Implementing IT Service Management as an Organizational Change: Identifying Factors Affecting the Change Resistance

Marko Jäntti, Sanna Heikkinen School of Computing University of Eastern Finland Email: {marko.jantti, sanna.heikkinen}@uef.fi

Abstract-When an IT organization decides to launch an IT service management programme, the discussion among employees after the decision is not always positive. New concepts, tools, roles and responsibilities and methods, as well as changes in strategy and culture may cause remarkable amount of change resistance among both employees and managers of a software company. Organizational change management is a fruitful research topic due to its challenging nature. It addresses employees' feelings, success factors of implementing strategic changes, role of change agents and factors affecting change resistance. In this study, we examine the IT service management programme as an organizational change and change resistance related to this change. Our research focuses on identifying symptoms of change resistance related to adoption of IT service management best practice framework IT Infrastructure Library (ITIL). The research problem of this study is: How does change resistance occur in IT service management programmes and how can it be decreased systematically? The main contribution of this paper is to present findings collected from five Finnish IT service provider organizations operating in different domains.

Keywords—IT service management; organizational change; change resistance.

I. INTRODUCTION

Transition from a software engineering company with software lifecycle models to a service oriented company with well-established IT Service Management (ITSM) processes and tools is a long journey that involves numerous challenges. Thousands of IT organizations world-wide use IT service management best practice framework IT Infrastructure Library (ITIL) in their service operations and globally, there are over million ITIL certified IT specialists. Despite the existence of ITSM best practices (ITIL [1], COBIT [2]), standards such as ISO/IEC 20000-1:2010 Part 1: Service management system requirements [3], maturity models and operational IT service management models, carrying out an IT service management programme successfully is a real challenge. The literature has shown that most major change initiatives (not only IT-related) seem to fail in the organizations. This has resulted in a need to examine how organizations can implement organizational changes successfully. There are strategic changes, such as changes in strategic technology platforms, changes related to service portfolio and changes in relationships between the service provider and strategic suppliers. IT changes, in turn, occur when somebody adds, modifies or removes IT services and their components. Often, there is no need to distinguish a strategic change from an organizational change because typically organizational changes are strategic changes.

One of the most famous persons related to the research field of organizational change is Kurt Lewin [4]. Lewin has proposed several important concepts of managing change such as action research, field theory, group dynamics and three step model of change. Lewin has presented a cyclic action research model that can be used to implement change. As a research method, action research emphasizes the role of actions taken during the research process. The method has been criticized with claims that it provides results that cannot be generalized to other organizations. Lewin applied a field theory for examining the human behavior. According to the field theory, the human behavior is related to both person and their environment. The concept of group dynamics refers to the Lewins finding that a group affects individual behavior while making decisions on organizational change.

In order to keep ITSM programme sustainable and live, one can apply organizational change models such as three step model of change. Three step model of change consists of three key stages: unfreezing, change and refreezing. During the first phase (unfreezing), one should ensure that the need for the change is understood in the organization and people desire the change. In other models, this is called creating urgency of change. During the second phase (change), a change is implemented by introducing, for example, creating new policies and procedures in the organization or communicating new values or attitudes to people working in the organization. In the third phase (refreezing), the focus is on reinforcing and supporting the change. The three step model of change addresses that organizational commitment must occur not only during the change but also before and after a change. In the ITIL framework, programmes that aim at continuous improvement of services are called Continuous Service Improvement Programmes (CSIP). CSIP is an ongoing formal programme undertaken within an organisation to identify and introduce measurable improvements within a specified work area or work process [5].

