THE REPAIR OF FLOOD DAMAGED PROPERTY: A CRITICAL REVIEW OF THE NEEDS OF HOMEOWNERS

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One of the primary reasons why firms fail to meet their customers' needs and expectations is due to their lack of awareness of exactly what those needs and expectations are, i.e. there is a gap between company perceptions of customer expectations and what customers actually expect. With five million people, in two million properties estimated to be living in flood risk areas in England and Wales, flooding and flood damage to property are somewhat inevitable. In fact, the increased frequency of flooding and the growing number of properties being constructed on floodplains suggest that these statistics are set to worsen in future. However, there is inadequate understanding of domestic property occupiers’ needs regarding flood damage reinstatement. Therefore, as part of a wider investigation, a review of those needs and concomitant issues is presented. The severity of the impact of a particular flood event on a household is influenced, in part, by factors that can be classified into two main categories: flood characteristics and the individual household characteristics. An initial assessment classifies homeowners’ needs as: time, utilitarian needs, relations and communication, health and safety, commitment and flexibility, economy and aesthetics. In order for insurers and repairers to offer services that will satisfy their clients, sound knowledge and consideration of the needs and expectations of homeowners is vital.

Keywords: domestic properties, flood damage, homeowners, insurers, satisfaction.

INTRODUCTION

One of the major functions of marketing in any business organization is to ensure that clients' needs are met, profitably (Kotler 1997). To accomplish this task, businesses ought to understand their clients' needs, a task that is not always easy (Kotler 1997).

It has even been suggested that in today's competitive business world, it is no longer sufficient to merely satisfy customers by meeting their needs and expectations, because a 'satisfied' customer remains a customer so long as there is no better offer, whereas a 'delighted' customer (one whose expectations have been exceeded) is more than likely to remain loyal (Jobber 1998; Gorst 2000; Kotler and Armstrong 2001).

Construction literature abounds with studies focusing on needs (or requirements) of construction clients (Simon 1942; Emmerson 1962; Banwell 1964; Latham 1994; Egan 1998; Chinyio 1999; Kamara et al. 1999; Kamara et al. 2002). However, these investigations largely deal with industrial and commercial construction project clients. Reinstatement of flood-damaged domestic properties involves ‘projects’ and clients

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(insured homeowners) that are significantly different from those of ordinary construction projects. Some of the unique features are:

- Recovery and restoration – returning the flood-damaged property to its pre-incident condition (BDMA 2002).
- Processes involved e.g. cleaning, drying, ‘deodorizing’, sanitation, etc. (BDMA 2002).
- Size, usage, contents, etc. (Nicholas et al. 2001).
- Potentially complex flood claims (Crichton 2002).
- Parties involved i.e. homeowner, insurer, flood reinstatement firm, loss adjuster, and/or loss assessor, as opposed to the conventional team of client, designer, consultant(s) and contractor(s).
- The ‘clients’ undergo a potentially traumatic experience often resulting in what Green et al. (1983) refer to as ‘threat anxiety’ (expectancy of flooding), ‘event anxiety’ (during the flood event) and ‘aftermath anxiety’ (related to time taken to return to ‘normal’ living conditions).
- Loss of symbolic objects or assets of sentimental value, underinsurance on buildings and no insurance on contents (resulting in financial loss), may exasperate the trauma experienced by homeowners (Green et al. 1983).

The distinction between the homeowner and a commercial client implies a difference of needs regarding reinstatement of flood-damaged property. For customer satisfaction purposes it is therefore important to investigate and focus on homeowners unique needs and expectations.

NEEDS, EXPECTATIONS AND SATISFACTION

Any efforts towards customer satisfaction would be futile without a thorough consideration of clients’ needs and expectations. Surprisingly, while businesses may even identify their target market relatively easily, they may still fail to understand their customers' needs (Kotler 1997), of course at the firms’ own peril.

Since this study is being carried out in a much wider context of insured homeowners’ satisfaction with respect to services received during flood damage reinstatement works, a brief discussion of the concepts of needs, expectations and satisfaction is useful.

