al., 2011). A must-opt decision occurs when an optional extra is presented with no option selected, ostensibly an opt-in decision. However, it is not truly an opt-in because it is impossible to progress to the next webpage until the consumer explicitly accepts or rejects the option – hence, they must-opt. Various devices may be used to prohibit progression such as a pop-up window or highlighting in red missing responses. The consumer must go back and read and consider the option variants and choose one.

Distinguishing Essential from Optional Decisions

A casual examination of a must-opt and an un-selected essential decision might suggest they are the same. Although they look similar, they are fundamentally different. The examples in Table 1 show both decision constructs consist of a number of un-selected radio buttons. The must-opt allows the consumer to select or decline the option of adding additional drivers. In contrast, the un-selected essential decision requires the consumer to choose between a number of delivery options. Hence, the must-opt deals with an optional extra that can be declined, whereas the un-selected essential decision offers a choice between different variants, but cannot be declined.

A Taxonomy of Decision Constructs

The authors propose a taxonomy of seven decision constructs, described and illustrated in Table 1. Over time, as firms pursue inventive ways of presenting consumers with optional extras, other decision constructs may be identified.

DEScriptive ANALYSIS

A descriptive analysis of a number of websites accessible to Irish consumers was conducted in order to: (a) determine whether the decision constructs identified are used in practice; (b) determine whether any additional decision constructs need to be added to the list; and (c) examine the constructs in terms of factors such as opacity, clarity and frustration. Twenty-five websites were examined across the Travel, Consumer Products, Financial Services, Accommodation, Entertainment and Recreation sectors.

A single representative task was chosen for each website (e.g., purchase a book) and each decision point encountered during that transaction was recorded. All decision constructs were examined to determine whether they could be categorised according to the identified construct types. Some websites had multiple decision constructs, while others had very few. For example, the travel websites had a total of 65 decisions based on 6 websites, whereas consumer products had 27 decisions based on 9 websites.
The most commonly encountered decision construct is the un-selected opt-in with 69 instances, followed by the un-selected essential decision with 26 instances (see Table 2). Each construct encountered was assessed in terms of: clarity (i.e., whether the type of construct would be clear to the consumer; clarity of the optionality of the decision; clarity of the available options; the level of opacity for the decision construct; and the level of frustration experienced when the construct was encountered. Each of these, other than frustration, was measured on a 5-point Likert scale. Frustration was measured on a 3-point scale. The more negative measure was at the low end (e.g., very unclear) and the more positive measure was at the high end of the scale (e.g., very transparent).

The mean values for the must-opt and the un-selected opt-out were lower than the other mean values in the majority of the measures reported above. This finding suggests: the type of construct encountered was less obvious; it was less evident the option encountered was optional; the choices available to the consumer were less clear; the constructs were more opaque; and the use of the construct led to higher levels of frustration than did the other construct types. The pre-selected opt-out had a higher level of opacity than the must-opt and was only slightly better in terms of clarity of optionality and clarity of the available options. This finding is not unexpected as the pre-selected opt-out can easily result in the consumer inadvertently choosing an option if they do not take action to decline it and is, therefore, generally an opaque option. Even though a must-opt may initially be opaque to the consumer, because the consumer is informed they must make a choice before they can move on to the next page removes some of the ambiguity and opacity in relation to this form of construct. As the pre-selected opt-out is the more commonly encountered form of opt-out, the consumer is more likely to react to this decision structure and decline the option than they would for an un-selected opt-out. This finding suggests it is clearer and less opaque than the must-opt or the un-selected opt-out, which are less familiar ways of presenting options.

The opt-ins and the essential decisions had higher mean values for all measures, suggesting: it was more obvious what type of structure was encountered; the choices were clearer; the constructs were less opaque; the use of the constructs led to less frustration; and in the case of the opt-ins, it was clearer that the decision was optional. The number of opt-outs (see Table 2), both pre-selected and un-selected is quite small (9 and 5 respectively). Opt-outs are most probably being used less frequently as a result of legislation (European Union, 2011). The introduction of this legislation may have spurred the use of the must-opt to force the consumer to make a decision on an option. The must-opts were generally presented in 2 different formats: radio buttons with none of the options pre-selected and a drop-down menu where the consumer selected one of the options (see Figure 1). Of the 15 must-opts identified, 11 were radio buttons and 4 were drop-down menus. The small number of drop-down menus means it was not possible to compare means in a meaningful way.

A consumer could be easily forgiven for mistaking the must-opts in Figure 1(a) and (b) for un-selected opt-ins, as there is no indication the consumer must take action in order to make a decision. In the case of the radio buttons, while it is normal to have one radio button selected, it would be reasonable for the consumer to presume they were not required to consider the options unless they wished to add a driver. In the case of the drop-down menu, the consumer could also reasonably presume that no action is required unless they intend bringing carry-on luggage. Once the consumer clicks on the menu (see Figure 1(c)), it is more apparent that action is required. However, if the...
The consumer has continued with the interaction without engaging with either of these must-opts, they will have no indication action is required until they attempt to proceed to the next page. At this point they will be informed they must specify whether they wish to add additional drivers or to have hand baggage only or checked-in baggage.