Only few academic studies have addressed the organizational change perspective in implementing IT service management programmes. The study of Tan, Cater-Steel and Toleman [6] emphasizes the role of the committed senior management in the ITSM projects success, as well as the role of a project champion and the recognition of the need for an appropriate change management strategy. Additionally, in the study of Pollard and Cater-Steel [7] key success factors of ITIL implementations included top management support, training, virtual project teams, careful tool selection and use of external consults. Additionally, there are studies that have focused on conceptualising the ITSM projects [8]. The literature of organizational change management deals with the concept of change agents. Ford et al. [9] discuss how change agents may affect the resistance of change. They comment that change agents can participate in change resistance from their side by not legitimizing changes, misrepresenting changes and not calling for action (carrying out required actions). First, legitimization of changes refers to the action where change agents provide justification for changes, presenting clear rationale why the change is needed in the organization, and enhance the readiness for change adoption as well as increasing the likelihood of change acceptance. Legitimization of an ITSM programme might be, for example, a statement of required cost savings. Additionally, one should pay attention how fast change shall be adopted and what is extent of the change acceptance. The schedule plays an important role for example, when two IT service providers have agreed on merger by specified date.

Furthermore, Ford et al. [9], present that change resistance should be seen as a resource instead of a negative issue. Three types of value can be identified: existence value, engagement value, and strengthening value. Existence value means that change agents are able to keep conversation on change active and may also attract new members to participate in discussion. Conversation on ITSM programme may be started from service desk workers and then extended to other service areas. This conversation helps change agents to increase their understanding of the change. Engagement value can appear when change recipients engage in the change, for example, when they feel that the change will affect them negatively or when they are afraid of the organizations success. For example, a product manager engages in creating service catalogues because he/she feels that management does not understand the role of his / her product within the product portfolio. The strengthening value of resistance means that a conflict may strengthen recipients commitment on the change. A conflict could be, for example, a nature disaster or finding a common enemy, such as a tough competitor.

A. Our Contribution

The main contribution of this study is to study

- How change urgency related to ITSM programmes is communicated in the IT service provider organization?
- How IT service provider organizations introduce changes related to ITSM processes?
- How does change resistance occur in IT service management?
- Which methods are used by organizations to decrease the change resistance?

As results, this study provides new scientific knowledge on means how ITSM-related change urgency is communicated within an IT service provider, actions how organizational change is introduced, evidence on how change resistance occurs and methods how change resistance is decreased. The results of this study can be used by continual service improvement managers, ITSM programme managers, portfolio managers, service directors and other managers and team leaders responsible for introduction of ITSM processes. The remainder of the paper is organized as follows. In Section 2, the research methods of this study are described. In Section 3, the results of the study are presented. Section 4 is the analysis of findings. The discussion and the conclusions are given in Section 5.

II. RESEARCH PROBLEM & METHODOLOGY

The research problem of this study is: How does change resistance occur in IT service management programmes and how can it be decreased systematically? The research problem was divided into the following research questions:

- How change urgency is communicated in the organization?
- How IT service provider organizations introduce changes related to ITSM processes?
- How does change resistance occur in IT service management?
- Which methods are used by organizations to decrease the change resistance?

A. Data Collection Methods

Data was collected from five IT service provider companies in Finland. Companies operated in various business domains (healthcare, energy, miscallenous services, bank and insurance). These organisations were selected for this study because they were representative cases of IT organisations with many year's experience in ITIL and ITSM. The following data collection methods/sources were used during the study:

- Documentation (ITSM process descriptions)
- Archives (incident records, change request records, service request records, email records)
- Interviews/discussions (service managers, directors, development manager, product/service managers)
- Participative observation (ITSM Awareness training periods in two organizations)
- Physical artefacts (Organization's intranet, ITSM tool)

We used case study research and action research [10] to collect the data on IT service management improvement programmes and service management process improvement. According to Yin [11], a case study is "an empirical inquiry that investigates a contemporary phenomenon within its real-life context". We used an exploratory case study with multiple case design. However, we decided to keep organizations and roles of respondents anoymous because it might be relatively easy to combine a person to a role and because organizational change management issues can be tricky and sensitive issues within the organization. Results of the case study resulted in change resistance-related information as by-product. Action research was used because suits well to the studies of organizational change.

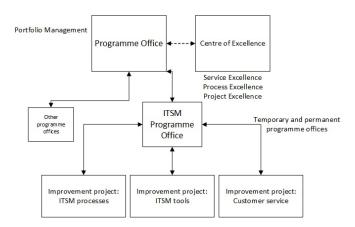


Fig. 1. Implementing ITSM Programmes

B. Data Analysis

The data of the case study were collected and analyzed using a within case analysis technique [12] that focuses on analyzing each case stand-alone before making any comparisons. Research findings were validated through discussions, seminars and workshops with the representatives of case organizations. In each case, the research team produced a case study report which was delivered to the case organization's contact persons. A qualitative content analysis technique was applied for case study material to build categories based on the comments from IT service provider organizations' managers and employees.