Customers: what do they “need”?  
A need is defined as "a lack of something requisite, desirable, or useful; a physiological or psychological requirement for the well-being of an organism" (Britannica 2002), or "states of felt deprivation" (Kotler and Armstrong 2001). The latter includes physical needs for food, clothing, warmth, and safety; social needs for belonging and affection; and individual needs for knowledge and self-expression.

Human needs have been classified in various ways, such as:

- Psychological, safety, belongingness and love, esteem, self-actualization (Maslow 1987).
- Utilitarian needs, hedonic (or experiential) needs (Blythe 1997).
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- Stated needs, real needs, unstated needs, delight needs, secret needs (Kotler 1997).
- Psychological needs, social needs, symbolic needs, hedonic needs, cognitive needs, experiential needs (Foxall et al. 1998).

Whatever the classification, clients' needs are admittedly numerous and complex; they have been associated with a number of characteristics, including:

- Individuals’ needs vary (Albrecht and Bradford 1990, in Chinyio 1999).
- Needs may vary over time (Weihrich and Koontz 1993, in Chinyio 1999).
- Needs must be recognized and/or perceived (Blythe 1997).
- Needs may be satisfied simultaneously by a single product (Foxall et al. 1998).
- Needs are not entirely definitive and absolute (Chisnall 1985).

In the context of this research, "clients' needs" are the desires and requirements of insured homeowners concerning the restoration and/or reinstatement of their flood damaged domestic properties (adapted from Chinyio 1999).

**Customer expectations – mind the gap!**

Customer expectations form a central role in many models of service quality and customer satisfaction (Folkes 1994) and hence the need to consider the concept in such a study. “Customer expectations are beliefs about service delivery that function as standards or reference points against which performance is judged” (Zeithaml and Bitner 2000: 48). This definition is similar to that offered by Folkes (1994), hence for this discussion, expectations will be viewed as the customer’s beliefs about the range of likely outcomes of service offerings against which performance is evaluated.

Zeithaml and Bitner (2000) put forward a conceptual model known as the “Gap Model of Service Quality” which focuses on four customer gaps, namely: not knowing what customers expect, not selecting the right service designs and standards, not delivering to service standards, and not matching performance promises. This model is based on the rationale that the primary reason why many firms do not meet their customers’ expectations is due to the firms’ lack of understanding of exactly what those expectations are, i.e. a gap exists between company perceptions of customer expectations and what customers actually expect.

Zeithaml and Bitner (2000), in their conceptualization of service quality, further propose two expectation standards namely:

- Desired service (upper boundary) – the level of service which the customer hopes to receive, i.e. ‘wished for’ level of performance, and
- Adequate service (lower boundary) – the level of service, which the customer deem acceptable, i.e. ‘minimum tolerable expectation.’

The implication of the above distinction is that customers are likely to be dissatisfied if the service level falls below the minimum acceptable level whereas if the service exceeds the desired level, customers are likely to be very satisfied (delighted).
A consideration of factors that form and/or influence customers’ expectations is essential due to the role played by expectations in customer satisfaction; these factors include:

- **Past experience** – the customer’s previous exposure to the same service (or one that is relevant) will help to shape their predictions and desires (Jobber 1998; Gorst 2000; Zeithaml and Bitner 2000).

- **Supplier's marketing** - the service provider's explicit advertising promises influence the level of customers’ expectations (Jobber 1998; Zeithaml and Bitner 2000).

- **Competitors** – service received from a rival company, may influence the customer's expectations of a subsequent transaction (Gorst 2000).

- **Word-of-mouth communication** – a person’s experience of given goods or services, if relayed to others, will form and/or influence expectations. Such information is often perceived as unbiased (Jobber 1998; Gorst 2000; Zeithaml and Bitner 2000).

- **Reports** - Reports and documentaries on products by consumer programmes and magazines are another source of expectations (Gorst 2000).

