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RECOVERING FROM TRUST BREAKDOWNS IN LARGE SYSTEM

IMPLEMENTATIONS

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Abstract

On the basis of experiences from the Faroese large-scale implementation of integrated healthcare information systems and insights into dynamic aspects of trust, we offer the following lessons learned for the successful management and recovery of trust (breakdowns) in large system implementations: restore relations by turning towards face-to-face events and procedures, assure a well-functioning and available support organization, demonstrate trust in actors to enhance their own self-confidence and celebrate successes, even the smallest or ones injected by yourself. The propositions are based on a 6-year longitudinal qualitative case study and analyzed using critical incidents and content analysis. The propositions were discussed in a seminar with project participants. Finally the findings are challenged and sharpened and suggestions for further research are given.

Keywords: Trust, Implementation, Breakdown, Recovery, Prescriptive findings, Healthcare

1   INTRODUCTION AND RESEARCH METHODOLOGY

Aspects of trust during information systems implementation projects have been recognised as important and the presence of a high level of trust among project participants is seen as a critical success factor that must be fulfilled to reach the goals of the project (Gefen, 2004). Even though many authors have addressed what trust is and the consequences of a lack of trust between actors, not many have included trust relations between actors and the project as such – and even fewer have been prescriptive, giving actual recommendations for how to recover from trust breakdowns. On the basis of an analysis of the dynamic aspects of trust during a major Faroese implementation of an integrated healthcare information system (IHIS), it is concluded that it is beneficial to take direct action to meet three criteria: to focus on how to keep the project in a trustworthy state; to take actions to let actors meet face to face or face a relevant version of the IT system; and to keep the actors' self-confidence on a high level.

The paper will develop a number of prescriptive pieces of advice on how to recover from trust breakdowns in large implementations of information technology systems. The paper is organised as follows. After the research approach the context of trust (breakdowns) is presented by recapitulating fundamental aspects of trust, by introducing the case and by accounting for three incidents of trust breakdowns and recovery, thus classifying the incidents. Then the incidents are analysed, which leads to the prescriptive advice and a recommendation for how to identify trust breakdowns and initiate the related recovery actions. The final section concludes with some implications for future research and practice.

As trust perceptions are subjective phenomena this study follows an interpretative qualitative approach (Walsham, 1993). The study was based on a systematic data collection strategy that included multiple data sources, semi-structured data collection and electronic data recording and transcription. It relied on 3 empirical sources: participant observation, individual semi-structured interviews with all levels of the organisation and document studies. In this longitudinal study 17 actors, selected to represent the principal

IHIS project stakeholders, were interviewed twice a year from the summer of 2005 until early 2009 to balance frequent collection of interviews with practical needs for clustering interviewing around fixed point in time – and for convenience due the efficiency. The first slice of interviews was done just after signing of the implementation contract before the actual implantation commenced, where the last slice was done during the final implementation of last ward at the main hospital. By using a longitudinal approach it is possible to follow the development of trust over time.

The empirical analysis was conducted in a three-stage process using content analysis (Krippendorff, 2004), supplemented by critical incident analysis (Flanagan, 1954). The first stage aimed at developing an understanding of the empirical materials through the lens of modernity and trust (Giddens, 1990; Schlichter & Rose, 2009), while the second stage was concerned with understanding the dynamic elements of trust in the specific context (Strauss & Corbin, 1994; Schlichter & Rose, 2009). In the third stage, which is reported in the present paper, normative aspects from the theory of critical success factors (Francoise et al, 2009) structured the formation of prescriptive recommendations (Gregor, 2006) for how to recover from trust breakdowns. The recommendations were challenged and structured during a workshop with academics and practitioners from the case organisation in late March 2010.

