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Creating Consumers' Acceptance of Electronic Risk Manager

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Abstract — This paper clarifies how insurance companies can promote issues of consumer safety and risk management in electronic environment. On the basis of both qualitative and quantitative studies the suggestions for developing eRisk Manager are provided. The theoretical background of the paper relies on risk classifications and consumer perceived risk factors. The paper contributes theoretically by introducing widened framework of consumers' experienced risk classification and providing empirical results in the under-researched area of consumers' risks.

Keywords — Consumers, insurance, risks, risk management, Internet services

I. INTRODUCTION

Financial services have been rapidly moved to electronic business infrastructure during the last ten years. In this, the Nordic countries have proceeded as forerunners, and in fact, Finnish banks introduced electronic banking with basic transactions in 1996. Insurance companies followed and first of them opened their Internet home pages also in 1996. Step by step have financial organisations moved their services to electronic environment and today there are a vast variety of services available on the net.

Finnish consumers are used to electronic services. Today over 50 per cent of them use regularly electronic banking. However, those services that are needed infrequently have not been that successful among consumers. Yet, there are services that are not available on the Internet, and mainly they are services that are considered complicated. In these cases, the personal interaction is preferred.

For above reason, there are no extensive risk identification and risk management services for consumers on the Internet. Risk construct deals with situations where consumers are placed at risk because of decisions they make in the marketplace, other areas of life or even in government inaction. The underlying notion is that there is a possibility to be harmed [1] or win in some way.

So far the other problem is that insurance companies do not have enough resources to provide personal risk management services for consumers. As a consequence of this consumers are left by themselves, although they have not enough capability to handle these issues. Therefore, many households are remained uninsured.

However, high personal risk management level in common serves both consumers and insurance companies. It prevents accidents that cause costs and many kind of troubles for both parties. In reality, risks and risk management thinking seem to be unfamiliar to consumers. Their knowledge of risks should, therefore, be improved by providing concepts and ways of thinking by using terminology which is familiar for them. Even the concept of risk have different meanings for experts and for lay persons [2]. In addition, consumers need more information and reminders of every day risks and how to prevent them. Also the negative attitudes towards risks may be one obstacle of active personal risk management.

The purpose of this paper is to clarify how insurance companies can promote issues of consumer safety and risk management in electronic environment. The specific research questions are following:

- 1) *how consumers perceive safety, risk taking and risk management?*
- 2) *how electronic environment can serve as a media to diffuse risk information and risk management tool kits?*
- 3) *what are the key factors attracting consumers to use electronic risk manager?*

The literature concerning consumers' risks and risk management is quite limited and research offering overall consumers' risk scope and risk dimensions is scarce. There are, however some specific risk classifications concerning consumers' behaviour and consumers' purchase decisions (see e.g. [3]), societal risks (e.g. [4]) and risks of specific activities, such as electronic equipment and traffic (e.g. [5]).

The article is organised as follows. First the theoretical approaches of consumer risk classifications and perceptions are discussed, then the empirical data and findings of two studies are presented. Thereafter we suggest, how to create an acceptable electronic risk manager for consumer use, and finally we discuss the challenges given by this paper for academic and practical fields.

II. CONSUMER RISK CLASSIFICATIONS

Various risk classifications have been presented to describe consumer decision making and consumer behaviour during purchase processes (see e.g. [6]–[8]). Based on these classifications and our focus group study (see section Data and Methodology below) we developed the framework for overall consumer risk experience (Figure

1). The framework provides a holistic perspective and divides experienced risks into eight classes as follows: 1) economic risks, 2) physical risks, 3) psychological risks, 4) social risks, 5) time dependent risks, 6) activity based risks, 7) technological risks and 8) global risks.

