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Increasing Trust in e-Commerce: Concepts and Examples of Insurance Solutions

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Abstract

Consumers have embraced the concept of e-Commerce although less enthusiastically than expected. Major concerns still exist regarding the use of the Internet for private purchasing. Trust is seen as a factor that is becoming increasingly important for both consumers and content managers alike. Various trust-related support features for online transactions are available, but most lack any form of guarantee or insurance for the parties involved. In this context, the paper seeks to explore the concepts and potential contributions of contract-based guarantees and insurance services with regard to business-to-consumers online transactions. After outlining available seals of approval and insurance solutions for B2C online transactions, the paper drafts a first research framework for investigating different insurances. The case of 'Trusted Shops', backed by a German insurance provider, illustrates the concept of insurance solutions and analyzes benefits and risks for all parties involved. The potential advantages and limitations of extending the concept along the dimensions 'scale' and 'scope' are presented. The paper concludes by providing some suggestions for further research.

1 Business Environment and Literature Setting

Consumers are still apprehensive when using the Internet for private purchases, including the risk of misuse of personal data and unsolved legal positions (e.g., Jarvenpaa and Todd 1996; Farquhar et al. 1998). Since the Internet creates shopping habits where buyers and sellers are spatially and temporally separated, the actors involved mostly remain anonymous when conducting transactions. Online buyers as well as online retailers face the problem of appraising the integrity and respectability of the business partner. Hence, trust is seen as a factor that is

becoming increasingly important for the functioning of electronic markets (e.g., Smith et al. 1999).

The factor 'trust' is probably one of the major variables influencing interpersonal behavior and determining human interaction (e.g., Golembiewski and McConkie 1975; Koller 1992). A situation requiring trust is by definition embodied with risk and the possibility of loss on behalf of the trustor¹ (Deutsch 1958). Management research (e.g., Lewis and Weigert 1985; Coleman 1990) has focused on trust primarily from a calculative and risk-oriented perspective of the agent. A rational agent only then engages in risky behavior, if the expected profit is higher than the loss involved with the betrayal of confidence.

Gambetta (1988) and Luhmann (1988) view trust as a particular level of the subjective probability with which an agent appraises the performance of a specific action of another agent, prior to monitoring the action himself within a context that affects his own action. Thus, trust implies the previous engagement on an agent's part, i.e. recognizing and accepting the potential downside of risk. For Mayer et al. (1995), trust is not 'taking risk' per se, but rather the willingness to do so. Other authors (e.g., Wicks et al. 1999) emphasize emotional and moral aspects. Trust occurs because of an emotional bond between agents and a belief in the moral character or 'goodwill' of the trustee.

Yet another large body of literature covers trust and trust-building measures in the context of organizational relationships (e.g., Jeffries 2000; McKnight and Cummings et al. 1998; Das and Teng 1998) or between individuals in teams. The importance of technical means in the process of building trust is stressed by Cassell and Bickmore (2000), Olson and Olson (2000) and Shneiderman (2000).

Trust in online transactions is becoming a key factor for determining the success and failure of Internet activities (Urban et al. 2000; Resnick et al. 2000). Different studies (e.g., Kollock 1999; Smith et al. 1999, Urban et al. 2000) present a variety of tools to signal trust in the online world. Kollock (1999) suggests the implementation of online communities including reputation systems. Links from other trusted sites are also seen as a trust signaling element (Smith et al. 1999). According to Urban et al. (2000) there are a variety of trust-building components currently in operation with the potential for establishing trust on the Internet and on specific websites. They include the information displayed or the delivery fulfillment and service offered. All these trust-related components are considered to be supportive in the process of building trust, but lack any form of guarantee or insurance for the parties involved.

Hence, the *objective of this paper* is to explore the concepts and potential contributions of contract-based guarantees and insurance services in the context of business-to-consumers (B2C) online transactions. The paper is structured as follows: After a market overview of major available seals of approval and insurance solutions for B2C online transactions, we develop a first framework for investigating different insurance solutions to B2C online transactions. We introduce

1 Legal term for the person who gives or offers 'trust'.

the case of 'Trusted Shops', backed by a German insurance provider and analyze the benefits and risks for buyers, retailers, and insurance providers. Potentials and limitations for further developing the concept of insurance solutions along the dimensions 'scale' and 'scope' are then presented. Finally, we provide conclusions and an outlook on further research.

