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FOSTERING TRUST IN E-COMMERCE VIA SEALS AND INSURANCE SOLUTIONS

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 issues (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. As Akerlof (1970) stated in his 'Market of Lemons', in a situation with insufficient information about the players and their products, without any system or mechanisms for promoting reputation and thus trust, eventually only the lowest quality sellers remain on the scene. Seen from another perspective, the expectation of reciprocity or retaliation in future interactions – termed 'shadow of the future' by Axelrod (1984) – creates an incentive for good behavior.

Hence, trust is seen as a factor that is becoming increasingly important for the functioning of electronic markets (e.g., Ba et al., 1999; Smith et al., 1999; Jarvenpaa et al., 2000). 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; Zaheer et al., 1998). A situation requiring trust is by definition embodied with risk and the possibility of loss on behalf of the trust granting party (Deutsch, 1958). Management research (e.g., Lewis and Weigert, 1985; Coleman, 1990) has focused on trust primarily from the calculative and risk-oriented perspective of the agent. A rational agent only engages in risky behavior, if the expected profit is higher than the loss involved with the betrayal of confidence. Resnick et al. (2000) consider trust as a 'quality label' that has to be gained at a certain price. To them "newcomers should always be distrusted until they have somehow paid their dues, either

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through an entry fee or by accepting more risk or worse prices while developing their reputations" (Resnick et al., 2000, p. 48).

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 by another agent, prior to monitoring the action himself within the context that affects his own action. Thus, trust implies a 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. According to Urban et al. (2000) trust-building components include information displayed or delivery fulfillment and service offered. Links from other trusted sites are also seen as a trust signaling element (Smith et al., 1999).

Kollock (1999) suggests the implementation of online communities including reputation systems. Reputation systems collect, distribute, and aggregate feedback about participants' past behavior. Thus, they can help to decide whom to trust, encourage trustworthy behavior, and deter participation by the unskilled or dishonest. Through the mediation of a reputation system – assuming buyers and sellers provide and rely on feedback – isolated interactions take on attributes of long-term relationships. Therefore, reputation systems require two components: (1) long-lived entities that count on future interaction, and (2) a mechanism for capturing and distributing feedback about current interactions. Their applicability is based on the assumption that future decisions are based upon the use of feedback (Resnick et al., 2000).

All these trust-related components are considered to be supportive in the process of building trust, but they lack any form of guarantee or insurance for the parties involved.

The objective of this chapter 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 chapter is structured as follows: After a market overview of major available seals of approval and insurance solutions for B2C online transactions in Europe, a framework is developed for investigating different insurance solutions to B2C online transactions. The European arena has been chosen for several reasons: International insurance models are rare; the European horizon offers complexity but is finite enough to avoid confusion; and the case study presented focuses on a European firm. The chapter introduces the case of 'Trusted Shops', backed by a German insurance provider, and analyzes the benefits and risks for three different stakeholders: buyers, retailers, and insurance providers. Potential and limitations for further developing the concept of insurance solutions along the dimensions 'scale' and 'scope' are then presented. Finally, conclusions and an outlook on further research are provided.

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. This primary data gathering is based on a survey of websites and subsequent telephone interviews with the providers of trust solutions. The majority of the investigated seal 'providers' do not offer any additional insurance solution.

Therefore, in the second research phase, we introduce a research framework and use it as the conceptual basis to conduct a case study (Yin, 1994) on one of the few trust providers also offering insurance: the German company 'Trusted Shops GmbH', a subsidiary of the worldwide operating Gerling Group. Our framework facilitates the detailed examination of one specific insurance supplier in a field where only few companies and even fewer researchers have been active; it thus leads to a variety of insights into insurance solutions as trust building components. As such, the case study approach is particularly useful for testing the framework and identifying further research opportunities (Benbasat et al., 1987).

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

Internet buyer concerns about the safety and reliability of B2C online transactions 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 have been created over the last two years. Table 1 summarizes selected European seals of approval.