Managing expectations is an important role for service providers; since some expectations are controllable, service providers have the opportunity to influence (via controllable expectations) the yardsticks that their customers will ultimately use to evaluate service quality, which will determine whether or not they are satisfied.

**This thing called “satisfaction”**

Although the subject of 'satisfaction' has received considerable attention and focus from various angles of industry and business, there still seems to be no consensus on the definition of satisfaction, an admittedly difficult concept to define (Oliver 1997). Marketers, argue that if a consumer perceives a product (good or service) as being below their expectations, then dissatisfaction results. Alternatively, satisfaction results if the benefits received are perceived as either matching or exceeding expectations (Jobber 1998; Adcock et al. 2001; Kotler and Armstrong 2001).

Conceptually, satisfaction is often described by the use of two frameworks (Anderson and Fornell 1994, in Gorst 2000; Bitner and Hubbert 1994), namely:

- **Transaction-specific satisfaction** - the consumer's dis/satisfaction with a discrete product encounter, and

- **Overall satisfaction** - the consumer's overall dis/satisfaction with the organization based on all encounters and experiences with it.

Although not universally accepted, this kind of conceptualization has been drawn upon in previous research (Gorst 2000; Tam 2000).

Whatever the conceptual controversy on satisfaction, the idea of expectations is prevalent in literature. What a client 'expects' from a service transaction or an organization's overall offerings, is seen as the yardstick against which perceived service quality or performance is measured to form the consumer's feelings of dis/satisfaction. These expectations constitute a "frame of reference" used to evaluate service quality (Gabbot and Holborg 1998).
It is worthwhile at this stage to underscore the distinction and relationship between needs and expectations. Whereas needs denote a perceived condition of lack in something desirable or requisite, expectations designate what the customer believes they will receive in a specific service encounter. Needs, *inter alia*, influence the formation of customers’ expectations of service quality. Although expectations can either be 'realistic' or 'unrealistic', they still form the basis upon which decisions are made by individuals to expose themselves to an encounter without fear of harm, since the individual has an idea of the likely consequence of a particular course of action (Auchterlounie and Hinks 2001).

In this research, satisfaction will be taken as the consumer's fulfilment resulting from judgment about the pleasurable level of consumption-related fulfilment, including levels of under and over-fulfilment that a product or service feature provides (Oliver 1997).

**FLOODING, FLOOD DAMAGE AND REINSTATEMENT OF DOMESTIC PROPERTIES IN THE UK**

Flooding from rivers is historically a natural occurrence, with its own benefits to local economies and ecology. Smith and Ward (1998) refer to this slow seasonal rise and fall of the river hydrograph as "normal flooding". Although flooding is natural and inevitable (Environment Agency 2003), it causes substantial damage to property and sometimes results in loss of human life and livestock when it occurs in areas populated by humans (Smith and Ward 1998; MET Office 2003). In the UK for instance, there have been many significant river floods, most destructive ones being those in 1947, 1953, Easter 1998 and Autumn 2000.

By definition, a flood generally involves the inundation or overflow of water over land that is not normally submerged (Ward 1978, in Simon and Ward 1998). Flooding occurs as a result of one or more events such as rainfall filling rivers, streams and ditches; coastal storms resulting in overtopping and breaching of coastal flood defences; blocked or overloaded drainage ditches, drains and sewers; heavy rain resulting in run-off flowing overland; or rain soaking into the ground and raising ground water levels (ODPM 2002).


Although there is no consensus on whether extreme rainfall is becoming more frequent and whether it is linked to man-made climate change (POST 2000), insurers believe that factors such as more variations in weather patterns, increased development on flood plains, more affluent lifestyles and changing construction techniques, poor maintenance of flood defences and drainage systems and changes in agricultural practices, etc. are now combining to make floods more frequent, more widespread and more costly (ABI 2002).