Figure 1: Methodology

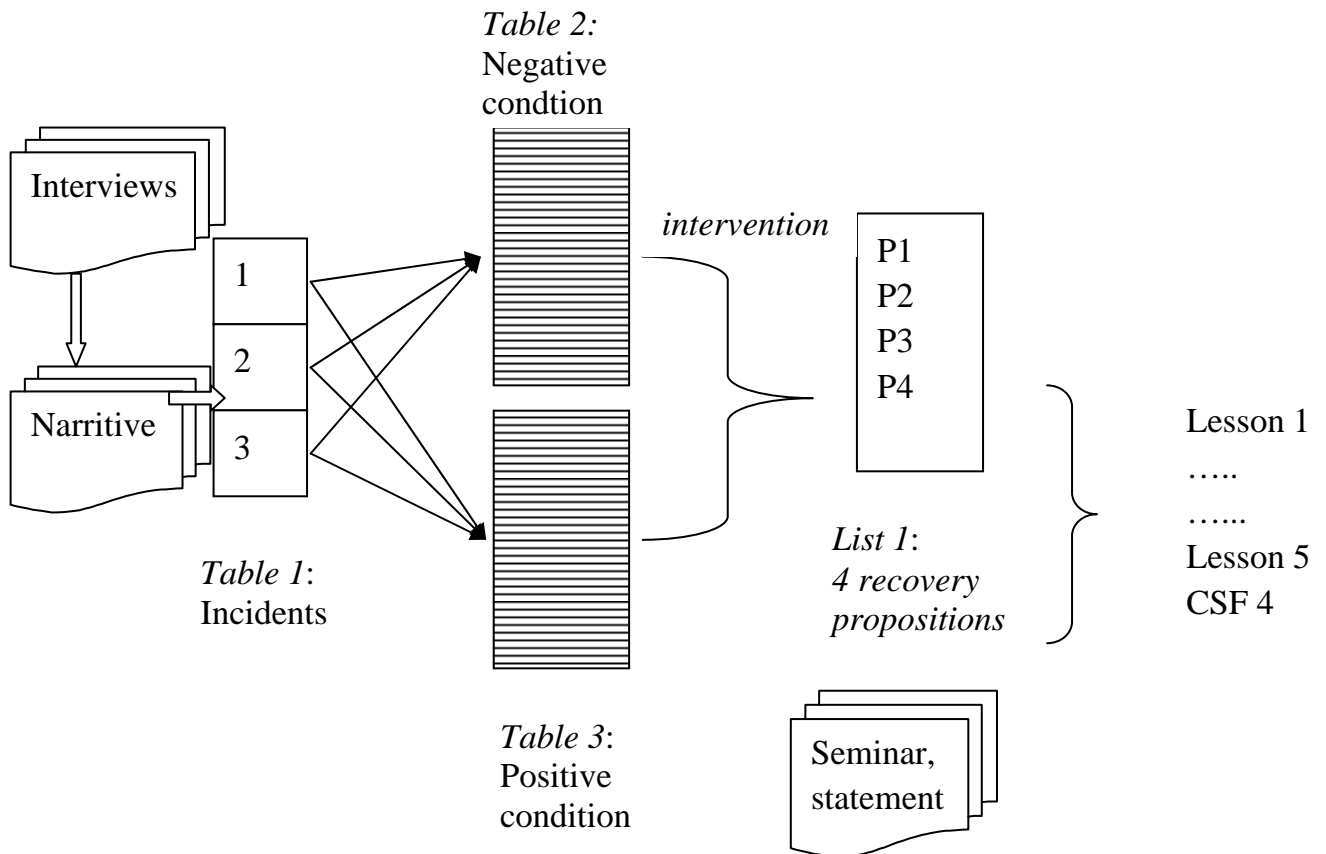Figure 1 above provides an overview of the methodology used in the paper. Based on more than 50 *semi structured interviews*, *participant observation* and *document studies*, the *narrative* of three trust breakdowns were written. The breakdowns are summarised in table 1: "Incidents". By reading the narrative, positive as well as negative trust conditions and consequences were identified (and "marked" with a letter to assure

forward and backward traceability) and placed in tables 2 and 3. Then the *interventions* used to "change" ("recover" from) the negative to the positive trust conditions were identified in the narrative. The narrative, the related trust conditions and consequences and the interventions were then presented and challenged at a seminar with a broad representation of actors leading to feedback consisting of more than 30 comments and suggestions. Finally 4 propositions for trust recovery were derived from the analysis.