Table 1 shows that more than half of the investigated seal suppliers limit their operations to the country in which they are based. Only two suppliers offer their product to shops not registered in their country of origin. ['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

Table 1. European suppliers of seals of approval for B2C online transactions

Seal	Company	Affiliates	Main Impact Area	Launch
VeriSign Secure Site Siegel	VeriSign Deutschland GmbH Berlin	S-Trust Deutscher Sparkassen Verlag	Based in Germany	October 2002
L@belsite	FEVAD, Fédération des Entreprises de Vente à Distance, Paris	FCD, Fédération des Entreprises du Commerce et de la Distribution, Paris	Based in France	August 1999
Österreichi-sches eCommerce Gütezeichen	Austrian Federal Chamber of Commerce, Vienna	Internet Service Providers Austria, Austrian Consumer Information Organization	Based in Austria	January 2001
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 Française Interpro-fessionnelle d'Assurance (FIA)	Axa Group	Based in France	1999
Gepruefter Online-Shop[a]	EuroHandels-institut e.V. (EHI), Cologne	EuroHandelsinstitut e.V. (EHI)	Based in Germany; Launch in other European countries within 2002	February 1999
DIN Tested Website	DIN CERTCO Gesellschaft für Konformi-tätsbewertung 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 Kreditversiche-rungs-AG, part of Gerling Group, and Impact Business & Technology Consulting GmbH	Based in Germany; January 2001 launch in UK, present in Austria, Benelux, France, Italy, and Switzerland	January 2000

Source: Company WebPages and telephone interviews in March 2001 and 2002
[a] 'Tested Online Shop' – translation from authors.

to country.] All seal suppliers listed in Table 1 have launched their seal concept within the last four years, probably, we surmise, as a reaction to the discussions about the lack of security in online transactions. The topics covered in the certi-

Table 2. Comparison of seal characteristics

Seal	Seal Content	Seal Validity	Monitoring/ Enforcement
VeriSign Secure Site Siegel	Server authentification 'ssl' encryption payflow payment service	No expiration date, but annual fees apply	Proof of organization procedure, Registration of trade name
L@belsite	Fulfillment of codes of practice stated in FEVAD's Charter of Quality, transparency, data protection	No expiration date, but annual fees apply	Audits, exclusion from scheme in serious cases
Österreichisches eCommerce Gütezeichen	Transparent processing of orders, adherence to Data Protection Act 2000, state-of-the-art encrypted transmission, return of payments in case of complaints	One year	Audits, random checks, contractual penalties in serious cases
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 from scheme in serious cases
FIA-NET	Audit of security system for payment; audit of the communication systems	One year	Monitoring on annual basis
Gepruefter 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 eCommerce 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

Source: Company websites and telephone interviews in March 2001 and 2002

Table 3. Service offerings as benefits for online buyers beyond seals of approval

Seal	Type	Insurance Solution	Additional Services
VeriSign Secure Site Siegel	Quality seal	None	None
L@belsite	Quality seal	None	None
Österreichisches eCommerce Gütezeichen	Quality seal	None	Internet Ombudsman as out-of-court arbitration body
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 € 2,500 per shop and transaction	Dispute resolution system

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

Unlike the 'Which? Web Trader' service – popular in the UK – which in the event of a dispute between consumers and retailers investigates and, if necessary, removes a retailer from its list of accredited websites, Trusted Shops mediates disputes between consumers and retailers to speed up a resolution.

However, aside from additional offers like free legal advice for online buyers, the main difference among the seals of approval lies in their eventual 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 (AXA and Gerling respectively). 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).

4. Research Framework for Insurance Solutions Covering B2C Online Transactions

In this section, we develop a research framework for investigating instruments aimed at increasing trust in B2C eCommerce via insurance solutions. The overall framework is depicted in Fig. 1; further levels of detail are shown in Fig. 2 and 3.

For each individual transaction, the process of buying and selling goods consists of a variety of phases such as the 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 by adding products to their 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 Fig. 2.