**Reinstatement of flood-damaged domestic properties**

Insurance is primarily a method for redistributing losses; in flood insurance, the insured pay an annual premium in advance to a financial institution to mitigate the financial loss caused by floods (Smith and Ward 1998). Thus insurance enables
householders and businesses to minimize the financial cost of damage from flooding (ABI 2002).

In the event of flood damage to their domestic properties, homeowners submit a claim to their insurer to enable them to reinstate their domestic property to a ‘pre-flood’ condition. Depending on the size of claim and the wishes of the insured homeowner, the insurer's options in claims settlement may include:

- Verify and approve a flood damage claim and then pay out a cheque to settle the claim for reinstatement without getting involved in the process of repair.
- Appoint a flood damage reinstatement firm to repair or replace the damaged property with equivalent property.
- A combination of the above options.

However, as a way of enhancing customer loyalty, insurers traditionally tend to get involved in the process of reinstatement by both engaging a restoration and/or reinstatement company as well as paying for the repair works that are covered by the insurance policy.

The main aim of the reinstatement work is to return the property to its pre-flood condition, although repairers may suggest additional flood resilient repairs to help minimize flood damage in future. Any additional costs from such repairs are borne by the homeowner.

Whereas in a typical commercial/industrial construction project, the main parties are usually the client, designers and contractors, a flood reinstatement project typically involves the homeowner, public loss assessor (at the homeowner's choice and expense), insurer, contractor(s) (flood restoration and/or repairer specialist), and loss adjuster."

Loss adjusters, who are usually the first people on the scene, are claim specialists engaged and paid by the insurance company. Their engagement usually depends on the extent of damage to the property (CILA 2002). Their job is to assess the amount of damage and the work needed to reinstate the property to its pre-incident condition. This includes checking policy cover, estimating costs, carrying out the ongoing supervision of the work, and making recommendations to the insurance company about interim and final payments (Crichton 2002). Some homeowners have cast doubt on the impartiality of loss adjusters who are engaged and paid by insurance companies (Warwickshire Trading Standards 1998).

Unlike loss adjusters, who are engaged by an insurance company and are paid a fixed fee, loss assessors, deal with claims on behalf of policyholders on the basis of receiving a fixed percentage of whatever they recover for their client (CILA 2002).

Flood damage reinstatement projects often involve damage management specialists who essentially carry out cleaning work and restoration of contents (furniture, furnishings, appliances, personal belongings, etc.). However, a previously flooded property requires drying by specialists before it can be repaired. Once the drying is done, repairers with a range of specialist building trades are involved in the reinstatement work.

**Factors that influence the severity of flooding on households**

Floods can be devastating especially when they arrive without warning. The most visible and obvious impact of floods upon households is the physical damage to...
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contents and the fabric of the building, which may or may not result in financial loss to the homeowner. However, there are other more 'indirect' losses, which are often overlooked (Green et al. 1983). These indirect losses are generally associated with disruption to the 'normal' course and quality of life (see Green et al. 1983, for further reading).

The stress associated with losing personal belongings, living in temporary accommodation pending repairs, and the trauma of the clean up and restoration can be considerable. Several studies have also highlighted the various effects of flooding on households (FHRC 1999, 2001, POST 2002, ODPM 2002), the main ones being:

- Property damage and the consequent unpleasant task of cleaning the flooded property with its residual smells and damp problems (ODPM 2002).
- Financial - financial pressures of repair, particularly for under-insured homeowners; potential reduction in property value (ODPM 2002); loss of employment, production and/or earnings (Green et al. 1998; ODPM 2002).
- Health problems – various physical or mental (psychological) health problems due to flooding impact (Green et al. 1998), anxiety of flooding recurring (Green et al. 1998; ODPM 2002), etc.
- Symbolic objects - loss of personal belongings, particularly those of sentimental value, which are often irreplaceable, such as photographs, paintings, etc. (Green et al. 1998; ODPM 2002); and loss of pets (ODPM 2002).
- Social effects – a sense of loss of time due to inconvenience of the event; disruption owing to loss of social connections and sense of 'community', possibly in the case of severe floods (Green et al. 1998).
- Other inconveniences - having to live in temporary accommodation pending repairs; possible additional costs of living in temporary accommodation and worries over the security of the household property (ODPM 2002).

