

Impossible dream or business imperative?

SOA done right has enormous potential

BY PAUL FURBER

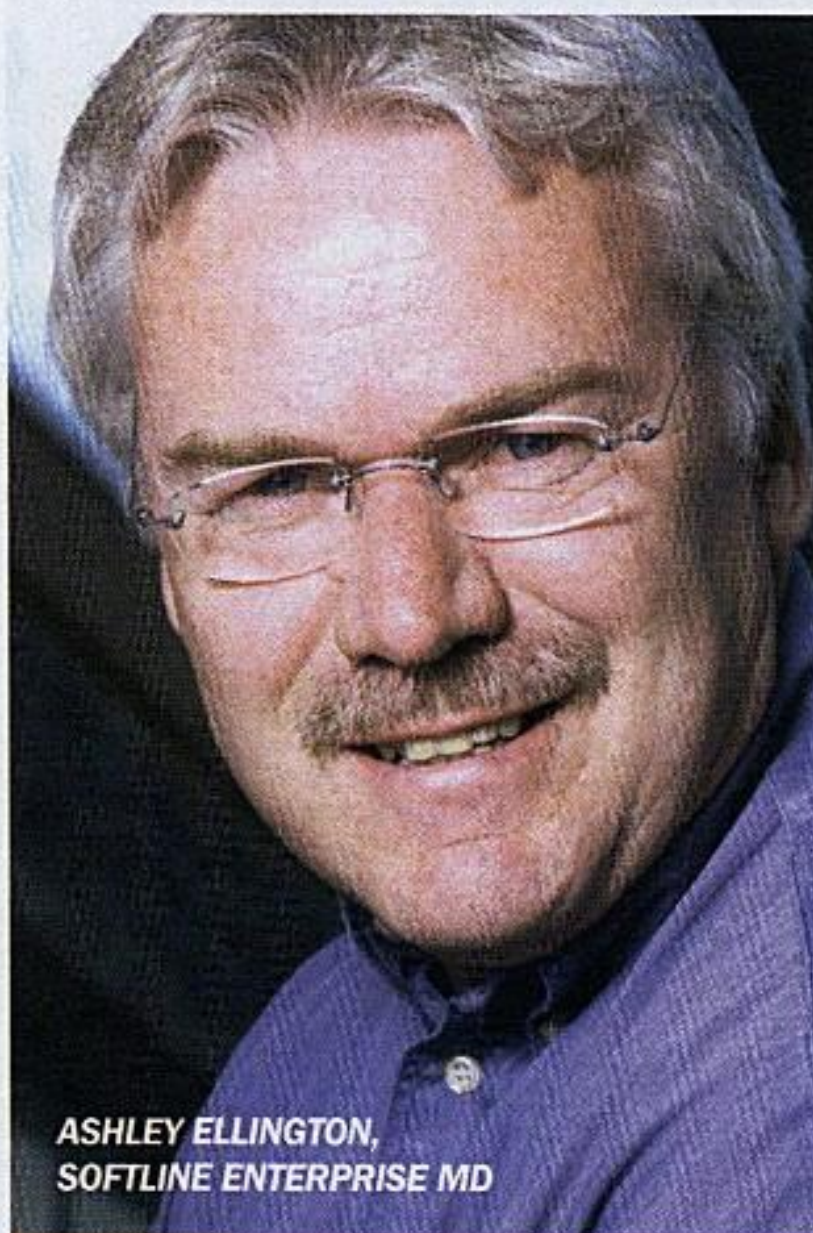
THE HOLY GRAIL of business software development is to have completely reusable code in modular components. Instead of writing software from scratch, programmers should just be able to mix and match components to construct new applications. In the business process environment, this concept is echoed by services oriented architecture, an approach that takes basic business processes and makes them available as software services.

Instead of inflexible systems more or less dictating how processes can happen, SOA says that disparate systems can be separate but still be able to exchange data and process information between themselves through a set of standard services. The theory goes that executives should be able to mix and match services to construct new processes without throwing out all of their investment in existing applications. The practice, however, has a way to go.

Business software developers already know this, says Mike Steyn, director at triVector Consulting. "Object-orientation punted reuse at a software level and, in some cases, this has been achieved. But the lesson that was learned is that reuse does not just happen by itself. It has to be included in the intent of the initial design."

Similarly, SOA doesn't just happen by itself he notes. "It is not adequate to deploy analysts committed to designing for reuse, no matter how skilled they are. There must be a set of strong design principles to govern sound application and interface designs."

Mark Strathmore, partner director at Software AG, says most people make three basic assumptions about SOA: there's a need to rip-and-replace existing systems, SOA and web services standards help to ease the pain of integration, and SOA allows the reuse of existing applications. "But what



ASHLEY ELLINGTON,
SOFTLINE ENTERPRISE MD

“SOA can be infinitely distributed, making it hardest of all to control, unless the appropriate infrastructure is in place.”

—RICK PARRY,
MD OF PROGRESS SOFTWARE

does reuse mean in the context of SOA? Does it simply mean the reuse of only newly created web services? Does it also include the reuse of existing applications?”

DISPELLING MYTHS

Strathmore says many organisations that have embarked on the SOA path have come to realise that achieving true reuse is not as simple as creating web

services and making them available for consumption.

To successfully implement an SOA and get the appropriate levels of reuse, organisations need firm support from all levels within both the IT and business portions of the organisation.

But even then, there remain significant hurdles. Adrian Logan, development manager at DVT says he's seen five common attitudes towards SOA in the field that need to change.

“Myth number one is that SOA is easy. While SOA concepts are reasonably simple to understand and apply, building an SOA-rich environment is an involved and evolutionary process that requires constant customer interaction. Myth number two is that SOA is a panacea. While SOA architecture forms the kernel of the solution, business process expertise and applications expertise are equally vital if it is to work.

“Myth number three is that SOA is an off-the-shelf solution. This can in theory apply to technology-neutral solutions that are designed to have a high degree of reusability. The scenario changes when we're looking at technology-specific solutions which all require a degree of customisation.

Myth number four is that SOA is not aligned to any standards. In truth, SOA is based on several well established industry standards, including those developed by the OASIS working group and the various web services standards bodies,” he says.

The final myth? SOA is expensive. “Well, how long is a piece of string?” asks Logan. “The cost of an SOA solution is directly related to its sophistication, the level of the automation required and the applications and products that are deployed. Careful planning and foresight can result in an effective, feature-rich solution that won't break the bank.”

Part of that planning is asking the