2   THE CONTEXT OF TRUST

The author was involved as an observer when the project was planned and during the full implementation period from 2005 until 2010. The main purpose of the involvement was to understand and identify what trust was in this context and how dynamic aspects of trust could be explained. Even though the implementation project faced huge problems, the management succeeded in achieving the goals and the IHIS is now (spring 2010) fully functional in both the primary and the secondary healthcare sectors. In the following text three incidents in which the project was challenged by declining levels of trust are described.

A letter in parentheses, e.g. "(A)", indicate a point in the text to which reference is made at a later stage during the analysis, where (letters+number) refers to interviews done:

CD:	Consulting Doctor	nn:	Interview Number
NUR:	Nurse	PM:	Project Manager
CIO:	Chief Information Officer	DM:	Deputy Minister
HD:	Hospital Director	GP:	General Practitioner

2.1   Trust

Trust studies are a well-established part of the information systems literature and play an important role in three principal enquiry domains:
- eCommerce; customer's trust in the vendor is understood to be an important factor in the decision to buy
- virtual organizations, teams and communities; trust between individuals is influential in the collaboration relationship
- inter-organizational systems; organizational co-operation is dependent on trust

The presence of trust is widely understood as a critical success factor (CSF: Bullen & Rockart, 1981) for the achievement of the successful implementation of information systems (Somers & Nelson, 2001; Akkermans & Helden, 2002; Sun et al, 2005; Schlichter, 2010).

Trust can be understood as
- a process (Komiak & Benbasat 2008); it can be established, built, lost, regained over time;
- an individualized continuum. This means that trust levels can vary (trust can break down and be restored), and that individual actors can have different trust levels at the same time (Schlichter 2010) or
- as trust in an organizational system (Lowe and Locke 2008).

According to Gefen (2004), trust (in the context of an implementation project) is 'the belief that others upon whom one depends, yet has little control over, will not take advantage of the situation by behaving in an opportunistic manner but, rather, will fulfil their expected commitments by behaving ethically, dependably and fairly, especially under conditions involving risk and potential loss'. Trust is furthermore shown to have positive consequences by having influence on co-operation and commitment between actors (Rajiv 1999; Salam, Iyer et al. 2001), reduces complexity (Lander et al 2004) and is crucial to establishing positive results during implementation (Scott and Kaindl 2000; Somers and Nelson 2001; Lander, Purvis et al. 2004; Wang and Chen 2006). Trust is 'important for ERP customization clients in determining their assessment of the relationship with the vendor, because the customization of such complex software typically entails vulnerability and dependence on the vendor'(Gefen 2004,p266) . Successful implementation of ERP systems

'requires a corporate culture that emphasizes the value of sharing common goals over individual pursuits and the value of trust between partners, employees, managers and corporations' (Somers and Nelson 2001). The consequences of lack of trust can be severe; as problems and delays mount, trust relations become strained - leading to a circle of suspicion and disbelief which is both destructive and hard to break out of (Gefen 2004; Nah and Delgado 2006; Schlichter & Rose 2009). When trust does not exist in an implementation project, much effort must be directed into control, regulation and documentation.

The understanding of trust in this literature is also primarily taxonomic - trust is a property with different facets or categories. Trust is deterrence-based, knowledge-based or identification-based (Lander et al 2004); process-based, characteristic-based or institution-based (Gefen 2004); mutual, cognitive or swift (Scott and Kaindl, 2000). If trust is an important component of implementation success, but absent, then trust should be created. Various mechanisms for establishing trust are considered, including initial interactions, integrity, predictability, communication, sharing control, concern for others, joint identification, commitment, potential for success, and managerial decisions (Lander, Purvis et al. 2004). Trust can be built up with intensive communication, coaching, delegation of responsibility, personal care and attention (Jarrar, Al-Mudimigh et al. 2000). Building trust quickly in temporary project situations is considered important (Lander, Purvis et al. 2004), and customization companies need to behave responsively and to act in accordance with their clients' expectations (Gefen 2002). The present paper develops concrete recommendations on how to re-build trust.

