

SAP NetWeaver[™] - The Need For Tactical Solutions On The Road Towards Strategic Goals

A series of white papers by Iryx

Paper 3

Where should NetWeaver fit into the strategic IT architecture?

- does it replace the current one?
- can it sit side-by-side with the current one?
- do I have a strategic IT architecture?



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Today's Challenges.

Evolution

IT has moved on from disparate systems, through desperate integration by any means (point-to-point), to SOA. Service Orientated Architecture is what is says on the label. SOA is the ability to re-use existing functionality, existing data and existing systems but exposing them to create an environment flexible enough to support 'agile businesses'. SOA is, therefore, the instruction sheet for how to create an environment which:

- provides meaningful and structured information in a timely fashion,
- supports enterprise-wide initiatives, and
- allows agile responses to new market, customer or internally-driven needs.

I would be letting the side down if I did not mention the fundamental term of choice – 'leveraging existing assets through web-services'.

In essence SOA is the answer to the question 'How can I integrate my people, information, processes and systems in a single, homogeneous environment that allows me to leverage all of the advantages that brings?'.

What the IT community is now facing, driven by today's leaders, Microsoft, IBM and SAP, is the need to move to a more flexible infrastructure to facilitate collaboration. As IT budgets have shrunk two things have come to the fore:

- Firstly, the need to reduce costs through closer ties to partners (both customers and suppliers); in a word, collaboration.
- Secondly, the need to move from IT strategies of massive reimplementations, each costing millions and taking years to a strategy of quick-win, fast ROI projects. Each successive project must build on the infrastructure and re-using the functionality of previous projects.

To enable all of this we have SOA. SOA is the architecture for flexibility, collaboration and empowerment. The 21st century IT architecture.

Packaged Applications

It is not a spectacular breakthrough in thinking to realise that most companies have IT applications which have evolved to become pretty much in line with the way the business works. In all probablity they have been developed to mirror the businesses own peccadillo's, and are all the more invaluable to the business for all of that. Previously, the drive for commonality of information, processes and people interfaces led us all down the garden path of packaged applications. What were the consequences of this?

- Loss of specific functionality supporting internal processes.
- Force-fitting processes into ill-fitting suits of functionality (or should that be straight-jackets?).
- Large, long and very, very expensive IT projects (as an SAP consultant I did appreciate this though).



Integration

Where the breakthrough has come is in the realisation (driven, admittedly, by pressure on IT budgets) that it is not necessary to replace all of those old but well-fitting applications to achieve the goals of commonality. The dawning of the age of SOA brings with it enlightenment, with the understanding that we can keep all of that nice functionality and leverage it's intrinsic value by placing a single, homogeneous integration layer above it. A layer which understands the applications, can expose their critical functions, and pull together the disparate data into single, homogeneous information channels for the business.

Agility

The promise of SOA is one of real agility, where businesses really can collaborate real-time and with a much reduced lead time. SOA is the host from where business processes can be changed and from where new business processes can be developed without changing the plethora of applications which reside underneath. The creation of web services, exposing the application functions is the key driver for this.

NetWeaver

And so to SAP NetWeaver[™] - not a product or even a component, but a technology stack. In fact, NetWeaver is the SAP answer to the whole IT question, it incorporates their own SOA (Enterprise Services Architecture – ESA), their own development environment fully integrated with J2EE and integration at people, information and process level, exposing most functions of most SAP component applications as web services. All of this exposed as role-based portals. Basically, NetWeaver could be seen as the evolution of the SAP philosophy.

There is one more, one critical, factor; that of the need to create a more homogeneous, single-sign-on environment for users. This means to move away from lots of different systems with lots of different user interfaces towards a portal concept. The portal concept allows any user to access everything they need from a single, browser-based access point and allows the Enterprise to create a single user-experience, leveraging the information in the Enterprise and providing a more flexible and responsive user community.

