

Through the Portal: Service-Oriented Government

Thirty-seven distinct units form Israel's Ministry of Justice (MoJ), and 37 disjointed IT infrastructures representing 140 different systems grew up to support them until Ronnen Brunner, the current CIO responsible for all these entities, declared a cessation of IT fiefdoms. There would be universal adoption across all units of one common IT infrastructure — an enterprise services architecture (ESA).

ESA is a concept (not a technology) that forces you to reconsider your system analysis tactics.

With a services approach to IT, Brunner explains, "There are huge cost savings and efficiencies. There is a better user experience. There can be quick turnaround times on departmental and user requests. These things are critical in the public sector. The cycle time from the minute we had an idea for a new process, for even a medium-size application, often took 24 to 36 months. Having adopted an ESA approach, we've collapsed that cycle time down to 12 to 18 months. This is not only half the time but half the cost." Brunner expects to improve on these numbers as the service repository grows larger.

The ESA initiative began three years ago with an organization-wide implementation of SAP Enterprise Portal (SAP EP) to support all 3,000 MoJ employees. The goal was to provide all employees with a personalized desktop backed by one sweeping, services-based infrastructure that would ensure all employees would have the right resources always available to them. "To do this," explains Brunner, "you need more than just the ability to personalize a user interface. You need good integration among components. You need the ability to easily move information from one to another. And you need the ability to reuse and repurpose application components from one activity to another. Personalizing the user environment is certainly very important. But you must also recognize that there are lots of content contributors and consumers across an organization such as ours, and everything needs to be able to work together. This is the key benefit of an enterprise services architecture."

by **Michael Nadeau**, Managing Editor



Israeli citizens rely on the Israeli Ministry of Justice for a wide variety of services including land appraisals, legal aid, mediation, and patent registration. A total of 37 agencies make up the Ministry of Justice. Ronnen Brunner is the CIO responsible for the IT infrastructure and services that support these agencies.

A New Approach

The MoJ's approach reflects a change in how information systems are implemented in the SAP NetWeaver era, says Brunner. Rather than a black-box approach where the system is developed in the lab for a year with a big-bang go-live, SAP NetWeaver projects happen step by step, with on-the-fly fine-tuning and service additions in conjunction with end-user feedback and overall IT landscape compliance.

With help from SAP, it took two MoJ programmers 10 weeks to install the servers, develop content, and roll out the portal to 3,000 users. All departments gained a better way to define roles and establish permissions for different tasks.

Brunner's team was able to introduce a number of new applications, including the following:

- ☑ **More timely and detailed budget reports:** Department managers can now get reports on budget utilization,

three levels in depth. In the past, managers had to wait days for such reports.

- ☑ **Better, faster search facilities across document repositories:** The MoJ took advantage of SAP EP's Knowledge Management (KM) functionality. The MoJ's core business is centered on legal documents, and it stores an enormous number of them in more than 100 systems. The ability to run one search over all repositories and find the relevant documents saves a lot of time and effort.
- ☑ **Better access to law reviews and opinions:** As a pilot for the KM project, the MoJ selected the civil department of the Attorney General's office. It was estimated that access to law reviews and opinions through the portal could save each of the 1,000 attorneys in the department 20 hours per month. That would mean that the department could spend



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the 240,000 hours saved annually on more productive tasks. Brunner cites one instance in which two MoJ lawyers with offices near one another were unknowingly both composing the same legal document. Using KM through the portal, they could have avoided this wasted effort.

- ☑ **Integration with other ministries:** Since project launch, the MoJ has integrated the portal with systems from the Ministry of Finance and the National Postal Service. The postal service information comes in XML format and represents the income from different fees the ministry collects. Each payment is represented by a single record in the post office data; another record in the unit’s information system represents the debt. The portal helps integrate the two records, allowing the user to manipulate the information. Thus, there is no need to predesign the reports, as the user can do it himself.

With ESA, you build applications differently, says Brunner, because of the opportunity for reuse. “The time to solution is shortened,” he says. “Once I have 30 or 40 applications [built on the ESA platform],” Brunner continues, “60 to 70 percent of my subsequent development will come from reusing these services. This saves money, and this saves time.”