2 Research Methodology

Since the provision of different types of insurance products to the participants of online transactions is fairly new, little research has been undertaken to analyze the various options of insurance models and to emphasize the existing diversity in comparison to other trust building measures. To get an overview of providers currently combining a seal of approval with an insurance solution, the first step of this research includes a market overview covering European companies and organizations that offer at least a seal of approval for online trade transactions. The majority of the investigated seal 'providers' do not additionally offer any insurance solution.

Therefore, in the second research phase, we introduce a research framework and use it as conceptual basis to conduct a case study on one of the few providers, the German company 'Trusted Shops GmbH', a subsidiary of the worldwide operating Gerling Group. Case studies provide a rather rich picture of the world (Yin 1994), as they are not restricted to gathering information related to the questions of the survey instrument. The detailed examination of one specific insurance supplier leads to a variety of insights into insurance solutions as trust building components. As such trust-building schemes have not been investigated intensively yet, the case study approach seemed particularly useful for identifying issues for further investigation (Benbasat et al. 1987).

3 Market Overview: Seals of Approval and Insurance Solutions for B2C Online Transactions

Concerns about safety and reliability of B2C online transactions on part of the Internet buyers have led to the introduction of a variety of seals originated by different companies and organizations. In Europe, a diversity of seals and quality marks has been created over the last two years. Table 1 summarizes selected European seals of approval.

Seal	Company	Affiliates	Main Impact Area	Launch
Clicksure Quality Mark	Clicksure Limited, Oxford	IBM, Compaq, Arthur Andersen, SwissCom, and PSINet as signatories	Based in UK, offices in LA, Washington DC, and Berlin; Planned office in Singapore	1999
Which? Web Trader	Which? Web Trader Scheme, Hertford	British Consumer Organization 'Which?'	Based in UK, but partnership with international consumer organizations in Belgium, NL, France, Italy, Spain, Portugal	July 1999
FIA-NET	FIA-NET L'Assureur d'Internet, Paris	Axa Group	Based in France	1999
Geprüfter Online-Shop ²	EuroHandelsinstitut e.V. (EHI), Cologne	EuroHandelsinstitut e.V. (EHI)	Based in Germany; Launch in other European countries within 2001	February 1999
DIN Tested Website	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH, Berlin	Deutsches Institut für Normung e.V. (DIN)	Based in Germany	November 2000
Trusted Shops	Trusted Shops GmbH, Cologne	Joint venture of Gerling Spezielle Kreditversicherungs-AG, part of Gerling Group, and Impact Business & Technology Consulting GmbH	Based in Germany; January 2001 launch in UK; Plan: End of 2001 present in Austria, Benelux, France, Scandinavia, Switzerland	January 2000

Table 1: European Suppliers of Seals of Approval for B2C Online Transactions

Table 1 shows that more than half of the investigated seal suppliers limit their operations to the country that they are based in. Only two suppliers offer their product to shops not registered in their country of origin.³ All seal suppliers listed in Table 1 have launched their seal concept within the last two years, probably as a reaction to the discussions about lacking security in online transactions.

The topics covered in the certification processes of the selected hallmarks are similar (see Table 2). Audits are completed regarding the organizational, the technical and the financial situation to ensure e-competency of the online retailers. The main purpose of all these seals is to demonstrate and assure the quality and

² 'Tested Online Shop' – translation from authors.

³ 'Which? Web Trader' is an exception, since the certification of the shops is done by local consumer organizations and regulations for granting certificates differ from country to country.

hence to increase trust on the side of potential online customers. However, the differences in monitoring routines and the validity timeframe of the seals point to clear distinctions in the level of quality of the investigated seals. Table 2 summarizes these results.