2.2 The Faroese IHIS project

This section presents a narrative of the case. The narrative is a synthesis of all the existing documents and interviews and has been through a set of discussions both among the authors and during reflective meetings with the actors interviewed, leading to revisions. Letters in parentheses indicate a reference to the trust conditions and consequences in tables 2 and 3.

The Faroe Islands are a self-governing part of the Danish National Community with 48,000 inhabitants distributed across 18 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. In total 3 hospitals and 27 general practitioners (GPs) report to the Ministry of Health. General practitioners are self-employed, but work in clinics supplied by the local authorities. They invoice private sickness benefit associations and co-operate with the hospitals. Discussions about establishing an integrated healthcare information system, with the purpose of modernising and integrating the Faroese healthcare system, began in 2000. A contract with a supplier was signed on 3 November 2004, after feasibility studies and planning. The project was discussed in the Faroese parliament, and the involvement of local IT firms sought. The implementation project is one of the largest IT projects ever in the Faroese public sector, involving the complete healthcare system throughout the community. Implementation commenced in January 2005, with completion planned for the end of 2006; however, the project ran into difficulties and has been rescheduled several times. In March 2010 it was expected that the IHIS would be in use in all 3 hospitals and by all the GPs.

The ministry contracted an external consultant as the project manager and in mid-2005 recruited a Chief Information Officer (CIO). A project charter and group were established, and a series of information and configuration meetings were held. Two pilot wards configured and installed the IHIS, and under the guidance of the supplier's project manager, the core system was finally configured during the spring of 2006. A major roll-out was planned. In the second half of the year the surgical ward succeeded in configuring parts of the system to its needs. In early 2007 the IHIS was implemented in the emergency ward at the National Hospital, where GPs could experience it, and a few adopted it in their own practices. In September 2007 the core system was formally taken over by the Faroese healthcare authorities and a party was thrown to celebrate (U). The ministry bought a laboratory information system, a blood bank system and a digital x-ray system to be integrated with the IHIS system.

A full account of the case is given in Schlichter (2010).

2.3 Incidents

The initiatives occurred in different parts of the implementation project. The differences were analysed to understand each initiative's unique profile regarding breakdown and recovery, and named to illustrate the main problems to handle.

2.3.1 Challenged workshops

One of the first activities in the implementation project was a series of configuration workshops with the participation of healthcare professionals (doctors, nurses and secretaries), representatives from the project organisation (project managers and technicians) and consultants from the supplier. The purpose of the workshops was to provide the Faroese staff with an initial understanding of the IT system's structure and capabilities, to perform the initial configuration to localise (B) the system to the Faroese healthcare structure and to create a foundation for the specific implementation and set-up at the individual wards and other organisational structures. The workshops brought together many of the important actors from the project.

However, not all of the workshops were regarded as suitable for bringing the project forward by the local actors. The workshops neither led to the desired result nor were executed in an effective manner: "it was not all workshops that worked – often we missed healthcare insight by the consultants" (CEO-19).

It was claimed that the consultants did not have sufficient healthcare background (A), that they were un-prepared and that they mainly had a technical background. However, it was also recognised that the users participating in these workshops had a very low insight into the nature of information systems (A): "They did not have any knowledge of computers – only been on a very short introductory course" (NUR-21) and it seemed that a very large amount of configuration was needed (B). These issues led to workshops where the Faroese actors could not understand what was going on (A), and were ready to leave the project because they could not see how the goals of the project could ever be reached with the amount of resources allocated to the project (D): "I believe this requires more resources than available – and foreseen" (HD-24).