The un-selected opt-out also fared poorly in the evaluation. They were all presented using checkboxes and all used rejection framing (see Figure 2(a)). The consumer is required to tick the box if they do not desire the option presented. The consumer could easily mistake this for an un-selected opt-in (see Figure 2(b)). The main difference in the two constructs is the way in which the option is phrased. The un-selected opt-out uses rejection framing that requires the consumer to take action if they do not want the option whereas the un-selected opt-in uses acceptance framing that only requires action if the consumer wants the option. As the un-selected opt-in is by far the most commonly encountered construct, a hurried consumer could easily presume that an un-selected checkbox is an un-selected opt-in, resulting in the inadvertent selection of the option.

CONCLUSIONS

The genesis for the research question was to explore whether firms were acting in good faith in relation to consumer protection regulations. The EU has recognised programming constructs are being used to nudge consumers to behave in a way that firms wish and have enacted additional legislation that applies to all distance contracts.

This study theorised possible ways in which essential and optional decision constructs can be presented in online transactions. From this exercise seven mutually exclusive decision constructs were identified and organised into a taxonomy. The research successfully identified the use of all the proposed constructs across multiple websites and B2C sectors; no other constructs were encountered that were not captured by the taxonomy. The findings indicate most firms are using obvious and appropriate decision constructs allowing consumers to make quick decisions, requiring little deliberation, and resulting in productive consumer experiences. However, there are a number of firms using more complex constructs, such as the must-opt, the un-selected opt-out or pre-selected opt-in, possibly to increase the likelihood of the consumer selecting the option. These interactions appear to be counter-intuitive to good design. While common constructs such as un-selected opt-ins and essential decisions fared well, the must-opt and the un-selected opt-out constructs were more problematic in online transactions.

On certain websites, consumers need to attend closely to all decisions encountered to negotiate successfully through the transaction process. With the must-opt and other ambiguously presented decisions, EU regulation deals with the notion of optionality inadequately. Some firms seek inventive ways of attracting consumers’ attention to various optional products and services. The question is whether these tactics are ethical and consistent with ‘good’ marketing practice. Cultural lag theory (Ogburn, 1957) is resilient; firms still use new technologies to shape consumer behaviour in their favour.
REFERENCES


Geddes and Grosset. (2004). Webster’s Universal English Dictionary


<table>
<thead>
<tr>
<th>Decision Construct</th>
<th>Description</th>
<th>Illustration</th>
</tr>
</thead>
</table>
| **Un-selected opt-in**     | Default: don’t receive the option  
Normal presentation: *un-ticked*  
Framing: acceptance | [Image] I want an extended warranty |
| **Pre-selected opt-in**    | Default: don’t receive the option  
Normal presentation: *ticked*  
Framing: rejection | [Image] I do not want an extended warranty |
| **Un-selected opt-out**    | Default: receive the option  
Normal presentation: *un-ticked*  
Framing: rejection | [Image] Quote valid for 30 days. We would like to email you reminders over this period. If you don’t wish to receive these emails please tick here. |
| **Pre-selected opt-out**   | Default: receive the option  
Normal presentation: *ticked*  
Framing: acceptance | [Image] Transit Insurance (optional) €0.75 |
| **Must-opt**               | Default: cannot proceed  
Normal presentation: multiple *un-ticked*  
Framing: normally acceptance | [Image] Additional drivers: ✗ Yes ✗ No |
| **Un-selected essential decision** | Default: cannot proceed  
Normal presentation: multiple *un-ticked*  
Framing: normally acceptance | [Image] Express delivery in 2 days (€5.00)  
[Image] Fast delivery in 3-4 days (€2.00)  
[Image] Free delivery in 5-7 days (free) |
| **Pre-selected essential decision** | Default: variant selected  
Normal presentation: *ticked*  
Framing: normally acceptance | [Image] ✗ FREE Super Saver Delivery (4-6 business days)  
[Image] ✗ Standard (3-4 business days)  
[Image] ✔ Two-Day Delivery: get it on Monday, December 9 |
Table 2: Analysis of Decision Constructs

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<th>Type of Decision Structure</th>
<th>Measure</th>
<th>Mean</th>
<th>SD</th>
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<th>SD</th>
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<td>5 = v clear</td>
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<td>4.33</td>
<td>.82</td>
<td>4.83</td>
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<td>5 = v clear</td>
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<td>1.10</td>
<td>2.83</td>
<td>.41</td>
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<td></td>
<td>Clarity of available options</td>
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<td>Level of opacity</td>
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<td>5 = v transparent</td>
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<td></td>
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<td></td>
<td>Level of frustration</td>
<td>1-3</td>
<td>1= v frustrated</td>
<td>3 = not frustrated</td>
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<td>Pre-selected opt-in (n=6)</td>
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12
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### Figure 1: Presentation of Must-opts Construct

<table>
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<th>Presentation</th>
<th>Illustration</th>
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<tbody>
<tr>
<td>(a) Must-opt using radio buttons</td>
<td><img src="image" alt="Additional drivers: Yes No" /></td>
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<tr>
<td>(b) Must-opt using a drop-down menu</td>
<td><img src="image" alt="Select baggage" /></td>
</tr>
<tr>
<td>(c) Must-opt drop-down menu once clicked on</td>
<td><img src="image" alt="Select baggage drop-down menu" /></td>
</tr>
</tbody>
</table>

### Figure 2: Presentation of Un-selected Constructs

<table>
<thead>
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<th>Presentation</th>
<th>Illustration</th>
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</thead>
<tbody>
<tr>
<td>(a) Un-selected opt-out</td>
<td><img src="image" alt="Quote valid for 30 days" /></td>
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<tr>
<td>(b) Un-selected opt-in</td>
<td><img src="image" alt="I need wheelchair assistance" /></td>
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