Seal	Seal Content	Seal Validity	Monitoring / Enforcement
Clicksure Quality Mark	Audit of e-business credibility (e.g., confidential data handling, transaction management & terms of delivery) business practices covering privacy, security and transaction; Audit based on British Standard on Information Security Management	No expiration date, but annual fees apply	Random checks by independent audit; Suspension, withdrawal or cancellation for non-compliance to standards; Merchants' right to appeal against decision within seven days
Which? Web Trader	Fulfillment of codes of practice (e.g., clear and adequate information about products and services to enable informed decisions: contact details, pricing, order instructions, ways of payment, right to cancel contract, terms & conditions of contract etc); No clear security provisions or measures	Constant updating of codes of practice; Site update by online retailer	Random checks for compliance through feedback, complaints, mystery shopping, etc.; Exclusion of scheme in serious cases
FIA-NET	Audit of security system for payment; audit of the communication systems	One year	Monitoring on annual basis
Geprüfter Online-Shop	Fulfillment of 10 audit criteria like terms & conditions, data transfer, data protection, pricing, transparency of order process, confirmation of order, delivery statements, right to revocation and return of goods	One year	No audits within twelve months
DIN Tested Website	Program for auditing e-Commerce applications using three international standards (e.g., DIN ISO/IEC 12119 for verifying software); Audit of identity of online retailer, contact options, terms of delivery, payment processes, data protection and data security	Three years	Random checks regarding changes of website content; Revocation of seal if certified shop fails to comply with requirements
Trusted Shops	Audit of organizational, technical and financial conditions of online shop	One year	Monitoring on annual basis; Random quarterly checks; Revocation if shop fails to comply with the requirements; Penalty fees

Table 2: Comparison of Seal Characteristics

Aside from additional offers like free legal advice for online buyers, the main difference among the seals of approval lies in the combination with insurance services (see Table 3). Only two of the investigated seal suppliers, *FIA-NET* and *Trusted Shops*, offer an insurance solution together with their seal. In these cases, the benefit for the online buyers increases from 'recognizing a quality symbol' to 'being insured against fraudulence'. Both *FIA-NET* and *Trusted Shops* are supported by worldwide leading insurance companies. Thus, online buyers gain trust and reduce their exposure to risk through the intermediation of an independent party with an established reputation (e.g., Tan and Konstapel 1998).

Seal	Type	Insurance Solution	Additional Services
Clicksure Quality Mark	Quality seal	None	None
Which? Web Trader	Quality seal	None	Free legal advice service for online buyers; Dispute resolution system
FIA-NET	Quality seal with two integrated insurance principles	Insurance against non-delivery for online buyer; Insurance against non-payment for online retailer; Online retailer bears costs for both principles	Free legal advice service for online buyers; Dispute resolution system
Geprüfter Online-Shop	Quality seal	None	Dispute resolution system
DIN Tested Website	Quality seal	None	Dispute resolution system; Alternative arbitration board planned
Trusted Shops	Quality seal with integrated money-back guarantee	Money-back guarantee up to 5,000 DM per shop and transaction	Dispute resolution system

Table 3: Benefits for Online Buyers beyond Seals of Approval

4 Research Framework for Insurance Solutions Covering B2C Online Transactions

In this section, we draft a research framework for investigating instruments aimed at increasing trust in B2C e-Commerce via insurance solutions. The overall framework is depicted in Figure 1; a more detailed version is then shown in Figures '2' and '3'.