During the workshops major part of the actors also questioned the IHIS's influence on issues such as privacy and security, but received no actual feedback on these issues (E): "A lot of rumors were around about lack of privacy and security – could a reasonable level be reached?" (PM-20). The IHIS as such also seemed unstable and difficult to use (C) with no assistance (helpdesk) available: "… everything gets registered in the journal – it is not at all to understand …" and "we do not know where to get assistance easy" (CD-22).

After a couple of less successful workshops the supplier decided to change the approach of the workshops, firstly by appointing consultants with healthcare experience to manage the workshops (Q) and secondly by letting their own consultants take care of a larger part of the initial set-up than planned (O, R). At the same time a CIO was appointed for the first time to head the information systems in the Department of Health. One of the first actions by the CIO was to agree with the supplier to establish a so-called "sandbox" (O, Q), where the future end-users could try to set up and configure an almost fully functioning replica of the IHIS, thus being able to become acquainted with the system by working with a "real" IT system instead of only abstract paperwork (P, R).

2.3.2 Slow progress

After the successful recovery from the initial workshops the hard work began to configure the IHIS according to the actual situation and (maybe) re-engineer the working procedures at the wards. Based on what was learnt by super users (representing the end-users) and a few centrally placed IT people during the initial workshops, the idea was that the actors on the Faroese side of the implementation project should be able to configure the information system themselves with only minor support from the supplier. They should "work on their own", which was more difficult than foreseen (G); it was especially difficult to match (or adapt) the built routines of the IHIS with what was actually happening on the wards: "We have worked a lot to configure the system and it was an enormous effort to match the system with our processes" (CIO-33).

During the delayed process of configuration some issues emerged. First of all it now seemed impossible to finalise the implementation of the first wards according to the planned schedule (F). Next the group of actors performing the configuration also found technical problems ("bugs") in the software (C) and mismatches between the software delivered and the requirements from the contract (B), especially related to privacy issues (E) and payment procedures (G): "My main requirement as GP was to be able to issue invoices and prescriptions but I have had problems to communicate with other users, system failures, crashes and so on" (GP-14).

When the group experienced these problems they could not gain timely assistance since no support organisation was in place (C). The supplier claimed that the only way to solve these issues was to upgrade the standard software to a new version, leading to the often-seen problems when upgrading software during an implementation process. The stressful mix of discussions on who should pay for the costs related to delays (F) and upgrades and the heavy delay to the project caused (F) worried discussions among all the actors on the future of the project; had the authorities entered a project that could be neither finalised nor fully financed (D)? "It is factual that the project is though for the participants. For this reason you can feel fed up with it; that it goes on forever and no results are met" (PM-31).

All these issues called for heavy actions to re-establish trust among all the actors. The executive management decided to take a "time out" and a meeting was set up in Denmark with the participation of the project managers and lawyers from the parties, an external consultant and deputy directors (O): "It was a nice meeting. I felt the air was cleansed and the process revitalized. Some results were the question of up-grade and who should pay for extra work" (DM-028).

As a result of the meeting the suppliers' project manager was replaced with a more experienced person who had also been a part of the initial pre-analysis phase; a full-time configuration consultant was deployed to the Faroe Islands for a period of time; and principles of the issue of splitting the cost were agreed. During her stay the configuration consultant was able to balance the IHIS to the professional needs of the end-users (Q, P). The deployed consultant took part in the initial phase to set up a local support organisation with related procedures (R): "… she [the consultant] took leadership in the configuration and to set up procedures related to maintenance, support, helpdesk and so on" (PM-043).

2.3.3   Squeezed core actors

With assistance from the configuration consultant the full span of the core parts of the IHIS was in place. The Faroese healthcare authorities now had an IHIS fully localised in their own organisation and ready to be implemented at the different wards. The core configured system was formally tested, accepted and taken over, which was celebrated (U) by speeches and partying: "… earlier this year we took over the system because we have got the deliveries bought. We showed our joy by a huge party – the participants reacted quite positive on this" (CIO-33).