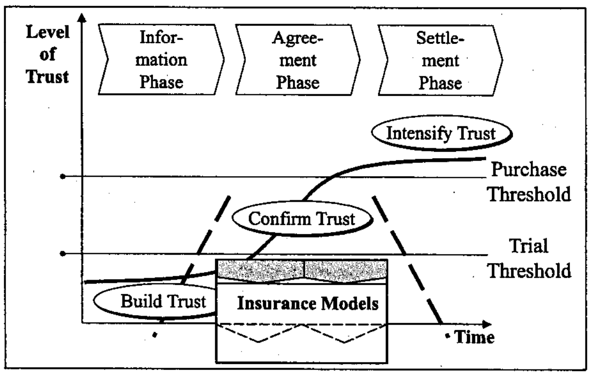

Fig. 1. Research framework for investigating trust-increasing instruments

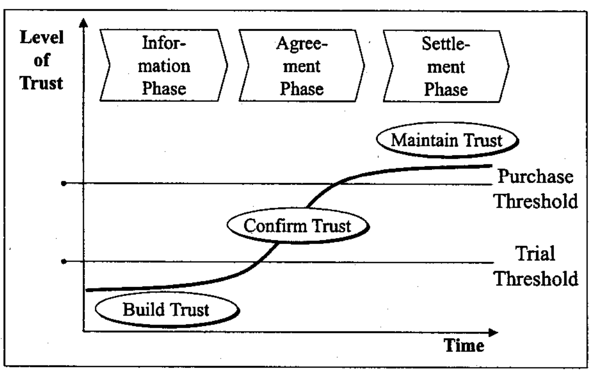

Fig. 2. Trust levels during transaction phases

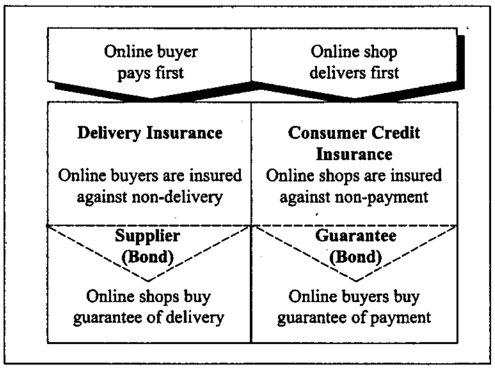

Fig. 3. Insurance models for B2C online transactions

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 form of market transaction is predestined to lead to the need for developing mechanisms to manage this risk. Depending on who makes the 'first move', our framework distinguishes two insurance models for online B2C transactions: (1) delivery insurance and (2) consumer credit insurance (see Fig. 3).

The delivery insurance scheme insures online buyers against non-delivery by 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. Thus, the shop is not only approved, but its customers know that a performance failure by the shop is covered by a delivery guarantee granted by the insurance company.

The consumer credit insurance covers the case of non-payment by 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, 2002). Trusted Shops can use the local offices as basis for building up local contacts Europe-wide.

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 Fig. 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.

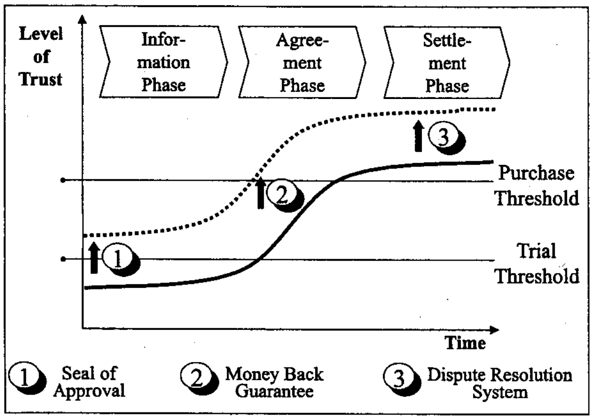

Fig. 4. Components of trusted shops' product portfolio

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 Fig. 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 concept and the development is supported by the TEN-Telcom-Initiative belonging to the Directorate General, 'Enterprise and Information Society' of the European Commission.

5.1.1 Certification Process

Shops wishing to participate request the 'Information for Online Shops', and will then receive the Trusted Shops evaluation report with detailed instructions on how to fulfill the certification criteria listed in the information package. The online shops are screened according to the following overall 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.

