move

moderne verwaltung

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Knowledge Melting Away

Can digital documents be archived over long
periods and be read again?

Measure Quality

In allocating budgets for IT projects values like security or citizen friendliness of a software application are hardly considered. Federal ministries in Denmark could translate such qualitative values into concrete cost reduction due to a Business Case Analysis.

The combination of service oriented architecture (SOA) and Open Source solutions is a promising strategy for e-government. In order to receive the necessary budget for realizing that idea the Ministry of Science ran a Busines Case Analysis.

SOA and Open Source

The Open Source SOA strategy has been developed by the ministries with respect to political requirements like budget effective cost reduction, quality, security and usability. The combination of Open Source and SOA allows the wished for standardization in e-government. Electronic invoices to the ministries had already been successfully implemented. Open Source fosters a widespread dissemination and SOA creates standardization. Their combination even enforces these mechanisms and therefore translates political requirements like cost reduction, quality, security and citizen usability successfully into a technical solution. Yet, when it came to negotiating the budget for 2010 the problem remained that values like quality and security were not strong enough in order to influence the budget decision positively. The chances of realizing Open Source SOA were fading.

A Business Case Analysis of Solution Matrix makes an independent comparison between very different IT systems possible. All IT systems that were competing for the budget were compared with respect to their influence on required values like cost reduction, quality, security and citizen usability. The analysis' characteristic is its ability to quantify qualitative values which creates a comprehensive and profound basis for successful decision making.

A meaningful comparison becomes possible by decomposing a value like quality into its measureable constituting elements, i.e. rework cost, success rate or cost per transaction. These measureable elements are quantified by interval estimates in the end. Subject matter experts from within the ministries were asked to deliver these interval estimates and by doing so create consensus among decision-makers which is extremly important in the public sector. A risk and sensitivity analysis predicts the probability of the results and identifies and quantifies the crucial risk factors concludingly.

Advantageous Approach

The comparison between the different IT systems showed the Open Source SOA approach as the most advantageous one. It would allow the Danish ministries a cost reduction of approximately 318 million Euros until 2010. The standardization enhances citizen usability which is expressed in a higher success rate per transaction. That further allows a reduction in rework cost of almost 14 million Euros. Security is ensured by reducing user identities drastically. 26 million user IDs were used in the former system whereas with the new system only one ID per user is necessary so that there are only five million user IDs left. The budget for implementing Open Source SOA was decided for unanimously. ◄

The expert: Johannes Ritter

Johannes Ritter is partner at Solution Matrix. After his studies of Economics in Passau and Helsinki, Johannes Ritter worked five years in the IBM European Headquarters in Paris.

Photo: Solution Matrix