III. ITSM PROGRAMMES AS ORGANIZATIONAL CHANGES

In this study, we apply Lewins three step model of change and its phases (unfreezing, change and refreezing) to organizational changes where the context of change is adoption of IT service management process frameworks (IT Infrastructure Library) and service management standards. In unfreezing phase, we should first identify what is the rationale behind the change, what are the clear benefits of change, how to communicate the urgency of change to employees and managers of the IT organization and how to identify skilled and motivated change agents. Figure 1 shows an example of how ITSM programme could be implemented.

The change management model of Lewin is a very useful tool for organizing the findings from IT service provider organizations change efforts. During the study we observed that the change urgency related service management improvement is created in IT companies by addressing customers or owners need for a change or bottlenecks in the current IT infrastructure. The case organization's representatives reported following factors that triggered the adoption of ITSM frameworks in their organization:

- "Our key customer would like to improve service level management with us because they are not satisfied with the current practices."
- "We need defined service management processes because there have been plans on merging two organizations together."

- "The owners of the company encourage us to increase service quality."
- "IT customers are continuously requesting new types of IT service reports. Producing those manually takes a lot of time. The new tool should support effective measurement and reporting."
- "Customers are not interested in buying our new product because it lacks some specific features."
- "Our new management started a cost savings programme. We need measurable processes in order to improve, for example, the througtput times of processes."

A. How IT Service Provider Organizations Introduce Changes Related to ITSM Processes?

During the second phase (change) of the three step model of change, a change is implemented by introducing, for example, creating new policies and procedures in the organization or communicating new values or attitudes to people working in the organization. In our study, we observed that the IT service provider companies valued the following factors in introducing ITSM processes. Many companies in our study were implementing IT service change management processes.

- All the employees in the service area were provided a half day process training (TR)
- Motivating employees why change management is important (MT)
- A short general information package on ISO/IEC 20000 and ITIL Change Management (TR)
- Defining the scope of the process (P)
- Defining the processes in general level (P)
- Identifying the different types of changes: normal change, standard change, emergency change (P)
- Practicing identification of changes with practical examples (E)
- Publishing roles and responsibilities (RR)
- Starting the Change Advisory Board practice (F)
- Publishing the schedule, goals and monitoring (MN, G)
- Main focus should be in managing processes (P)
- Mapping the process improvement goals to organizational goals.(G)
- Meaningfullness of improvement work (ME)
- Ensuring that the right direction has been selected (MN)
- Consistent human resource management plays important role
- Proceeding in understandable steps (S)
- Integrated to annual goals (G)

- Tailoring ITSM to organization's own context (not just copy the processes from ITIL) (TA)
- Searching common good things (participative approach instead of orders) (PA)
- The goal should be to learn together and on individual level (L)
- Inspire yourself and others (MT)
- Finding the levels of freedom in developing processes (P)

B. How Does Change Resistance Occur in IT Service Management?

The following comments that address the change resistance were captured from our industrial partners:

- "Change resistance occurs in coffee table discussions"
- "Why should we change existing functioning practices?"
- "This approach is not suitable for us. It is too unflexible"
- "ITSM is yet another new ISM"
- "Does it make any sense to assign all the changes including the minor ones to the Change Advisory Board, it sounds very bureaucratic."
- "I am not interested in participating in service management training, I just try to make this work better."
- "I would say that the introduction of the new IT service management system is painful because employees do not have enough knowledge on IT service management processes."
- "We should introduce some new practices that promote the IT service management. For example, we could market the problem management process for application managers by launching a campaign: Start your day with a problem."
- "I am little bit worried about how processed and daily practices could be brought together."
- "Can you mention why should we learn these ITSM things if the managers only goal is to decrease the number of people?"