In more detail, the criteria to be checked step by step state that online retailers must provide full and clear details of their identity including (1) full name, legal form and location of the company; (2) name of an authorized representative; (3) registered company number and place of registration; (4) full legal address including country of incorporation, street, house number, postal code and city; and (5) contact address including telephone number and e-mail for enquiries at an easily accessible location. Their first web pages must include a clear reference to the general terms and conditions of trade, in a form which is easy for customers to download and to understand. The terms and conditions need to state the right of cancellation of the contract, the right of return of products, the full postal address for the case of complaints, warranty and guarantee conditions, and conditions of termination if applicable. Any product offer must include the main characteristics of the product, information regarding the time of the conclusion of the contract, the minimum contract period and relevant details relating to payment and delivery. Offers limited in time must be identified accordingly. Online retailers must clearly identify which laws apply to their offers. The price of all products must be clear and easy to locate. Prior to placing an order, customers must be clearly informed about the full, actual and binding retail price, including all taxes (e.g. VAT) as well as any additional costs (for example, postage and packaging). The prices quoted at the time of the offer are binding and online retailers must clearly highlight any offers that are subject to time limits. The information on conditions of payment shall include in particular additional charges for a chosen method and time of payment with regard to debiting and electronic payments. Customer inquiries must always be answered within a reasonable period of time. Online retailers must immediately inform customer if a product ordered is out of stock, and they must immediately confirm an order by returning a detailed overview that includes the order date, delivery date, number of products ordered, any specific prices and the total price. Sellers should agree on a binding delivery date. The period of time between the date the order was placed and the date of delivery must not exceed 30 days. Online retailers agree to grant customers the right to cancel the contract without reason by notice in writing or as implied by returning the product. They can exclude the right to cancel the contract in the case of goods made to the customer's specifications or goods which deteriorate rapidly, audio and video recordings or software which has been unwrapped by customers, and software downloads, as well as newspapers, periodicals and magazines. Further, sellers must adhere to existing data protection legislation and must inform customers about the basic principles of its privacy policy. They require an explicit authorization from customers to use personal data other than for purposes stipulated in the contract. In particular, customers have the right to be informed about the extent and purpose of the use of their personal data and of any third parties having access to this data. Personal data shall only be transferred to third parties if customers give their explicit consent or such transfer is allowed or requested by law. In particular, customers have the right to object to the use or transfer of their data for advertising purposes and direct marketing. Sellers must use encryption and a safe server to protect the customer's privacy and avoid misuse. The electronic transfer of payment details must always be encrypted. Online retailers must develop their security procedures as new threats emerge and new technologies are made available. They must be able to assure that all transactions will be confidential (see www.trustedshops.com).

Once a shop states that all criteria are fulfilled and provides access to the necessary information, the actual certification process is mainly operated centrally and remotely and normally does not take longer than 3 working days. The data of the certified online shops is retained in one central IT system located in Darmstadt, Germany. For Trusted Shops, the certification costs for an online shop applicant are approximately € 1,500 to 2,000.

When the certification has been successfully completed, the Trusted Shops sign is integrated into the online shop's homepage, and the shop and its customers can take full advantage of the service offerings.

5.1.2 'Money Back Guarantee'

The 'money back guarantee', up to € 2,500 per shop and per transaction, 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.

The 'money back guarantee' as part of the Trusted Shops seal of approval can be defined as a supplier bond. The online retailer concludes a contract with Trusted Shops and hence buys a 'guarantee of delivery'. This means the retailer pays for Trusted Shops' delivery guarantee to the consumer even in case of bankruptcy or other performance failures on the side of the shop. Although the online buyer has the financial advantage and security, the annual contribution for the guarantee is paid by the online retailer (see Fig. 5). The online shop gains reputation by being approved, i.e. 'being safe', and can transfer this improved reputation as a marketing tool into increased online sales turnover.

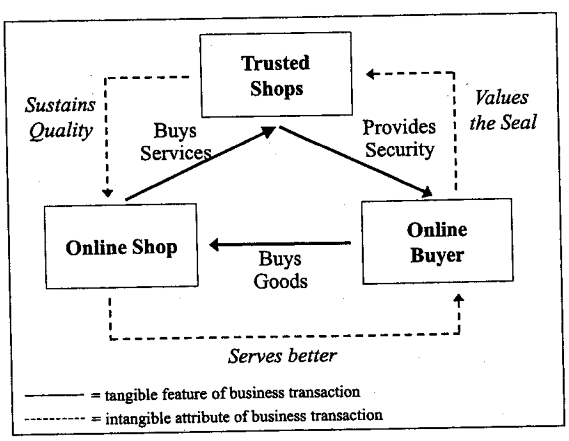

Fig. 5. Relationship between trusted shops, online buyer and online retailer

5.1.3 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 Trusted Shops – Business Model, Figures and Projections

Trusted Shops generates its revenues from the fees it derives from certifying online shops. The membership fee covers the certification for one year including the extensive check of the online shop, support for dispute resolution, 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 starts at € 590 per year for shops with a turnover up to € 100,000. About ten percent of the more than 400 certified online shops have an annual turnover higher than € 500,000. Since November 2001, Trusted Shops cooperates with the German Internet provider '1 & 1 Internet AG'. Online shops hosted by '1 & 1' pay a monthly membership fee of € 29 to Trusted Shops.

