

# Envisaging Business Integration in the Insurance Sector

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## INTRODUCTION

Data, information and knowledge are the heart of the insurance business. Each policy is composed of a set of data that can vary substantially. Risk management is a complex process that implies the availability of rich and accurate information and knowledge. In our fast moving world, connectivity and articulation between insurance industry players is therefore mandatory. Information and communication systems and technology (ICST) can provide this connectivity, allowing insurance partners to become closer and able to reach better negotiation, reducing response time and costs and probably creating new business opportunities (Strazewski, 2001).

Insurance intermediaries (brokers and agents) are important players in this scenario. They act as consultants operating independently from insurance companies, being specialists in providing services to their clients, gathering the best solutions thanks to their vast knowledge of insurance companies' products. Consequently, they achieve the best insurance contracts at the least cost (APROSE, 2005a, 2005b).

Being a great value-adding activity, insurance mediation is also very complex. To operate in an effective and efficient way, intermediaries need to establish a good connection with all entities in the industry and electronic business can help insurance intermediaries' business model in both business-to-business (B2B) and business-to-consumer (B2C) dimensions. In B2B, intermediaries establish relations with insurance companies, agents, banks and official entities. In B2C, intermediaries establish relations with their clients, giving them all the necessary assistance in a customized and fast way, since the first contact and during the policy's whole life cycle, offering the best solutions according to their needs.

However, in spite of all the apparent and potential benefits, intermediaries are not grasping all the advantages that electronic business can provide. This definitely relates to a very important issue, the integration level between the different players' information systems.

Analysing the situation from the intermediary perspective, this article exposes the problems faced by intermediaries

and insurance companies all over the world when trying to integrate their business electronically and how these can be overcome so that partners can fully benefit from the opportunities here identified. The methodology used includes a deep case study involving a Portuguese intermediary having a significant level of integration with an insurance company. Results are compared with situations reported in other countries, leading to the conclusion that most of the problems and barriers here identified are being experienced worldwide. Conclusions bring significant implications for information science and technology (IS&T) and add important contribution and knowledge to research in this area.

## BACKGROUND

This case study involves three entities: an insurance intermediary, an insurance company and a software house specialized in the development of technological solutions for the insurance industry.

A deep study of the software house clients highlighted the case of an insurance intermediary having a significant level of integration with an insurance company. Interviews with representatives from the different companies have shown that in spite of strong and continued technological and financial efforts the parties were still far from having reached a satisfactory solution. Legal, technical and organizational issues seem to be burdening the integration process, maintaining an inefficient status quo and preventing the parties from grasping the desired benefits. It was then decided to deepen the analysis in order to foster knowledge in the area and assist in the development of proper solutions.

The intermediary in our case study uses GIS® Agents & Brokers (developed by I2S Informática-Sistemas e Serviços SA: [www.i2s.pt](http://www.i2s.pt)) for managing its own business, but also to transfer data to/from the insurance company Web site. Any break in the electronic data flow, internally or between parties, adds additional costs at several levels. Information systems must support the integration of processes across the extended value chain.

The insurance company in this study has an Internet public site which allows the intermediary and the general public to make online proposals and product simulations and knowing available products. A username and a password allow partners to access a restricted area where they can find, for example, product manuals and rates, proposal forms and products' general conditions. In the same area, the same username and password give access to a new restricted area of the extranet named Broker Information System, where it is possible, among other operations, to view online several brokers' portfolio data (clients, policies and claims) and to access a file transfer area.

This file transfer area allows the intermediary to receive/send data from/to the insurance company on a periodic basis (might be daily). The application GIS® Agents & Brokers includes a set of data transfer modules that, according to the insurance company format, can integrate data from the files received into the GIS® Agents & Brokers database and generate new ones from this database.

Besides communicating with the insurance company, GIS® Agents & Brokers can also import/export files from/to banks and export data to agents. When the intermediary needs to integrate data with some defined clients, it is possible to develop a customized application. In spite of sending/receiving data to/from the ISP (Instituto de Seguros de Portugal (Portuguese Insurance Institute): [www.isp.pt](http://www.isp.pt)), a regulatory body, there is no data exchange that interacts directly with GIS® Agents & Brokers.

The study revealed the existence of an additional integration module used exclusively between the insurance company and some of its brokers using GIS® Agents & Brokers. Data concern claims and only flow from the insurance company

to the intermediary, without integrating with GIS® Agents & Brokers. The claims module processes data sent by the insurance company and allows data browsing by means of an Internet browser.

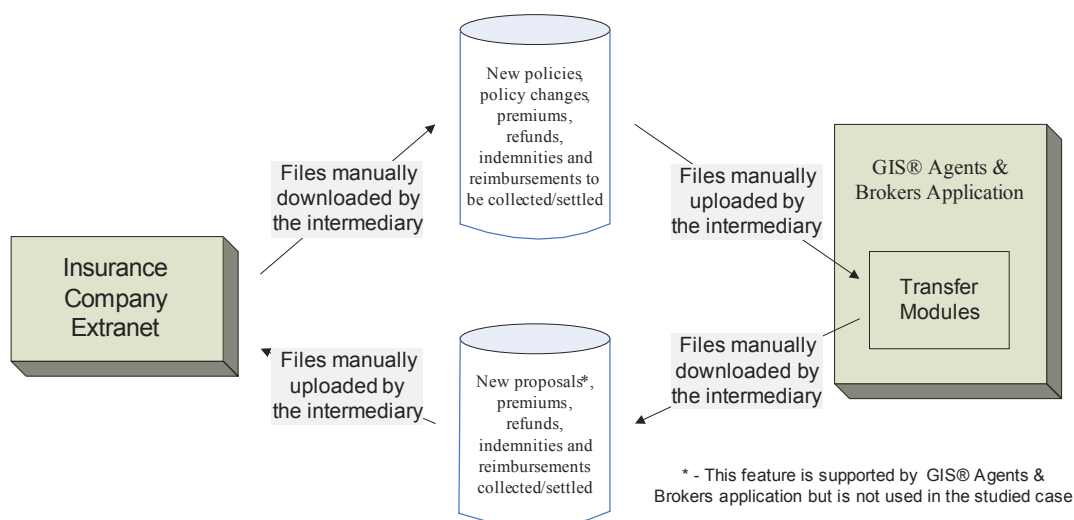
For detailed information and technical aspects, impossible to address here due to space restrictions, please refer to Amorim and Santana (2007) where you may find diagrams representing processes of interaction between the several entities and the electronic business platforms; data flow to/from the several transfer modules which integrate the application GIS® Agents & Brokers; and business terminology.

### ELECTRONIC DATA EXCHANGE AND INTEGRATION VIA THE INTERMEDIARY APPLICATION

GIS® Agents & Brokers includes a set of modules which allow data to be integrated to and extracted from the intermediary information system. As depicted in Figure 1, by means of file manipulation each transfer module integrates data supplied by the several entities or extracts data to be supplied to them. The exchanged files are composed of plain text formatted in columns. There is no use for XML. Initially, files were supplied to/by the several modules in floppy disks. Nowadays, there are alternatives, namely the use of e-mail or data download/upload from/to a private extranet area.

The several modules correspond to mediation process data needs and their functioning can be summarized as follows:

Figure 1. Data exchange supported by GIS® Agents & Brokers between an insurance company and an intermediary



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