

## The Impact of Networks on the Insurance Industry

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Résumé de l'article

Dans cet article, l'auteur décrit brièvement les réseaux internationaux de communication qui existent dans l'industrie de l'assurance. Même si ceux-ci sont encore à l'état embryonnaire, les assureurs ne peuvent plus les ignorer. Ces réseaux sont en voie de transformer radicalement les façons d'opérer et devraient prendre une importance considérable d'ici la fin de la présente décennie.

## The Impact of Networks on the Insurance Industry \*

by

D.J. Crowe

*Dans cet article, l'auteur décrit brièvement les réseaux internationaux de communication qui existent dans l'industrie de l'assurance. Même si ceux-ci sont encore à l'état embryonnaire, les assureurs ne peuvent plus les ignorer. Ces réseaux sont en voie de transformer radicalement les façons d'opérer et devraient prendre une importance considérable d'ici la fin de la présente décennie.*

517



Throughout the past twenty years companies in most trade sectors have invested heavily in computer technology. It is probably true to say that in all cases the main purpose behind this investment has been to improve the efficiency within the company rather than to resolve the communication problems which arise between trading partners. As a result, paper continues to be the main source of communication within each industry.

The possibilities of using networks for the benefit of a whole trading community provide opportunities to eliminate this paperchain and replace it with equivalent electronic services. Electronic mail is seen as the vehicle for delivering free text such as letters, memoranda and reports. Electronic data interchange (EDI) can be used to pass structured data between trading partners. General industry information, provided at the present time through a variety of means (such as periodicals, books, and reference manuals etc.), can be replaced by information databases. These services can provide a number of sectorial benefits such as the speeding up of

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communications and the elimination of duplication in rekeying identical information as it passes from company to company.

If one looks at the rationale behind community networks, it would seem obvious that the insurance industry would be one of the prime beneficiaries from such facilities. The insurance industry's services are totally information-based in that large quantities of information are required to assess risks. This applies not only to complex risks (for example, chemical plants) where a large amount of information is required to arrive at an underwriting decision, but also to fairly simple business lines such as personal motor policies.

518

Administrative processes have to be geared to the normal market practices of selling policies to clients. While an individual client may go directly to his insurer, insurance policies are also sold through intermediaries such as agents, brokers, banks, and other organizations. Complex risks often have to be shared between companies and the practice of reinsurance elevates the insurance industry into a truly worldwide community rather than individual markets working at a national level. In summary, the insurance industry cannot survive without information and, despite the computerization of systems in-house, we still use paper as our main communication medium - mountains of it!

From the reasons outlined above one might expect the insurance industry to be a pioneer in the networking field but, until fairly recently, this has not been the case and there are two main reasons why this is so. First, one has to accept that the information requirements of the insurance industry are highly complex. It is very difficult to establish common views on the data elements required, for example, to underwrite a particular class of business. The methods of selling different products and services are very variable and analysis of information flowing throughout the communication chain make it difficult to establish standard practices on which to build EDI services. As other pioneering industries have found, the use of EDI can only work effectively if the paper documents used are replaced by standard electronic messages. Secondly, the use of community networks was seen for a long time by many in the insurance industry as a potential restriction on competitive trade.

Companies felt that the introduction of such networks was a direct threat to their underwriting services although some recognized



that the administrative burden within the insurance market was common to all. Others were prepared to use network services but saw them as an advantage to be exploited over other competitors by providing private network facilities to tie in intermediaries to particular products and services. This approach overlooked the problems of intermediaries gaining access to and using many different non-standard network services. These issues and others have been the subject of much debate in the insurance industry over the past decade. Although progress has been slow, it is encouraging to note that, in the last few years, discussions have moved away from questioning the concept of networks to accepting that networks are here to stay.

519

Although I may have given an impression of an industry reluctant to take on the challenge of networking, it would be inappropriate not to mention an early initiative in the United States. A group of casualty insurers formed a shared value added network service in 1982 called **IVANS**, the purpose being to provide services for insurers and their intermediaries.