Since the beginning of January 2000, more than 400 online shops have been approved and are entitled to carry the Trusted Shops seal. Approximately 400,000 online transactions were insured since January 2000 (Trusted Shops, 2002). 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' conducted, on average, 1.2 transactions with certified online shops. By the end of 2002, Trusted Shops foresees a total of 1,000 certified shops and 750,000 registered active online buyers.

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

In this section, the benefits and risks for buyers, retailers, and insurance providers are analyzed (see Table 4).

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 Trusted Shops guarantee provided by Gerling free of charge for the consumer gives buyers security when they pay in advance, for example when ordering a product by prepayment, credit card or direct debit. Thus online shopping is almost as safe as going to the corner shop, while offering the advantages that come with buying over the Internet: convenience, competitive prices,

Table 4. Delivery insurance via supplier bond: Benefits and risks for different actors

Actors	Benefits	Risks
Online Buyers	• 'Money back guarantee' • Certainty of quality standard	• Diversity of offered seals
Online Retailers	• Improved Reputation • Increased number of customers • Quality seal as customer relationship instrument • Increased turnover • Competitive advantage • Verification of main internal processes	• Costs for insurance/miscalculation • Dependence on image and reliability of insurance company for duration of contract
Providers of 'Supplier Bond' (Insurance Provider)	• Profitable Business Model • Centralized collection of data about shopping behavior • Entrance to new business sector	• 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

selection and easy comparison shopping. The risk of losing money by paying for the ordered goods, up to the insurer's given limit, 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. If the dispute cannot be resolved, Gerling will refund the advance payment upon approval of the claim. The guarantee also comes into effect if a customer does not receive a refund after returning goods according to his seller's return policy. Finally, the insurance scheme also pays for an agreed deductible in case of fraudulent credit card use that can be traced to a transaction made at a certified shop. 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. The supposition is that existing customers will value the reliability and financial security, and that especially new customers without any previous experience with the retailer will favor online shops carrying the seal. Reaching 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 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 membership fee required and the annual commission (see Section 5.2), the risk of miscalculation – and hence negative transaction margin – needs to be taken into account. The contracts offered are valid for one year. The success of the insurance service as a marketing tool for 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 by the end-consumer for the services covered by the seal, such as the 'money back guarantee', can be seen as a risk. Supposedly 50 percent of all online buyers do not know about the concept behind the seal of approval, and accordingly very few are able to utilize its benefits. A critical mass of certified shops is also necessary for ensuring profitability. As it is in the interest of insurance providers to accept only online shops with high standards of quality as members, customer complaints have been minimal. Referring to Trusted Shops, 39 percent 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 of 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

In its home market, Trusted Shops has at least 15 competitors. The German market in online certification services is the most competitive in Europe. To take advantage of experiences made in its home market and to increase its economies of scale, the insurance services are to be further extended geographically. The Trusted Shops system, for instance, is spreading across Europe. In 2001, 'Trusted Shops Seal of Approval' was launched in the UK, in Austria, Benelux, France, Italy, Scandinavia, and Switzerland.

A development of this kind implies an intensive analysis of the different legal situations in various nations. In the autumn of 2002, 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 (see Arbeitsgemeinschaft der Verbraucherverbaende, 2001). 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.

7.2 Increasing Scope: Extension of the Product Portfolio

Diversification can be seen as an important strategy for growth (Meffert, 1991; Porter, 1998; Kotler et al., 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 transactions. Firstly, in B2B sectors the time needed for compiling a quotation, signing the contract, delivering the product and receiving the payment is longer; and secondly, the sums involved in these transactions are normally higher and often paid in installments (e.g., Backhaus, 1999; Timmers, 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 by 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 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 few 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.

This chapter 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 on the experiences and insights gained from working with Trusted Shops, it has become clear that further in-depth research will lead to even more sophisticated and internationally applicable business models for insuring trust in eCommerce. Firstly, our case mainly focuses on the position of the insurance supplier. Detailed investigations of online retailers and online buyers will lead to new insights regarding customer acceptance of the described insurance models and shed light on the economic impacts for Internet retailers. Secondly, trust building and trust confirming measures are at least equally important in B2B transactions. Hence, the next step will be to tackle the problems stemming from the transformation of traditional B2B credit insurance concepts into the online world of anonymity and online marketplaces.

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