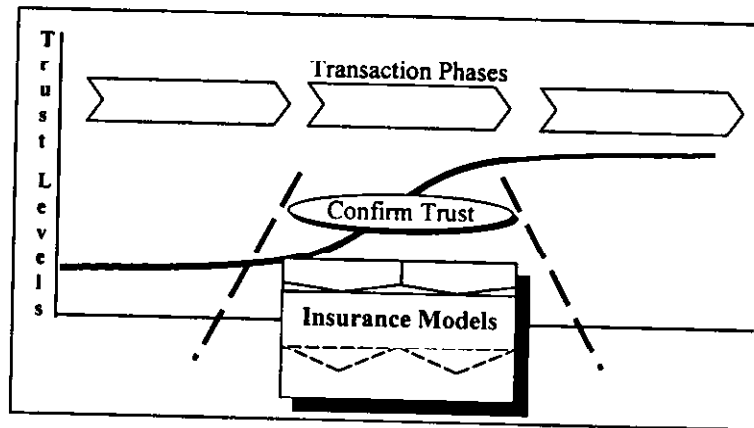


Figure 1: Research Framework for Investigating Trust-Increasing Instruments

For each individual transaction, the process of buying and selling goods consists of a variety of phases such as information, agreement, and settlement phase (Schmid 1998; Schmid 1999). In the Internet world, the *information phase* can be seen as the activity of browsing through an online shop. In the *agreement phase*, online buyers demonstrate their agreement to product offers by adding products to the shopping cart and accepting the price. Transaction *settlement* occurs when the order is placed and the payment is performed. For an illustration of trust levels during transaction phases see Figure 2.

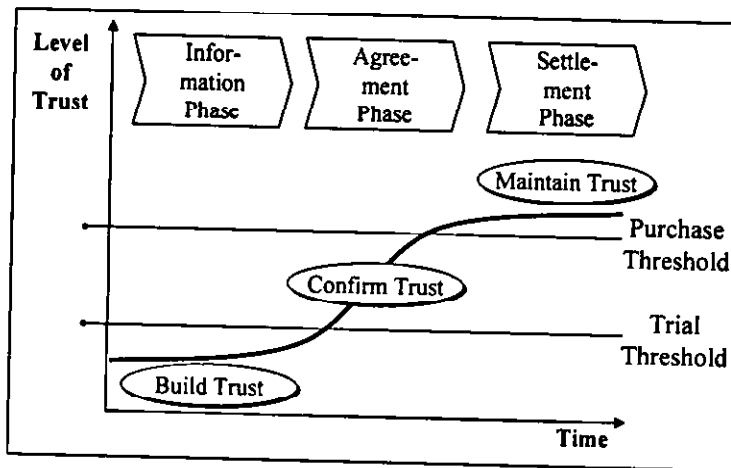


Figure 2: Trust Levels during Transaction Phases

Since online buyers and online sellers are separated by space, the likelihood increases that one party will end up empty handed (Kollock 1999). Accordingly, this new type of market transaction form is predestined for developing mechanisms

to manage this risk. Depending on who does the 'first move', our framework distinguishes two insurance models for online B2C transactions: (1) delivery insurance and (2) consumer credit insurance (see Figure 3).

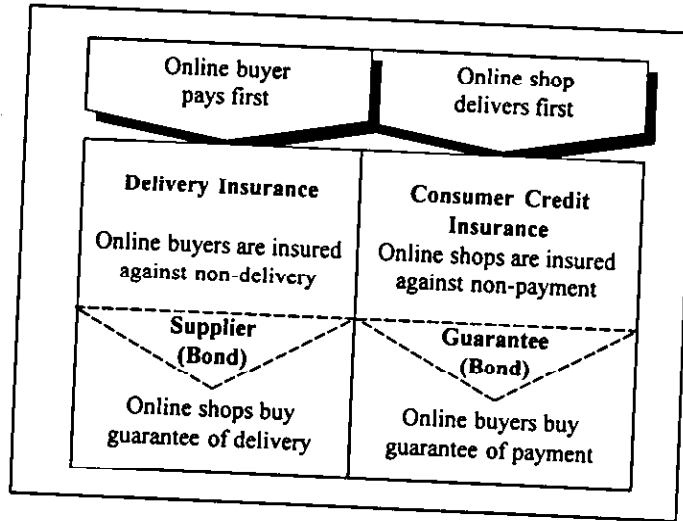


Figure 3: Insurance Models for B2C Online Transactions

The *delivery insurance scheme* insures online buyers against non-delivery of the online shop. The Internet retailer fixes a contract with the insurance company and buys a 'guarantee of delivery' in the sense that the shop pays a premium to the insurance company to cover non-delivery towards the end-consumer. The supplier guarantees delivery by virtue of the supplier bond. Thus, the shop is not only approved, but his customers know that a performance failure of the shop is backed by a delivery guarantee granted by the insurance company.