The factors that potentially determine the severity of the impact of flooding on households may be broadly classified into two categories (Green et al. 1983):

- Flood characteristics - duration, depth, speed of development, whether anticipated or not; concomitant climatic weather conditions (snow, rain, etc.); contaminants (sewerage, oil, silt, etc.); timing (for instance festive times like Christmas); rarity of the event in locality (FHRC 2001).
- Individual's characteristics - age, presence of children, prior health status and stress levels, previous flooding experience, whether or not evacuated and duration of, event anxiety, and aftermath anxiety.

Flood characteristics largely determine the extent of property damage (Soetanto et al. 2002); in particular the depth of floodwater is thought to be the key factor affecting the scale of flood damage to property (ODPM 2002).

Individual characteristics of the household may influence how well individuals cope. B&MR (2001) found that people affected by the same flood coped differently. This was attributed to both ‘innate’ and ‘learned’ characteristics of individuals. The subject of how individuals cope with disasters is complex and beyond the scope of this study.
In turn, flood characteristics and individual characteristics are likely to have some bearing on homeowners’ specific requirements with respect to flood reinstatement services.

**Homeowners’ Needs in Flood Damage Reinstatement**

Desires and requirements of insured homeowners concerning reinstatement of their damaged domestic properties are as varied as individuals’ characteristics are. Hence, homeowners do not attach the same level of importance to various requirements; their expectations are also likely to vary. In fact, as earlier discussed, clients expectations are generated and shaped by various factors such as past experience, explicit service promises, implicit service promises, word-of-mouth communications, etc. For instance a homeowner who has experienced flooding to their property before may have different expectations (higher or lower) in a subsequent flood reinstatement claim episode.

Literature does not catalogue the needs of domestic property occupiers in the context of flood damage claims. Potential needs of domestic property occupiers have therefore been identified (Table 1) and shall be used as a basis for further investigation; some have been adapted from needs of clients in industrial and commercial construction projects.

The BDMA (2002) stipulates that homeowners are entitled to expect a level of service that meets their recovery needs as predetermined in the basic flood recovery procedures. The emphasis in the guidelines is mainly focused on meeting property owners’ utilitarian and health and safety needs (Table 1) during the recovery of the physical property. However, homeowners are likely to go beyond such basic expectations to requiring aspects related to time, relations and communications, commitment and flexibility, economy and aesthetics.
### Table 1: Potential homeowners’ Needs in flood reinstatement work

