



Industry:

Public administration

Employees (total):

10 000

Annual budget of the administrative sector:

800 M Euros

ICT budget:

40 M Euros

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”Our ICT systems are the backbone of the Finnish judicial system and a significant part of Finnish democracy. ICT services must steadfastly follow the changes and schedules of legislation. By using the estimating methods that are part of northernSCOPE® together with Certified Scope Manager (CSM) services, we are now in control of our costs and able to manage functional outcomes, schedules and quality of software development better. ”

- Martti Karjalainen, Senior Specialist, Ministry of Justice

The administrative sector governed by the Ministry of Justice includes, e.g. judiciary, prisons and probation services, prosecution services, enforcement administration, legal aid, as well as public guardianship services. The portfolio of computer systems supporting these activities includes approximately 140 applications with close to 11,000 connected workstations. One of the most critical applications is the Election Information System. This system is at the core of Finland’s national election processes. The governance of all personal data in Finland is strictly regulated, and therefore most of the systems must be tailored rather than used “out of the box”. With an ICT budget of 40 million Euros, approximately 20% is spent on software development and 80% is spent to maintain our legacy systems and the IT infrastructure.

Challenges encountered prior to using northernSCOPE®

- Our projects and implementation programs were often in crisis due to cost overruns. The public sector auditor took notice and demanded that we take concrete actions to remedy the situation.
- New requirements typically appeared during the development projects, and the cost to handle them increased the project budgets substantially. In addition, there was inadequate transparency and lack of control over the price estimates provided by suppliers.
- Legislation often dictates both system development project content, and schedules. As a result, this forced us to try to improve the quality of requirements as well as the estimating accuracy and predictability of our software projects.
- Our system development projects were usually very large and difficult to manage.

Solutions using northernSCOPE®

The IT service organization of the Ministry decided to measure the size of the delivered software using function points (FP) as a basis of project estimates. Initially, we had to learn and then apply FP calculations and we needed the aid of a Certified Scope Manager (CSM). Our first concrete results were achieved by estimating the size of additional functions proposed and added to our projects. Today, our use of function points has been expanded so that the FP calculation is a de facto –standard included in our invitations to tenders. We’ve also started including FP pricing in our contracts and this has introduced a mutual language and a new co-operating model between us and our suppliers. By understanding what is to be done in the projects and how big the project is (functional size) has benefited both parties.

Highlights of our achievements

- Maturity of the use of function point analysis and its associated operational methods has evolved from one project to another. Today, pricing per FP is a de facto –standard in our competitive bidding and invitations to tenders. We used it from invitations to tenders throughout all the phases of the development of the new Election Information System.
- We now feel confident in our ability to control program costs. The cost level of the Ministry’s IT development projects (based on price/FP) has decreased to a level of 300 €/FP from its previous level where the prices varied from 500 to 1000 €/FP. We also note that the improvement of delivery efficiency was significant. The use of a Certified Scope Manager has increased the quality of our own requirements.
- Suppliers have positively embraced the new size based pricing model.
- The usage of function points and related pricing will be expanded to include enhancement requests conducted on our legacy systems. We also plan to expand our experience database, and then use it to systematically improve the efficiency of deliveries even further.
- Practically, the use of this new approach means more than 1 million € annual savings in our IT development.