

Large Program Benefits from Lean and Agile Delivery at The Dutch Government





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- Iterative development enables highly visible performance measurement
- Requirements accuracy improved whilst minimising documentation overheads
- Project teams achieve self-sufficiency in new way of working within 6 months



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- Iterative development enables highly visible performance measurement of development teams
- Consistent requirements approach adopted across multiple teams and stakeholders
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The work described in this case study took place during 2010 and 2011.

A Large Program with Many Stakeholders Distributed Across the Netherlands

The Ministry of the Interior and Kingdom Relations (BZK) is one of eleven ministries of the Dutch central government. BZK provides services across a number of areas including democracy and citizenship, asylum, immigration, and government digital services. Part of this role includes working closely with over 400 regional municipalities across the Netherlands.

A few years back, BZK initiated a modernization program to improve the way of working for all regional municipalities and the BZK itself. The goal of this modernization program was to improve the quality of services provided to Dutch citizens and make access to information faster, easier and cheaper. A key aspect of the modernization program was the development of new software systems to support the central ministry and all 400+ municipalities.

Dealing with Scale and Complexity – the Need for a Common Way of Working

The project was kick-started with a team of 6 and soon grew to 3 teams with around 25 people. One of the first challenges was to gather and prioritize the requirements for the new systems from the many stakeholders involved. It quickly became apparent that gaining consensus, and a consistent view of system requirements, was not going to be possible using a traditional, unstructured textual approach. The team soon began to accumulate large volumes of requirements documentation that was difficult to manage. "We were struggling with how to document this extensive body of knowledge that we were acquiring and how to assemble all the data. We needed to decipher from central or de-central requirements. We needed an organized way of working."

The problem was compounded due to two further factors: the complex inter-relationships between the various systems being developed by the program; and the fact that these systems could be developed in-house, outsourced, or bought in as packaged products.

An additional challenge was that the team had different backgrounds and were used to using different approaches. We knew that the team would grow significantly in size, so it was important to provide a solid foundation on which to build. The program needed to define a single, common way of working that would address the problems and that could be applied consistently across the teams.

"We are a government ICT project and therefore we are audited frequently. We need to have everything verified to ensure we're doing the right thing. It's imperative that we work with credible and proven vendors – IJI definitely had a strong pedigree in this area."

Keeping it Lean and Light – Selecting the Right Approach and the Right Partner

After looking at various possible solutions for defining a common way of working, Bart-Jan Hindriks, project manager, felt that many approaches on offer were simply too "document centric" and heavyweight to be suitable. Instead he decided to talk to IJI about a practice based approach. This would enable the program to define a lean, lightweight and flexible process that would address the shortfalls in their current approach, without replacing or disrupting any existing working practices that were working well.

Agile Use Case Driven Development – Adopting New Development Practices

IJI began the relationship with BZK by listening to the needs of the team members, understanding what was working well and what wasn't, and then recommending improvements to the team's existing way of working. Two new software development practices were recommended: use case driven development and iterative project management.

Use case driven development provided a solution to the program's challenges in capturing and communicating requirements, and gaining a consistent definition of the systems under development,

"We were looking for an optimal way of working as a team. IJI was the facilitator in our discussions, they helped us to identify issues and ask questions about what and why we were doing things. The team now understands this and has embraced this way of working."

across the extensive and distributed stakeholder community. Chain use cases were implemented to address the complex, integrated, "system of systems" environment, and as a means to cut waste by reducing the need for detailed application use cases for each separate system. This was regarded as an extraordinary achievement within BZK – it was the first time that requirements had been captured and agreed upon by all stakeholder groups for a program of this magnitude.

Iterative project management enabled the program team to focus the teams, get rapid feedback on progress and quality, address risk, and improve program decision making. Under IJI's guidance the program team introduced additional agile practices including product backlogs, iteration backlogs, planning poker, burn charts, daily stand-up meetings and iteration retrospectives. "We've now made the immeasurable things measureable. The value of that for both the team and management is considerable." Together the new practices enabled the team to take much greater control over the program, and to be able to clearly measure progress by tracking completed use cases slices and other work items in each iteration. The new approach also meant that BZK would be able to manage its suppliers more effectively – sets of use case slices provide neat, self-contained work packages that can be sub-contracted to external development and testing resources. Working iteratively meant that real progress, in the form of tangible, working tested software, could be measured in a very transparent way, for the municipalities as well as the central ministry.

IJI supported the new practices by providing training, coaching, and lean and lightweight practice guidance in a simple card format. This ensured that the project team focused on the essentials and the new practices bedded in quickly and effectively. After the initial success, more teams within the program adopted the new way of working. Over time the teams have become self-sufficient and are still adapting and optimizing their new way of working.

Effecting Positive Change – Coaching People to Selfsufficiency

Although IJI's engagement was originally conceived due to a need for an improved requirements management approach, a much more important goal was achieved during the six month engagement - an improved way of working for the whole program team.

"The biggest improvement was that we could support ourselves within 4-6 months."

IJI were able to quickly identify areas for improvement and recommend simple but effective solutions. We helped to introduce new working practices, supporting the people and helping them to focus on the essentials. The combination of expert coaching and simple, concise practice guidance has enabled the team to become self-sufficient in just 6 months. The new way of working has now spread out across the entire program team of around 60 people and has become their predominant development approach.

"I'm enthusiastic about this approach because it has enabled us to build a kind of "social contract" between all of the team members – the result is that everyone feels truly responsible for the success of the program."

All quotes attributable to Bart-Jan Hindriks, Project Manager, BZK.



About Ivar Jacobson International

IJI is a global services company providing high quality consulting, coaching and training solutions for customers implementing enterprise-scale agile software development.

IJI improves the performance of software development teams by introducing new practices, and removing barriers to their wider adoption.

Through the provision of high calibre people, innovative practices, and proven solutions, we ensure that our customers achieve strong business/IT alignment, high performing teams, and projects that deliver.

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