In Europe, there has been what can only be described as an explosion of network initiatives. Insurance tends to be conducted within national markets and this is due in no small part to the different legislation governing insurance in each country. Many of the countries in Europe have now set up insurance network service organizations, normally in collaboration with a value added network supplier such as IBM or GEIS. The most established of these national networks are listed below:

Belgium	—	ASSURNET
France	—	ASSURNET
Holland	—	ADN
Italy	—	RITA
U.K.	—	BROKERNET LIMNET

AU of these organizations apart from LIMNET are developing non-life insurance related network services between insurers and intermediaries.

LIMNET is providing both insurance and reinsurance network services for broker placed business to companies and syndicates in and around Lloyd's in the London market. It is a joint venture

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involving all the participants in this specialized market (London brokers, LIRMA, ILU, Lloyd's) and IBM. Exchange of information via computer magnetic tapes has been used in the market for many years. However, the major objective of LIMNET is to fundamentally change market practice by replacing magnetic tape and paper processes with new network services.

520 By its very nature, reinsurance is an international business and although the London market is a significant centre for reinsurance, the majority of reinsurance business is transacted on a global scale involving cross-border trading. Reinsurance therefore requires a worldwide network solution and it was with this in mind that, in association with IBM, eight European reinsurers formed a network service company known as RINET. Since its inception in 1987 RINET has been working on a range of reinsurance electronic trading facilities of which the first operational service for accounting was introduced in 1990. The RINET company is based in Brussels and services have initially been offered in 14 European countries although the intention is to extend services throughout the world over the next five years.

No article on networks would be complete without some observations on the importance of electronic message standards. If we replace our existing paper documents with EDI and give no thought to a standard industry approach we merely create problems for each recipient in the communication chain as a separate conversion is required for each differing format. If 100 companies wish to exchange data with each other and each company uses its own internal file formats for transferring data this would involve nearly 10,000 potentially different conversion routines. We have to avoid replacing our existing documentation jungle with an electronic Tower of Babel! With agreed message standards, each company's burden is reduced as there is only a need for one conversion to create a standard message from an in-house computer system and similar routine to deal with received messages.

It is encouraging to recognize that each insurance network initiative has taken the issue of message standards very seriously, although the results of this enthusiasm is that we now have many differing sets of standards covering a large number of requirements of the insurance and reinsurance industry. While this can be seen as

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a step in the right direction, there are many open issues that still have to be resolved.

For instance, bearing in mind the implications of 1992, should the insurance industry be creating one standard electronic marketplace for Europe as a whole with common standards, or should we create standards at a national level only? In the reinsurance area, should the standards used in the London market be the same or different from those used in Europe and elsewhere? Should we use some standard syntax conventions for creating our messages and if so, which one? Unfortunately a number of alternative approaches have evolved over the past decade with a result that there are different ways to construct message standards. One of these methods, known as EDIFACT has been introduced by the United Nations with the specific aim of assisting the development of EDI messages for international use.

521

As the United Nations is supplying a support structure in various centres throughout the world to help develop EDIFACT messages, most network organizations agree that this is the route for the future and this is providing the direction and momentum needed to solve some of our difficulties. In Europe the support structure is known as the EDIFACT Board. This organization has been endorsed and is supported by the Commission of European Communities and the European Free Trade Association.

Part of the function of the EDIFACT Board is to create business interest groups and two years ago an insurance sub-group was formed which is now represented by all the insurance networks and some national insurance trade associations throughout Europe. This forum is beginning to tackle the difficult problems outlined above and, in some circumstances, discussions are also taking place bilaterally between network organizations with common interests.

A number of the networking initiatives mentioned briefly in this article are at a fairly early stage of evolution and some insurance organizations may feel that this technological change can be ignored as it will not affect the way business is conducted. An answer to this view is very simple. Whether we like it or not, the use of networks is going to fundamentally alter the way we do business with our trading partners over the next decade. This is something that is not just happening in our industry, but in all aspects of commerce and

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some observers have commented that what is just beginning to happen compares in importance with the invention of the telephone over 100 years ago.

Whether this view is believed or not is a matter of personal judgement but maybe the words of an internationally known industrialist from the United Kingdom can best sum up the situation. Sir John Harvey-Jones, former Chairman of ICI plc UK, made the following comment when asked about the importance of networks in the future, "How to use information technology in a business is a strategic decision for any company. In taking that decision the impact of networks and EDI in particular is key for EDI allows the pulse of a business to be touched. EDI opens up new and exciting opportunities for management and must be part of a company's forward strategy."