A new group of coming end-users (super users) was now activated to act as local representatives in the ongoing implementation process (T).

As almost all the wards (and specialities) were now activated, the workload of the Faroese project manager became greater and greater (D). The project manager should also take care of the more technical aspects of the implementation, such as the IT infrastructure as well as supervising the high number of locally placed super users (I). The super users felt squeezed between their (normal, daily) roles as nurses and secretaries and being a formal part of the project organisation (H): "… yes, the relations are worn. The originally group is gone, exists no more. The new group has to be trained. That's a huge task – and suddenly one more shows up" (NUR-42).

Both the PM and the super users felt that the workload and the amount of conflicts (I) were far too high and lost their trust in their own abilities to fulfil their obligations. This was underpinned by the fact that the funding for compensating the end-users for their participation in the implementation project was quickly fading away (D). It was in this period of time that the end-users really experienced the new IHIS and how the implementation of it formalised and institutionalised the life at the wards (J) and that the end-users

experienced problems and flows in their daily use of the IHIS: "… it is a natural part of the implementation process. They have to decide on changes in workflows. Some will have to spend more time before the screen, some will face challenges to change into something unknown as flows disappear and new are established" (CIO044).

During this phase of the project the PM resigned and a major part of the super users decided to cancel their participation in the implementation.

The situation was once more serious and something had to be done to rescue the project. A new time out was taken during which the project was heavily rescheduled, new funding was granted and a new PM with experience of working with organisational changes and development (O, Q) at the hospital was hired. Also, it was decided to employ new super users (P, T) in the project and physically place these in the Department of Health together with the other IT staff and central parts of the implementation project (H,O,T): "They [the project staff] were moved up into the Department of Health. Four coordinators in all – they became an integrated part of the project implementation organisation. Actually this led to more resources and a more agile organisation" (CIO-44).

The centrally placed staff began to celebrate their progress at their morning breakfast meetings each time they made progress together with end-users and when they reported progress to the steering committee (U).

2.4   Consequences of breakdowns

Table 1 accumulates the immediate observations of breakdowns and the actual actions taken in the project seen in the text above. For each of the three incidents we show what was observed, the action taken by the project and which aspect was in focus during the actions.

Table 1: Three trust breakdown incidents

Incident	Observation	Action	Focus on
(1) Challenged workshops	Inexperienced consultants IT system not really ready for configuration	Consultants replaced Sandbox established	Actors' satisfactory meeting with the project
(2) Slow progress	Lack of functionality Only minor progress of configuration Dispute regarding payment of "extras"	Core IT system upgraded Consultants deployed Meeting among managers arranged	Maintain momentum Save the project The "effective" project
(3) Squeezed core actors	Core participants squeezed between roles and feeling lonely at wards Very high workload and doubt regarding roles and own qualifications PM resigns	Place core staff together Establish meetings at wards Reschedule to a realistic plan Employ a PM with hospital experience	Deteriorating self-confidence of the project manager and other central staff

3   THE CONSEQUENCES OF TRUST CONDITIONS

Above we saw examples of incidents in the project related to the breakdown of trust. Different situations of breakdowns and recovery actions were presented. To identify explicitly the consequences of the breakdowns, the interviews were analysed to locate statements and stories related to the three breakdowns. For each incident we identified and consolidated the negative trust condition (understood as the qualities of the situation observed) and the consequences of the negative trust condition. Please refer to table 2 below.