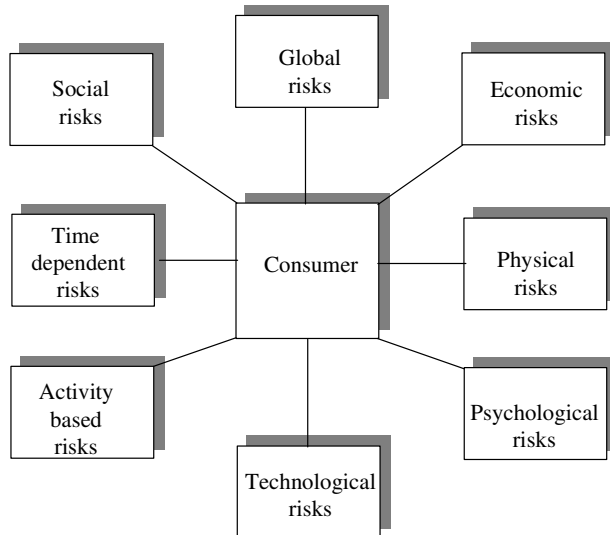


FIGURE 1
FRAMEWORK OF CONSUMERS' RISK EXPERIENCE [9]

The problem with various classifications seem to be their inability to pay attention to situational factors affecting consumers' risk experience. In addition, consumers' own view and explanations, e.g. so called "consumer own voice" cannot be revealed from the pressure of strict categorization. Moreover, classifications offer rather general description of risks without searching more deep individual risk contents and constructs. Instead, we encourage researchers to listen consumers' free talk and outlines by giving room to the flourishing semantic part of language. Only after this simultaneous classification and deep analysis of content can be executed.

III. CONSUMER PERCEIVED RISK FACTORS

According to McGregor [1] risks perception is a lens through which consumers view risk. It is defined as their judgement of the likelihood that a consequent loss or harm will occur, and as their judgement about the seriousness of its likely consequences. Perception of risk arises from unanticipated and uncertain consequences of the unpleasant occurrence. Even though McGregor's risk perspective seems to be concentrated on negative occurrence only, we would like to remind, that risk consequences may be positive as well.

McGregor [1] has developed seven risk factors on the basis of conventional risk perception theory. These factors are:

- Degree of knowledge and information measuring the extent to which consumers feel informed and knowledgeable about a risk.
- Perception of locus of control containing consumers' mental image of controlling things.
- Degree of perceived risk.
- Expectations of risk dealing with degree of satisfaction or disappointment whether an occurrence meet expectations of risk.
- Past experience with particular risks assisting in risk judgement even if consumers lack full knowledge about the risk.
- Influence of activists in order to reduce risks by lobbying authorities to make changes.
- Outrage attributing to situations where consumers are concerned with possibility of any harm to themselves.

In addition to the above factors McGregor [1] pays her attention to various issues concerning risk perception. She considers that many things are out of consumers' control, and it is very hard for them to assess risks in these circumstances. Also most decisions about risks are made with partial information because the future is unknown. On our opinion, all this make risks a difficult construct for consumers to understand and therefore, they find that personal risk management is outside their systematic control and competence.

McGregor also reminds that caring up close is easier than caring at a distance. Geographies of responsibilities accommodate the idea that distance is a source of moral harm. This offers us a reason to believe that global hazards, e.g. wind storms or earthquakes, on the other side of the world do not touch consumers feelings of risks as close as storms at the backyard.

Cultural environment affects also consumers' risk perceptions. McGregor even argues that consumers tend to trust authorities to play their part in the economic system. This may be the case in developed western countries, but surely many Africans feel completely otherwise.

IV. DATA AND METHODOLOGY

The research project started by following inductive logic. The first item of the empirical data was gathered by two focus group interviews that were carried out in October 2005 and February 2006. Altogether 15 consumers were attending the two focus groups. They were picked up among consumer panel maintained by National Consumer Research Centre. The advantage of a focus group method is that participants are able to discuss various phenomena in depth and from various points of view ([10]–[12]).

The study continued by the survey at the end of May 2006 forwarded to 940 respondents. All consumers of the consumer panel formed the sample of respondents. 770 respondents, i.e. 82 per cent, returned the questionnaire.

The sample can be considered large enough for generalising the results of the study. The questionnaires are analysed by statistical methods, e.g. factor analysis. Socio-economical variables are used in forming various risk profiles. At this stage, only the preliminary results of the study are available.