The *consumer credit insurance* covers the case of non-payment on the side of the online buyer and insures the online shop. This insurance concept is comparable with the traditional credit insurance common in many offline B2B transactions (e.g., Meyer 1997; Briggs and Edwards 1988).

5 The Case of 'Trusted Shops'

Trusted Shops is an independent third party which evaluates the credibility of online shops to provide a secure environment for online shopping. The company, launched in Germany in January 2000, is backed by one of Europe's leading industrial insurers, the Gerling Insurance Group. Within Europe the Gerling Group has 62 joint ventures, sales offices, service companies and independently operating

subsidiaries (see also Loebbecke and Jelassi 1997; Gerling 2001). Trusted Shops can use the local offices as basis for building up local contacts Europe-wide.⁴

The aim of Trusted Shops is to achieve transparency and security for European online consumers. The company provides B2C online retailers with a seal of quality and service as stated in Figure 3. This 'Seal of Approval' allows online shops to offer an additional guarantee to their customers stating that transactions are not only secure, but also covered by an insurance scheme specifically designed to protect their B2C online transactions.

5.1 Product Portfolio

Trusted Shops' product portfolio of trust augmenting measures consists of three components covering each of the transaction phases outlined in section 4 (see Figure 4):

1. Stringent *certification process* based on clear criteria to grant the 'Seal of Approval' and to ensure transparency, privacy and reliability of the participating online retailers,
2. '*Money back guarantee*' on purchases in the event of non-delivery or failure to refund returned goods, and
3. Multi-lingual Internet *dispute resolution system* to solve problems or disputes of customers 24-hours per day.

The whole concept is supported by the European Commission.

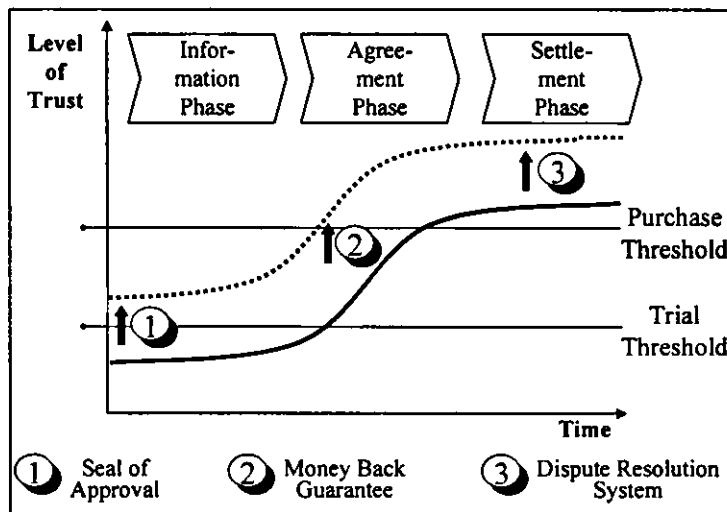


Figure 4: Components of Trusted Shops' Product Portfolio

⁴ Recently, the Trusted Shop's scheme was chosen as a candidate eligible for support by the European Commission in the research framework of the TEN Telecom initiative (Trusted Shops 2000).

Certification Process

The online shops are screened according to the following criteria:

1. Organizational requirements, e.g. terms and conditions or data protection,
2. Technical requirements, e.g. the reliability of the information transfer between the online shop and customer or the codification of data, and
3. Financial requirements, comparable to the traditional credit check.

The certification of an online shop by Trusted Shops costs approximately € 1,500 to 2,000. On average the certification process takes about five calendar days.

'Money Back Guarantee'

The 'money back guarantee' covers a range of incidents:

1. Non-delivery of ordered goods at all,
2. Non-delivery of ordered goods within 30 days,
3. Return of goods in accordance with the shop's return policy,
4. Credit card abuse attributable to the member shop.

This type of guarantee can be defined as a supplier bond since the online retailer concludes a contract with Trusted Shops and hence buys a 'guarantee of delivery'. Although the online buyer has the financial advantage and security, the annual contribution for the guarantee is paid by the online retailer (see Figure 5).