Table 2: Negative trust conditions and consequences

Reference to the actual incident	Negative trust condition	Negative trust consequence	Reference in text to "incidents" from the case
1	IT immaturity amongst users and/or low insight into the actual IHIS or Faroese context by the consultants	Suspicion of the new system, insecurity, unwillingness to collaborate	A
12	Standardised IHIS built for a different context and needing much configuration	Lack of confidence in the system and system supplier, forced work practice changes and workarounds	B
12	Usability and operational difficulties with IHIS	Lack of confidence in the system, slow learning curve, work disruption	C
123	Resource shortages	Lack of confidence in the achievement of project goals	D
2	Greater transparency of digitalised information in IHIS	Worry about accountability, privacy, surveillance	E
2	Project delays	Lack of confidence in schedules and deadlines, lack of a sense of urgency in the progressing project	F
23	Dissatisfaction with implementation by users	Breakdown of project staff morale	G
3	Absence of a prior relationship between IT professionals and users	Need to establish trust relations, limited social capital, limited tolerance of divergent viewpoints	H
3	Many diverse stakeholder groups	Communication difficulties, interest conflicts, cognitive overload especially for project staff	I
3	Formalisation and institutionalisation of work practice and documentation (medical journals)	Suspicion of management control, insecurity over own practice, adaptation and change difficulties	J

From table 2 it can be seen that a specific trust condition (e.g. "resource shortages") can relate to more than one incident of trust breakdown.

Table 3 below provides a list of positive trust conditions and related consequences as seen after trust was re-established in the three trust breakdown incidents. References are given to: 1) the negative trust condition(s) that is (are) "solved" when the positive trust condition is achieved and 2) the text in the narrative where the positive condition can be located.

Table 3: Positive trust conditions and consequences after intervention and related to negative trust conditions

Negative trust condition	Related positive trust condition after intervention	Related positive trust consequence	Reference to case
A C E I	Increase in the quantity and quality of personal contact with and between actors	Better communication between stakeholders with diverse interests, increased social capital	O
A E J	Many opportunities for users to experience the IHIS	Confidence in own ability to understand and negotiate the system and incorporate it into own work routines	P
B G J	Emerging work benefits through the use of the IHIS	Confidence in the system's ability to contribute work advantages that outweigh the teething troubles and start-up difficulties	Q
A C F	Rapid and flexible response to user support	Confidence in the project group's ability to know and hear users and act on their behalf	R
BC	Tailoring of IHIS to users' work routines	Confidence in the project group's ability to understand local medical work routines and adapt the system accordingly	S
D F H	Restructured and better-resourced project organisation	Internal project confidence and role security, better communication with users	T
D G	Repeated small project successes	Confidence in the ability of the project to meet its goals, despite setbacks and delays	U

4 THE MANAGEMENT OF TRUST

The Faroese implementation project survived the five years of struggling and managed to recover many times from serious trust breakdowns. Many reasons exist for this. Our analysis suggests, however, that substantive parts of the breakdowns could have been avoided by being proactive and adopting more appropriate recovery tactics at earlier points in time.

The narrative of the Faroese IHIS implementation project, including the observations of negative and positive trust conditions and consequences (as documented in tables 2 and 3), was presented in a half-day seminar in March 2010. The seminar had the participation of representatives from hospital management, doctors, nurses and secretaries as well as high-level management from the Ministry of Health (cabinet minister, deputy minister and department chairs) and from the supplier. During the seminar the participants developed more than 30 recommendations for concrete actions to be taken to move from a negative to a positive trust condition in the presented trust breakdowns. By critically reading, analysing and discussing the narrative and the recommendations, 4 propositions on how to recover from trust breakdowns emerge. For each proposition the related set of actions is shown with supportive citations from the seminar.

The first proposition is about how to (re-)establish better communication and achieve internal project confidence and role security:

(1) When trust disappears or is reaching a low level arrange physical face-to-face meetings and re-establish trust by physically placing core team members in the same location.

As we see in the case, trust in the successful completion of the project can often be restored be letting the actors meet face to face around project activities (references O and T in the narrative). During the seminar many statements such as: "Let them work together and meet each other" and "Let the resource persons from the initial implementations stay within the frame of the project to learn and develop themselves" were given by high as well as lower management.

The second proposition addresses the question of support to the people's participation in the implementation project.