Timescales

One thing is for sure, the implementation of a complete NetWeaver solution will not be a 1 month project. SAP themselves talk about projects lasting years. In today's business environment this is only feasible if those years are actually a series of small, fast projects each delivering the customer one more piece in the final jigsaw.

What does this mean for SAP customers? Well, no matter the size of the customer the same questions need to be asked;

 Why do I need NetWeaver, which parts of NetWeaver do I need and when do I need it?



- Where should NetWeaver fit into the strategic IT architecture? (does it replace the current one, can it sit side-by-side with the current? do I have a strategic IT architecture?)
- What will NetWeaver deliver for me that I cannot get out of my current architecture?
- How do I get from today's architecture to the strategic architecture I now envisage (which includes NetWeaver)?
- Can NetWeaver deliver everything I need in the new, SOA, world?

This is the second detail paper published by Iryx on NetWeaver. It deals with question 2 – 'Where should NetWeaver fit into the strategic IT architecture?'



Where should NetWeaver fit into the strategic IT architecture?

End Goal

As discussed in paper one of this series, one of the foundation stones of the process for understanding and implementing NetWeaver (or any SOA tool) is the definition of the strategic IT architecture that is the end-goal. In other words, understanding the SOA which best fits the business in the medium term is a key also to answering this question.

Current status

Clearly, many businesses already have an IT architecture in some state of evolution. This may be fairly complete with many of the components of an SOA in place, or it may be embryonic. Other businesses will not yet have evolved such a comprehensive strategy.

What SOA has brought is a clearer, more distinctive understanding of what an IT architecture needs to deliver. NetWeaver clearly defines the levels of integration relevant to any Enterprise (big, medium or small). NetWeaver also delivers the tools needed at each level, and its open standards basis means that it is positioned to handle the real-world scenario of existing strategic IT architectures.

Most businesses have more than a set of individual applications each providing a set of reports and maybe a spreadsheet which is pulling them all together. Most businesses have knowledge management applications, some portal implementations, some existing middleware and some collaboration with customers and or suppliers. Not many are in the position of having pulled all of this together into a coherent architecture backed by an strategy for evolving this architecture.

Agility

Those businesses who had not had time to take that step back to evaluate their architecture and business needs in order to formulate a strategy should now take the chance offered by today's products in order to assure themselves of future 'agility'.

So, we are in a time of re-definition, re-assessment and re-alignment. What the business of today needs is to understand:

- what is delivered by SOA,
- where it is today, and
- how it gets to an SOA architecture.

Assessment

Iryx, as an integration solutions provider, believe that the first step is always an assessment, definition and understanding phase. From this we can get a clear



picture of which parts of the end-strategy are in place already, as discussed in paper 1.

What is certain is that, while NetWeaver does not need to be the only part of a strategic architecture, there should be only one such architecture for any single business. There are many factors involved in deciding which of the existing applications remain relevant, and these will help shape the outcome of the strategic architecture definition study.



Conclusion.

Where should NetWeaver fit into the strategic IT architecture?

- does it replace the current one?
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Every Business, regardless of size, should have a clearly-defined strategic IT architecture. Iryx can help you define yours and help you define the road-map for achieving it.

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References.

This document is one in a series of whitepapers Iryx have published on the subject of NetWeaver. The full list of whitepapers is:

Tactical solutions towards strategic goals overview

Overview document - 'Tactical solutions towards strategic goals'

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Where should NetWeaver fit into the strategic architecture?

Where should NetWeaver fit into the strategic IT architecture? (Does it replace the current one? Can it sit side-by-side with the current one? Do I have a strategic IT architecture?)

What will NetWeaver deliver for me?

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How do I get from todays architecture to NetWeaver?

How do I get from today's architecture to the strategic architecture I now envisage (which includes NetWeaver)?

Can NetWeaver deliver everything I need in the new SOA world?

Can NetWeaver deliver everything I need in the new, SOA, world?