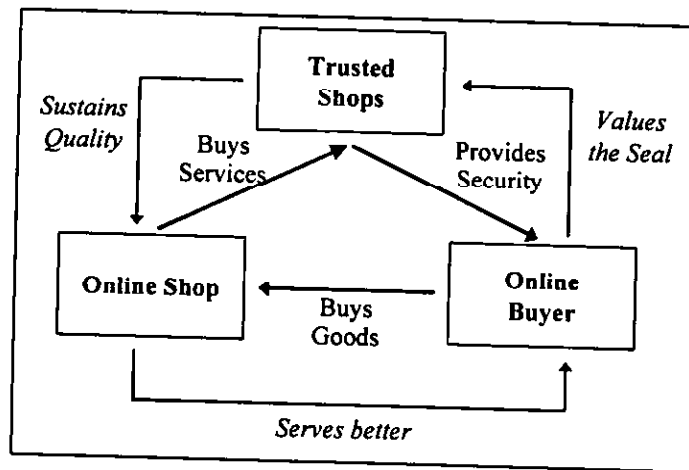


Figure 5: Relationship between Trusted Shops, Online Buyer and Online Retailer

Dispute Resolution System

The dispute resolution system is a service tool providing the online buyer with the possibility of solving disputes with online retailers through the Internet. Thirty days after ordering a product online, buyers are automatically contacted via e-mail by Trusted Shops. They are invited to give feedback regarding the order and delivery process.

5.2 Business Model

Trusted Shops generates its revenues from the fees it derives from certifying online shops. Two constituents determine the income of Trusted Shops: (1) the membership fee and (2) the commission. The membership fee covers the certification for one year including the extensive check of the online shop, support for the dispute resolution, the listing on the Trusted Shops website and the integration of the Trusted Shops system. The fee depends on the estimated annual turnover of the online shop, and is quoted between €375 to €7.500 per year. If the estimated turnover of the online shop lies below €500.000,00, the commission is a lump sum of €510 maximum, independent of the actual transactions secured by the 'money back guarantee'. In case the annual turnover exceeds €500.000,00 Trusted Shops takes a share in each transaction amounting to 0,1 to 0,4% of the transaction volume. Nine percent of the 110 certified online shops have an annual turnover higher than €500.000,00. Thus, only 10 of the member shops pay a monthly commission for each online transaction (Noël 2001).

5.3 Business Figures and Projections

Since the beginning of January 2001, 110 online shops have been approved and are entitled to carry the Trusted Shops seal. Approximately 106.000 registered online buyers have shopped under supervision of the seal, and about 130.000 online transactions were insured during the year 2000 (Trusted Shops 2001). Each day, approximately 1.000 active online buyers spend an average of €130 per purchase in the certified shops (Trusted Shops 2001). Buyers using 'Trusted Shops Seal of Approval' on average conducted 1,2 transactions with certified online shops. In December 2000, the rate of transactions per online buyer had only increased to the factor '1,3'. By the end of 2001, Trusted Shops foresees a total of 1.250 certified shops and 750.000 registered active online buyers.

Overall, Trusted Shops' turnover in 2000 amounted to €342.000 based on €315.000 membership fees and €27.000 commission (premium and transaction participation). Total costs for year 2000 are quoted with €4.151.000.

During the year 2001, Trusted Shops aims to expand their operations into France, the Scandinavian nations, Benelux, Austria, Switzerland and the UK striving for an turnover of €1.293.000. The membership fees are planned to increase by 74% to €1.192.000. The estimated revenue for 2002 reaches €4.748.000, based on a constant acquisition of new member shops and still about 93% of turnover

stemming from membership fees. Trusted Shops aims to break even by the end of 2002 (Trusted Shops 2000).

6 Applying the Business Framework: Benefits and Risks of 'Delivery Insurance' via 'Supplier Bond'

In this section, we take and analyze the benefits and risks for buyers, retailers, and insurance providers (see Table 4).