The research is one part of the publicly funded large research project titled "eInsurance - Novel Electronic Insurance Services". The main purpose of the project is to develop tool kits that make it easier and motivate consumers to use electronic risk management and insurance services. The results of the two studies serve that purpose. In addition, our results increase insurance experts' understanding of consumers' perceptions of risks. In order to achieve the goals of the project, eInsurance also targets to fill gaps between consumers' subjective risk perceptions and objective risks identified in literature and by experts.

V. EMPIRICAL RESULTS

A. Consumer risk perceptions

The results of the qualitative study show that consumers' risk experience and perceptions vary vastly. They prefer to tell risk stories that have happened in their own life and they refer to their neighbours experience. Usually consumers do not waste their thoughts for risks in every day routines. Traffic risks are exceptions and they are given a lot of attention. However, traffic risks are considered as risks caused by outsiders, and consumers feel that they themselves cannot influence on the probability of accident. Moreover, the spontaneous risk talk deviates from studies that were conducted quantitatively.

Common risks such as danger situations at home are not necessarily recognised. They are treated more like a part of every day life by using common sense to handle them, but not a part of personal risk management. On the other hand, consumers see life as involving a wide variety of risks of different levels. It may be difficult for consumers to discuss their own attitudes towards risks and they fail to recognise in themselves "pure" types with respect to risk attitudes. Apart from physical risks, consumers identify risks in their economic decisions, lifestyle, hobbies, and social relationships. Risks from technology, such as those related to data security, are mentioned as well. Global hazards, however, are not referred to.

The study reveals gaps in consumers' risk perceptions. Consumers do not notice some risks at home or surroundings at all, even though the risk to be injured in the accidents at home is quite large and every year approximately 2.000 people die in these accidents in Finland. Same time consumers are more worried about traffic accidents, where approximately 400 people die annually. Yet, traffic is more dangerous in consumers' minds than home activities.

Consumers do not take risk management as a systematic function such as it is treated in business life context, but they have acknowledged the importance for protective equipment. Insurance is considered rather as a protection against economic losses than as one instrument of risk

management. However, for some reason life insurance is not as popular than non-life insurance. Consumers consider insurance types and terms complex and difficult to understand and offer that as a reason not to insure or to underinsure. In addition, common private insurance types are considered expensive and their deductible too high. Therefore, the notice of termination of insurance cover is easily given in cases, when there is a need to save in personal costs and financial difficulties.

B. Perceptions of electronic insurance

The preliminary results of our survey reveal that consumers' attitudes are more positive towards electronic insurance services, as over fifty per cent of respondents are willing to purchase either all or part of their insurance cover on the Internet. The largest obstacle to use Internet services seems to be the complexity of insurance terms and conditions, which makes consumers feel themselves uncertain. Therefore, they prefer to interact with insurance experts face-to-face. Many consumers still believe that they are unable to survive in electronic environment. They are afraid of making wrong choices, which may later cause economic losses.

Questions of privacy protection and Internet safety are not a major concern nor are they considered an obstacle to the use of electronic insurance services. The need for more interactivity and customised services is emphasised instead.

TABLE I
MOST IMPORTANT INSURANCE AND RISK BASED ACTIVITIES
ON THE INTERNET

Activities on the Internet	Amount of respondents, per cent
Comparing insurance and insurance companies	69
Examples of claims covered	66
Premium calculators	63
Electronic claims applications	52
Updating and checking insurance terms and cover	46
Identifying requirements of household insurance cover	44
Clear insurance vocabulary	44
Quick response to questions	32
Insurance purchase	19
Information of accidents, risks and their prevention	15
Information of safety equipment	14

Respondents of the survey comment which electronic services they are willing to use in connection of risks and

insurance (Table 1). Most popular would be the ability to compare various insurance types between insurance companies. At the moment, there is no such service available.

More detailed information of most usual hazards at home raise interest among 46 % of respondents. On its part, 35 per cent of respondents are eager to learn more about hazards typical for children and how to prevent them, whereas 34 per cent are interested in hazards of senior citizens and their prevention.

Over 60 per cent of the respondents would like to have more examples of paid claims, and also over 60 per cent find premiums calculators useful. Most insurance companies in Finland offer such calculators. All in all, as Table 1 shows, consumers find most of the services interesting, only safety and risk prevention earn less interest (14-15 %) among respondents.

