

Development of Trust During Large Scale System Implementation

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EXECUTIVE SUMMARY

Implementations of information systems are complex and problematic with a reputation for being delayed and exceeding budget. A critical factor in implementations is trust in the system, trust in the project and trust between the various stakeholders. This case charts the evolution of trust in the implementation of the Faroese integrated healthcare system and shows how trust relations at various points in the project became difficult, what the causes and consequences of these trust difficulties were, and how they were successfully resolved in the project.

Keywords: Healthcare, Healthcare System, Information System, Information System Implementation, Trust

ORGANIZATIONAL BACKGROUND

The case study described here springs from the Faroese Ministry of Health and Social Affairs and follows the implementation of integrated healthcare information systems.

The Faroe Islands are a self-governing part of the Danish National Community with 48,000 inhabitants distributed across eighteen small islands. They lie in the North Atlantic Ocean between the Shetlands and Iceland with one third of the inhabitants living in the capital, Torshavn.

The Faroese health services differ considerably from the health services in other countries, mainly because of the limited size of the country and the long distance to universities and research-based hospitals abroad. Three hospitals and twenty-seven general practitioners (GPs) refer to the ministry. The general practitioners are in principle self-employed, but work in clinics supplied by the local authorities. They invoice the private sick benefit associations and co-operate with the hospitals. Apart from referring and admitting/discharging patients to and from hospitals, the general practitioners take part in emergency room duties.

The *National Hospital* in Torshavn is by far the largest hospital, with a primary admission area of ~35,000 people and is the secondary admission area for the whole province. Patients may

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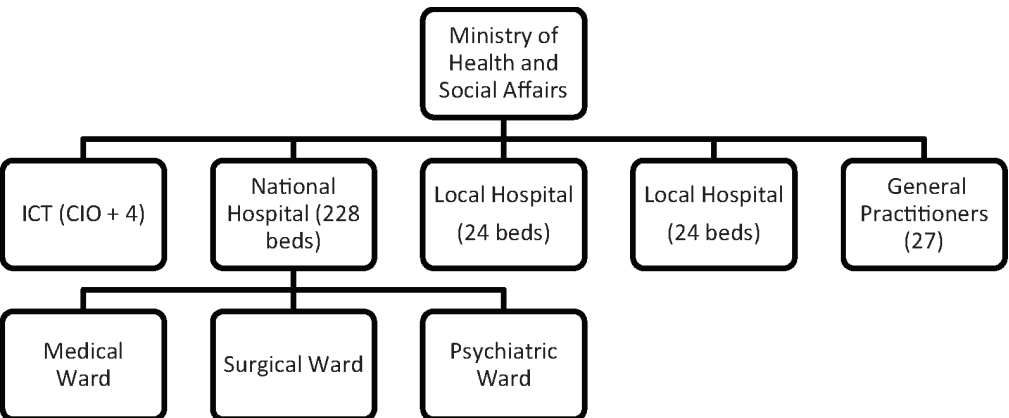
be sent to Copenhagen University Hospital in Denmark for specialized treatment. The National Hospital is organized into four wards with their own doctors, nurses, secretaries, out-patient clinics and beds. Apart from this there are a few departments not attached to any specific wards. The hospital is managed by a “troika” (a board of management: one hospital director, one managing doctor and one matron). It has 228 beds and 625 full time employees of which 40 are doctors. The yearly number of hospitalized patients is about 10,000. See Figure 1. Until the initiation of the present IHIS project the use of information systems in the Faroese healthcare sector has been quite limited. Everyday life in both the wards and the ministry of health has mainly been based on manual routines. Only a very limited group of the nurses, doctors and secretaries was used to or trained in the use of information technology. During the implementation project it came to a rather large surprise to the management how many troubles this lack of training in information technology coursed.

The Ministry of Health and Social Affairs (AHR) has a limited size and hence a limited organizational capacity. At the beginning of 2004 the ministry as such had less than 35 employees including only one person dedicated to work with ICT – a technician working as IT support. The hospitals were also low on IT staff. The national hospital had one IT support officer and one medico technician, and the two small hospitals didn’t have any dedicated IT resources whatsoever. The 3 hospitals and the ministry were at the initiation of the project connected in a broadband network, but no central datacenter was established.

The ministry was highly dependent on external consultants, both for day-to-day issues like maintaining the existing infrastructure and also for delivering more tactical and strategic advice. To manage the IHIS implementation project, the ministry contracted an external consultant as project manager for a period of three years, and by mid-2005 they had employed a Chief Information Officer (CIO) as head of information technology. The CIO has a master’s degree in IT management and came from a position with one of the major suppliers of information systems to the public sector in the Faroe Islands.

In 2000 a discussion arose among consultant doctors and civil servants in the ministry about the possibility of establishing an integrated healthcare information system with the purpose of modernizing and integrating all parts of the Faroese healthcare system. After feasibility studies and plenty of planning, a contract was signed on 3 November 2004 with a supplier of Integrated Healthcare Information Systems (IHIS). The implementation project was by far one of the large-

Figure 1. The Healthcare organization



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