Actors	Benefits	Risks
Online Buyers	<ul style="list-style-type: none"> • 'Money back guarantee' • Certainty of quality standard 	<ul style="list-style-type: none"> • Diversity of offered seals
Online Retailers	<ul style="list-style-type: none"> • Improved Reputation • Increased number of customers • Quality seal as customer relationship instrument • Increased turnover • Competitive advantage • Verification of main internal processes 	<ul style="list-style-type: none"> • Costs for insurance / miscalculation • Dependence on image and reliability of insurance company for duration of contract
Providers of 'Supplier Bond' (Insurance Provider)	<ul style="list-style-type: none"> • Profitable Business Model • Centralized collection of data about shopping behavior • Entrance to new business sector 	<ul style="list-style-type: none"> • Staff and cost intensive activity to constantly update data of member shops • Online buyers lack of understanding of the model • No critical mass of member shops

Table 4: Delivery Insurance via Supplier Bond: Benefits and Risks for Different Actors

6.1 Benefits and Risks for Online Buyers

The main benefit of the above approach for online buyers - in comparison to other trust building components - is the 'money back guarantee' without signing a contract or bearing any expenses. The risk of losing money by paying for the ordered good without receiving the product is negligible under this guarantee scheme. In case a delivery problem occurs, online shoppers can hand the dispute over to the insurance supplier. The seal of approval serves the online buyer as a quality mark; all Internet shops carrying the seal have been intensively checked by the insurer as a trusted third party (Tan and Konstapel 1998; Urban et al. 2000). However, the variety of offered seals of approval, as shown in Table 1, can lead to confusion among online buyers and online retailers.

6.2 Benefits and Risks for Online Retailers

The quality stamp should improve the reputation of the retailer and thus lead to a growing number of customers. Existing customers will value the reliability and financial security, but especially new customers without any previous experience with the retailer will favor online shops carrying the seal. Reaching the critical mass is a crucial factor for the breakthrough of online selling due to network effects (Shapiro and Varian 1999; Katz and Shapiro 1985). As a customer relationship instrument, a seal of approval combined with an insurance solution may provide a competitive advantage and prove instrumental in gaining a sizeable market share.

The certification process leads to an improved internal organization of the online store, since the process includes the verification of the main prerequisites such as terms and conditions or legal requirements. Hence, the process itself can be considered as a form of consultancy in which the consultant, i.e. insurance provider, benefits from a high standard of quality and trustworthiness on the part of the retailer.

However, a detailed calculation of the certification costs should precede a shop's decision for any particular insurance solution. Depending on the required amount of the membership fee and the annual commission (see section 5.2), the risk of miscalculation - and hence negative transaction margin - needs to be taken into account. The offered contracts are valid for one year. The success of the insurance service as a marketing tool as offered by online retailers clearly depends on the reliability of and the resulting trust in the insurance supplier.

6.3 Benefits and Risks for Insurance Providers

The data of the online buyers subscribing to the insurance option may be retained in a central IT system of the insurance supplier, thus enabling insurers to elicit important information about the habits of online buyers. The close contact to online shoppers supports the process of monitoring and tracing the activities of online retailers and decreases the risk of problematic and cost intensive member shops. However, the obligation to constantly sustain a high level of up-to-date member shop information can be very costly. The lack of understanding for the services included in awarding the seal such as the 'money back guarantee' can be seen as a risk. Supposedly 50% of all online buyers do not know about the concept behind the seal of approval, and accordingly very few are willing to utilize its benefits. As it is in the interest of insurance providers to only accept online shops with high standards of quality as members, customer complaints have been minimal. On the other hand, a critical mass of certified shops is necessary for ensuring profitability. Referring to Trusted Shops, 39% of online shops that applied were rejected (Trusted Shops 2001). Finally, for traditional credit insurance providers, B2C online transaction insurances present the entrance to a new business sector where end-customers are the final target group.

7. Extending Insurance Solutions Covering B2C Online Transactions along the Dimensions Scale and Scope

The next step will be to extend the position on insurance providers in the context of online transactions into different countries (scale) and by enlarging their product portfolio (scope).