VI. SUGGESTIONS FOR DEVELOPING ERISK MANAGER

Development of electronic services should be started by consideration, what kind of electronic services will fulfil consumers' needs and offer substantial benefits. Otherwise they do not attract consumers to move to electronic business environment. Instead they stay with their old habits and especially in connection with insurance and risk management this means personal interaction with insurance experts. However, those experts have limited capacity to serve all their private customers individually, and in this electronic vehicles could on their part take care of consumers, if there were sufficient risk management and insurance services available on the Internet.

As far as risks and risk management are concerned, the important question is, how eRisk Manager could support consumers to identify and manage their risks? The task is difficult, because consumers consider safety and risk management issues odd in electronic environment, although they are interested in dealing with their insurance cover electronically. In addition, our studies confirm that consumers' attitudes towards security issues are narrow focusing to safety equipment only, but they do not identify dangerous situations and places.

In order to develop a successful eRisk Manager at least following characteristics have to be taken into account. It should guide consumers to identify risks and provide preventive information of various hazards. In addition, it should combine customer registers with insurance and claims registers at company level and at customer level. Combined info can be used to affect customer behaviour with suggestions and personal guidance to avoid most probable risks. Also eRisk Manager should be easy to use and allow access 24 hours a day.

In addition, it should offer added value for consumers moving to electronic insurance services compared to traditional contacts. In this in-time interactive customer service would help consumers to get replies and solve their problems by return.

Providing security is an important part of risk management. According to McGregor [1] the human security concept includes personal well-being of individuals and their ability to feel secure in the basic needs that affect their day-to-day existence. If consumers are conscious of various risks in their every day life they most probably will act to prevent them. eRisk Manager could act as a reminder of most typical accidents at home, in the backyard and in the neighbourhood. In addition, there should be risk lists of hobbies and real examples which accidents can be insured and which cannot.

Insurance companies have enormous amount of information of risks occurred and risks that have been close to occur. This information should be utilized in visual and simple ways as a part of eRisk Manager. There are new ways and technologies to offer this information for consumers. This may even provide competitive advantage for those insurance companies that first pay their attention to develop this kind of risk service, because so far the security information on the Internet is fragmented and uneasy to find.

Finally, as a part of risk management eRisk Manager should recommend suitable portfolio of insurance types and covers. Respondents also wish more simple and understandable risk and insurance services. Moreover, tailor-made insurance cover should be also available on the Internet. Currently the offerings are limited to standardized services only.

Consumers tend to feel uncertain in front of new systems, services or products (cf. [13]). They are not yet used to electronic insurance services, as they have adapted them more slowly than internet banking. This should be kept in mind when introducing eRisk Manager. In order to gain acceptance consumers should either be educated to use new system, they have to have opportunity to trial use without threat of failure or it should provide new attractive benefits.

VII. DISCUSSION

The paper contributes mainly by introducing the widened framework of the consumers' risk dimensions. It confirms that the empirical results of the both studies can be analysed by the aid of our framework with eight classes, but some of the classes proved to be more important than others. For example global hazards are unfamiliar risks for consumers, whereas physical risks dominate their talk about risks. Traffic is considered the main danger factor because dangerous traffic situations are seen to be caused by others and, therefore, are difficult to anticipate. However, economic risks are also well recognised. In this our results deviate from those of Cunningham et al [14], as they conclude that financial risks are drivers of most other risks.

Most of the consumer perceived risk factors seem to be realised in our empirical studies. Only lobbying of activists and outrage are not revealed at this stage of the analysis. In addition McGregor's ideas of difficulties in assessing risks are well recognised on the basis of empirical results. However, we believe that better risk perception will lead to risk-reducing behaviour as Yeung and Yee [15] suggest.

For practitioners and members of the project group this study offers new information how consumers perceive risks and what kind of attitudes they have towards various risks in their own life. It also reveals that systematic risk management among consumers is rather unfamiliar and random phenomenon, and provides useful tips how safety and risk management issues should be presented in order to gain consumers' acceptance. Most of all, the results of the study can be utilized in developing electronic risk manager, i.e. tool kit for consumers to avoid and manage risks.

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