8 Keys to ESA Success

Brunner offers the following advice for companies going down the ESA path:

1. **Personalize.** To allow each user to personalize screens, you have to build applications in a more dynamic

way. For example, a controller might want to monitor budgets. You can personalize this task by allowing the controller to set the alert thresholds to the level he or she feels is appropriate, thus personalizing the application.

2. **Identify commonalities.** This includes reusing application components and considering needs at an organizational level. This will allow you to minimize development time and costs. For example, even a specific demand should be considered from a global enterprise point of view. The difference is that while examining the need from a micro aspect, you see a new solution for a specific department. From the macro perspective, you see the right place to split the solution into several components.
3. **Don't be afraid to deliver applications in a phased approach.** In fact, Brunner believes that this is the preferred method. Developing a complete application can take a lot of time, but often you can prototype 80 percent of the requested functionality in a short time. Giving users a partial solution with a promise of full functionality at a later date keeps them happy and invested in the process. This is the classic 80-20 rule, but with ESA, it is much easier to accomplish, as services can be created or connected to correspond with a certain business process.
4. **Collaborate with your service providers on the ESA approach.** Choose your architects carefully! Creating applications from the building blocks that ESA provides requires experience. You don't want a service provider whose first response is to start writing lines of code.

5. **Avoid unnecessary coding.** When using smart integration platforms such as SAP NetWeaver, you can often use its standard business content, templates, interfaces, and other items in place of custom coding. You have SAP EP, SAP Exchange Infrastructure (SAP XI), SAP Business Information Warehouse (SAP BW), so leverage them. Tell your programmers to use existing features, and somebody has to be professional enough to identify those features. If you do write code where you could have used existing features, you will be recoding when you upgrade.

6. **Reconcile .NET and SAP NetWeaver.** A .NET programmer writing code that will become an iView can either use features in Visual Studio or features provided by the Portal Development Kit for .NET. Don't use .NET control. Use the grid control from Visual Studio PDK for .NET because it is compliant with SAP NetWeaver and allows you to use SAP NetWeaver as the presentation layer, providing more advanced features. Learn to use the right objects; don't be tempted to use those objects you're already familiar with. It's the easy way but not necessarily the right way.

7. **Don't be afraid of your users.** IT departments worry that they will deliver solutions that users won't like. The concept for years has been to do full needs analysis in the first phase and let users go through subsequent phases with you, showing them development screens at different stages. This approach can be improved by moving the process to service road blocks and trying to go live at the service level. Users today are less afraid of computers, and you can give them solutions in pieces. Start fast and small.

8. **Take liability seriously.** You may have different systems integrators developing different applications. Each new systems integrator who comes in suggests a new repository of services. In the end, you need a solid working application. What happens when you reuse code written by one systems integrator with an application written by another? Do you hold the first one responsible when it doesn't work? The systems integrator can claim, for example, that it's similar to the typical conflicts between software and hardware providers, only now it is between two different services (especially when each service was developed by a different systems

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Collaboration across Israel's Ministry of Justice, Ministry of Finance, and the Israeli Defence Force is happening on two important fronts:

eGovernment, a layered approach to government services composed of intranet and Internet access, security including the use of digital signatures, payment and forms services (outbound), personal "safe box" for constituents' services, and other constituent-facing services. The safe box facilitates a highly secure personal channel for the government to send formal correspondence and documents (e.g., state payments, matriculation certificates), replacing standard land mail.

Merkava, a layer within eGovernment comprising the application infrastructure. In essence, this is the cross-ministry, standard SAP ERP system that will gradually be rolled out to about 100 ministries and agencies. Started three years ago, Merkava already serves some 2,000 users in 15 agencies. [NWM](#)

integrator). This is a big issue with ESA. The MoJ architect team makes and modifies standards, which become part of all code and services that systems integrators prepare. This way, when a service needs a new feature, the MoJ team can ensure that the systems integrator adds that feature in a way that won't damage the service. Make sure everyone complies with common standards and that those standards are not circumvented.

"ESA is a concept, not a technology," says Brunner. "It forces you to reconsider how you look at systems analysis," says Brunner. "You first understand the needs of the users, and then and only then do you think about how you are going to deliver a solution." [NWM](#)