<table>
<thead>
<tr>
<th>NEEDS</th>
<th>FEATURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>Prompt response upon registering of a claim</td>
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<td></td>
<td>Prompt assessment of the cost damage/reinstatement</td>
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<td>Prompt processing of insurance claim</td>
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<td>Early start of repair works</td>
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<td>Prompt reimbursement of relevant expenses incurred</td>
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<td></td>
<td>Prompt settlement of interim payments (if applicable)</td>
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<td>Timely completion of repair works</td>
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<tr>
<td>Utilitarian Needs</td>
<td>Comprehensive damage assessment</td>
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<td></td>
<td>Repairs to incorporate alternative/latest technology</td>
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<td></td>
<td>Property to be clean, dry, odour free and sanitized</td>
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<td></td>
<td>Value for money i.e. desired quality at appropriate price</td>
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<td></td>
<td>Building to be efficient for intended purpose</td>
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<td></td>
<td>Completed repair work to match pre-existing standards</td>
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<tr>
<td>Relations and</td>
<td>Easy access to contact insurers in the aftermath of flooding</td>
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<tr>
<td>Communication</td>
<td>First point of contact to provide professional and reassuring advice</td>
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<td></td>
<td>Familiarity with restoration and/or repair firm</td>
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<td></td>
<td>Sensitivity to homeowners’ distress resulting from flood damage and loss</td>
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<td></td>
<td>Desire to be kept informed about the insurance claim</td>
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<td></td>
<td>Desire to be actively involved and kept informed of the repair works</td>
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<td></td>
<td>Advice on possible flood resilient repair works</td>
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<td></td>
<td>Non-confrontational relationship with restoration and/or repair firm</td>
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<td></td>
<td>Impartiality is services provided by loss adjusters</td>
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<td></td>
<td>Clear allocation of responsibilities between parties</td>
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<td></td>
<td>Desire for expert guidance and explanation of all aspects of claim process</td>
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<td>Smooth flow of useful and consistent communication throughout the claim process</td>
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<tr>
<td>Health and Safety</td>
<td>Provision of Health and Safety information</td>
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<td></td>
<td>Desire to be alerted to potential health threats resulting from contamination</td>
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<td></td>
<td>Minimal exposure to risk for the client</td>
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<td></td>
<td>Recognition of risks &amp; uncertainty associated with repair works</td>
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<td></td>
<td>Minimal inconvenience to occupier resulting from repair works</td>
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<td></td>
<td>Comfortable temporary accommodation of comparable standard</td>
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<td>Commitment and</td>
<td>Flexibility to change the specifications during repair works</td>
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<td>Flexibility</td>
<td>Flexibility to incorporate flood resilience measures in repair works</td>
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<td></td>
<td>Guarantees on reinstatement work such as drying</td>
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<td></td>
<td>Extent and nature of repairs to be to prescribed industry standards</td>
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<tr>
<td>Economy</td>
<td>Fair settlement of claim</td>
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<td></td>
<td>Indication of projected costs</td>
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<td>Periodic appraisal of projected costs</td>
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<td>Price of the product to meet the budget (approved claim amount)</td>
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<td></td>
<td>Avoidance of disputes and extra costs</td>
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<tr>
<td>Aesthetics</td>
<td>Pleasant looking property on completion</td>
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</tbody>
</table>

[Adapted from Warwickshire Trading Standards (1998), Chinyio (1999), BDMA (2002) and ‘informal brainstorming’]

As indicated earlier, individual needs vary; homeowners in any of the vulnerable categories such as the elderly, infirm or disabled are more likely to be adversely impacted by flood events (FHRC 2001), and hence may have special needs. On the
other hand victims of multiple flooding are more likely to cope better than first time flood victims.

**CONCLUSION AND FUTURE WORK**

A thorough consideration of clients’ needs is essential if businesses are to offer services that meet (or exceed) their clients’ expectations. While the needs of commercial clients have been considered and significantly dealt with in the literature, there is lack of knowledge in homeowners’ needs in the context of flood damage reinstatement claims. Despite the dearth of literature on homeowners’ needs and expectations in the context of flood damage reinstatement services, a number of potential homeowners’ needs have been identified and classified as economy, utilitarian needs, relations and communication, health and safety, commitment and flexibility, and time.

These potential needs will serve as a starting point for a survey to further investigate and confirm (or reject) them. A comparison between service providers’ perceptions of homeowners’ needs and the actual needs of homeowners will be made to determine if a disparity exists. Data will initially be collected by way of in-depth semi-structured interviews, aimed at enhancing the findings of the literature review. Interviews will be recorded, transcribed and analysed using content analysis, identifying substantive statements and themes. Findings from the interviews will be used in designing a comprehensive questionnaire to investigate the research questions. The results of the research will provide a solid knowledge base upon which service providers can draw in their provision of flood-damaged reinstatement services.

The issues highlighted in this paper, particularly on the needs and satisfaction levels of homeowners, are part of a wider study towards the award of a PhD degree. The work is still at an early stage, with an overall objective to critically examine domestic property occupiers’ needs and to develop and validate a predictive model of key determinants of homeowners’ satisfaction with respect to the repair of flood damaged domestic properties.

**REFERENCES**


Flood damaged property


Simon, E. (1944) *The placing of management and building contracts*. HMSO.