> (2) The actors should meet and use realistic data and procedures in the system from their first experience with it and must continuously have access to a support organisation where they can gain qualified help at the level where they are at that specific moment in the project.

When the actors have good experiences of using or meeting the information technology system as such, an effective base for the re-establishment and maintenance of their belief in the success of the implementation project is present (references O, P, Q, R and T in the narrative). Especially actors from the wards stated that when the project came into trouble it was very beneficial for their level of trust that the project management began to focus on support and on being realistic in their talks about the project. One nurse said: "Actually provide support timely to configurators and users" and another urged the management to: "Be realistic – also during set-up, test and regarding data".

The third proposition relates to the demonstration of trust in the actors and hence their self-confidence.

> (3) Take direct action to establish a high level of trust in and around an implementation project. Show and demonstrate trust in the actors. Do not overly pin-point, disclose and discuss problems with all the actors. Actively work to ensure the actors believe in their own capability to complete their tasks. Train and educate actors continuously.

An implementation project anchored in an environment with a high level of trust is effective. When the actors' trust in the project turns to mistrust or reaches a low level several things happen: since initiatives to overcome the mistrust are taken overheads are introduced. The implementation project as such becomes less able to cope with actors not physically or mentally close to each other, thus being less effective (references T and S in the narrative). The top management said, "Believe in the project, also in troubled times" and explained the positive experiences when "The directors talked positive about the project". However, also in the present situation the local actors urged the management to "Be 'open' about problems" and to "Arrange frequent meetings face to face among users, suppliers and project team" to support their belief in their own abilities. One group stressed: "Remember to educate super users and configuration team, also when in trouble".

The fourth proposition looks at the concept and importance of success:

> (4) Constantly highlight and even inject frequent small successes. Remember to celebrate successes.

When actors experience frequent small successes during the implementation project their trust in a successful implementation is partly maintained and their self-confidence is reinforced (reference U in the narrative). "We need to stage and celebrate successes", as some department managers said.

5   CONCLUSIONS, LIMITATIONS AND FURTHER RESEARCH

During the present analysis we have established a set of lessons learned on how to recover from the breakdown of trust during an implementation project by analysing the actions leading from negative conditions to positive trust conditions. The lessons learned (formulated above as propositions) can be reformulated as concrete actions, which when applied will greatly enhance the chances of reaching the goals of the project when in a situation that is challenged by a breakdown of trust:

1. Introduce, increase and maintain face-to-face events and procedures

2. Establish (or enhance) a well-functioning support organisation

3. Assure that the support organisation is always available when needed

4. Demonstrate trust in the actors to enhance their self-confidence

5. Celebrate successes, even the smallest or ones injected by yourself

In this paper we have
- Augmented existing literature by showing the relations between the lessons learned and the negative trust conditions they can assist in solving.
- Provided recommendations for practice for project managers and alike.

The study presented in this paper stems from a single longitudinal case study. We claim that the findings are a valid of example "generalisation to theory" (Yin, 2003), which can be understood as a combination of "theory building" and an "other settings" generalisation. The internal validity has been secured by a strict system of coding and reference points. The case presents a typical implementation of an information system in a complex but quite well-known setting: a National Health Service set-up. The study is a unique longitudinal case covering the entire healthcare system in a country. Furthermore, the constructs analysed in the case – trust and the recovery of trust – are not different from those seen in other settings; the only real challenge we have identified is related to cultural aspects and the fact that the case is from an island-based community that may have its own norms and ways of handling trust. For these reasons it could be interesting to broaden this single case study to other situations and cultural settings, or even to focus on cultural-based differences of trust relations.

A natural step forward from the formulation of these four critical success factors would be to develop a methodology for measuring the level of trust formally. It would be useful to offer this as a "tool" such that the project manager can identify problematic issues and apply guidelines from the recommendations above (Tschannen-Moran & Hoy, 2000). It could also be interesting to investigate or test the actions' relative importance or impact in different environments.

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