7.1 Increasing Scale: Geographical Extension

To increase its economies of scale, the insurance services could be extended geographically. Trusted Shops, for instance, is aiming to establish itself in the majority of European countries with international expansion plans on the shelf. A development of this kind implies an intensive analysis of the different legal situations in various nations. At the beginning of 2001, the legal situation is still highly dependent on the particulars of countries and business sectors. Homogeneous insurance products can only then be offered Europe-wide, if their design is independent of local jurisdiction. In the more likely case that legal situations differ from country to country, insurance suppliers have to accept the time-consuming and legally challenging task to customize their insurance products and their terms of applications for each country - and business sector.

Furthermore, according to the European Commission, online buyers should conduct their legal proceedings against online shops within the jurisdiction of the country where the online buyer lives.⁵ In contrast, the insurers' contracts refer to the country where the online shop is registered. In the case of a claim, the insurance provider needs detailed insights into (1) the jurisdiction of all countries where certified online shops are located, and (2) - to a certain limit - the jurisdiction of the nations where the online buyers are taking legal actions.

Accordingly, in January 2001 'Trusted Shops Seal of Approval' was launched in the UK and end of 2001 the company plans to be present in Austria, Benelux, France, Scandinavia, and Switzerland.

7.2 Increasing Scope: Extension of the Product Portfolio

Diversification can be seen as important strategy for growth (Meffert 1991; Porter 1998; Kotler 1999). Considering the research framework outlined in section 4, a likely extension of the supplier bond scheme would be to provide a customer credit insurance against non-payment. The customer credit insurance represents a B2C version of the traditional business-to-business (B2B) industrial credit insurance.

B2B transactions differ in many ways from B2C ones. Firstly, the duration of compiling a quotation, signing the contract, delivering the product and receiving the payment takes longer and secondly, the amounts involved in these transactions are normally higher and often paid in installments (e.g., Backhaus 1999; Timmers

⁵ See Arbeitsgemeinschaft der Verbraucherverbaende 2001.

1999; Turban et al. 2000). Given these circumstances, the concept of credit insurances has become a natural ingredient to almost all larger B2B transactions. The insurer verifies a potential customer and informs his client (the supplier) about the reliability and creditworthiness of the purchaser. In case the credit insurance company accepts the potential customer, it covers a high percentage of the transaction risk. Thus, the insurance client is insured against non-payment of the customer (Meyer 1997).

A possibility to extend the current insurance concept in scope would be to transfer the classic credit insurance to the B2C online world and to allow 'payment guarantees' at the point of time and location of any online transaction (e.g., Marianac-Stock 2000). A cooperation with banks or credit card suppliers would be necessary, as they possess the data about creditworthiness of individuals and could thus provide information about the buyers' creditworthiness to the insurance company. The bank checks the creditworthiness of a customer via a Personal Identification Number (PIN). In case of approval the insurance provider covers the risk of non-payment. The required PIN based identification is in beta tests with VISA and other credit card companies. The current concept assumes that online buyers will bear the cost for such a service via their contract with their credit card companies.

While Trusted Shops is considering the introduction of 'customer credit insurances' Europe-wide, the diverse legal positions throughout Europe provide testimony to the limitations of easy and boundless online transactions between buyers and retailers worldwide.

8 Conclusion and Further Research

Seals of approval as a trust building and confirming measure in B2C online transactions have gained importance over the last two years. As the comparison of six European based seals of approval shows, only two seals can be categorized as more than just a mere 'quality symbol'. Only the seal suppliers FIA-NET and Trusted Shops combine their hallmark with insurance solutions and thus offer online buyers financial security. The paper illustrates that two different insurance models are conceivable depending on the transaction relation: (1) insuring the online buyer against non-delivery and/or (2) insuring the online shop against non-payment.

Based on our conceptual work as well as the experiences and insights gained from working with Trusted Shops, it has become clear that further in-depth research is required. Firstly, our case focuses on the position of the insurance supplier. Investigations of online retailers and online buyers will lead to new insights regarding the customer acceptance of the described insurance models and shed light on the economical impacts for the Internet retailers. Secondly, trust building and trust confirming measures are at least equally important in B2B transactions. Hence, in the near future we plan to tackle the problems stemming from transformation of

traditional B2B credit insurance concepts into the online world of anonymity and online marketplaces.

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