# The Role Of IT In 21st Century Insurance

As competition intensifies, insurers have to bring products to market in a timely manner and also ensure that all data are captured in the processes involved. **Mr David Piesse**, Head of Insurance, Asia Pacifc, Sun Microsystems, explains how Service Oriented Architecture, in which IT functions are attached to business processes, helps insurance companies stay ahead.

As has been said, the future shapes the present, and the role of IT in insurance will be business-process-driven and on-demand. Trends in the insurance industry indicate that risk-based-capital regimes and compliance for capital adequacy like Solvency II will trigger mergers and acquisitions. This will require the ability to implement enterprise-application integration in an agile manner in order to bring the products to market in a timely fashion.

Bringing products to market requires alternate distribution channels to supplement the traditional agent/broker model. The captains of the insurance industry have said that there is need to go to "back to basics" underwriting, which means underwriting for profit and not relying on the capital markets to cover up underwriting losses.

This means that underwriters need the right data to come to the right pricing, terms and conditions, and in decision terms, can actually turn down business that may not be profitable.

This is especially true now with the rise in catastrophes, both man-made and natural, where the need to make non-tradable insurance assets tradable in capital markets to boost reserves is a key issue.

Finally, people are living longer because of good health-care and lifestyle so that the world's pension systems are under reform requiring a wealth-management approach over traditional pension systems.

### Aligning IT to the Business Process

The IT approach here starts with the letters SOA or Service Oriented Architecture. Like all IT terminology, the true meaning becomes blurred by marketing. For the purpose of this paper, SOA means the streamlining of business processes over time so that these processes can be assigned ownership in a company. This means that all IT functions can be attached to a business process and, if advantageous, can be outsourced for efficiency.

SOA is, therefore, a journey over time to align the IT to the business and decompose the business processes to make them more efficient.

Certain business processes are removed in order to achieve straight-through processing of policy submission and claim settlement. This enables the insurance industry to do electronic trading like its cousins in the banking and capital markets.

Business processes can then be easily integrated across enterprises and insurance functions, or business services can be wired to each process and then automated as small working parcels of computer code.

Thus, if we looked at a motor claim, the business workflow would consist of a series of business processes – both human and automated. The automated processes would call a business service to perform a first notice of loss function, a settlement or reserving. If a company wants to outsource the claims function, this is now facilitated. A separation is made between business logic (that which is static) and business rules (that which is changeable). Underwriting makes up part of the business rules so they are separated into a rules engine so they can be changed without having to regenerate all the software applications.

In the next two years, we will see all companies transforming to the SOA approach in order to be competitive and get onto a global footing.

### Identity Management

Attached to an SOA journey are identity management (IDM) and information lifecycle management.

IDM is key to the security of the enterprise by tying ownership of people to the business process. In an insurance company, extending IDM to customers, agents, and other distribution channels, will be key to time-to-market issues. Compliance will require that policy, claim and email data will need to be kept for longer and, therefore, need to be archived to avoid having heavy costs of data on line. By tying insurance-strategy maps to business processes, we can ensure that the right key performance and risk indicators are held on line for enterprise-risk-management decisions, and storage costs are saved by archiving no essential data. This, then, allows identity-enabled information lifecycle management to exist in an organisation.

### On-demand Insurance

With this structure, insurance companies of the 21st century will rise to the challenges in the industry by business-process outsourcing and on-demand insurance.

On-demand insurance is a ready-made distribution channel allowing insurance companies to distribute products through banks, post offices, supermarkets, kiosks and any other channel and all on a pay-as-you-go basis. This can also be achieved by pervasive means such as smart cards in telephones, cars and other devices, allowing on-demand insurance to be charged by mobility issues. This form of insurance, coupled with the business process outsource (BPO), is the way to implement the SOA model. Thus, the back-to-basics underwriting issue is addressed within this model using the agile rules engine.