C. Methods for decreasing the change resistance related to ITSM

During the study we observed that organizations had used or expressed the need for the following methods:

- "Why are they continously asking that how could we improve things but they never tell us what has been improved?"
- "In order to ensure that employees do not go back to old practices, I needed to communicate the benefits of release management in a weekly meeting during two years. Sometimes, I felt a little bit frustrated, but at the end I think it was worth it."

- Reinforcing the new practices and create conditions for giving up from old practices
- Training key persons and ensuring that they are committed in change
- Training the personnel, for example providing them ITSM Awareness training
- Hiding the ITIL terminology to the background
- Creating justification for ITSM based on real service operations, not based on ITIL framework.

IV. ANALYSIS

The data analysis was carried out by using qualitative content analysis technique for the case study material. The purpose of the analysis was to create meaningful categories that can be exploited by future studies in the area of organizational change management. Regarding the first research question (How change urgency is communicated in the organization?), we identified that ITSM programmes are started because of key customers' requirements, management plans to outsource or merge service operations, the company's owners request to increase the quality, dissatisfied customers or due to establishment of cost savings programmes. The service improvement programme may receive more negative comments and change resistance if the reason behind the improvement is just to outsource services to other parties.

Regarding the second research question (How IT service provider organizations introduce changes related to ITSM processes), we coded the findings and identified 11 categories: Training (TR), Motivating (MT), Process (P), Examples (E), Roles and Responsibilities (RR), Function (F), Monitoring (MN), Meaningfulness of improvement work (ME), Goals (G), Scope (S), Tailoring (TA) and Learning (L). Our findings support earlier findings of Pollard and Cater-Steel [7] on success factors in ITIL implementations. Common issues with the study of Pollard and Cater-Steel were Process priority and Training. The study of Pollard and Cater-Steel [7] and Hochstein [13] also considered Top management support as a success factor. In our case, Motivating category could have been named as Top management category. Our Goals category corresponds to Relevant and realistic objectives category in the study of Stelzer and Mellis [14]. In this study, we did not use the category Service culture but some categories, for example, Learning could be part of the service culture. We also established categories that were not visible in previous studies such as the Function (based on a finding that service providers tend to create new organizational structures to facilitate the change) and Meaningfulness of improvement work (based on a finding that management should empower employees to carry out improvement).

Regarding the third research question (How does change resistance occur in IT service management?), we observed that change resistance occurs and is visible in daily events, such as in coffee table discussions, not only after seminars held by management. Employees may see the ITSM processes and practices too bureaucratic, time consuming and unflexible. The reason for this might be the large number of different types of records (incidents, problems, changes, releases) the support request may go through. In both training sessions and process improvement discussions, we observed that employees were afraid of that a Change Advisory Board function would cause a bottleneck for processing small changes.

Regarding the fourth question (Which methods are used by organizations to decrease the change resistance?) we established the following categories:

- Better communication: "Why are they continously asking that how could we improve things but they never tell us what has been improved"
- Repeating the message: "In order to ensure that employees do not go back to old practices I needed to communicate the benefits of release management in a weekly meeting during two years. Sometimes I felt frustrated but at the end I think it was worth it."
- Reinforcing: "Reinforcing the new practices and create conditions for giving up from old practices."
- Training: "Training key persons and ensuring that they are committed in change; training the personnel, for example providing them ITSM Awareness training."
- Terminology: "Hiding the ITIL terminology to the background."
- Business-based justification: "Creating justification for ITSM based on real service operations, not based on ITIL framework."

Our analysis can be constructed into following recommendations how to communicate the ITSM programme as an organizational change to employees and managers: 1) analyze the received questions and comments on the ITSM programme and build clear counterarguments, 2) ensure that there is enough communication on ITSM programme (vision, goals, urgency) and that communication is done frequently, 3) use multiple channels (training, seminars, newsletters, social media) for communicating the benefits of ITSM programme but ensure that the core message is always consistent and clear, 4) explore whether change recipients (service personnel) have understood the ITSM programme-related communication correctly, 5) as a change agent use participative method to invite people for planning the change and learning together, 6) remember that talks do not necessarily lead to action. Thus, one should define a clear action plan for the ITSM programme. Action plan may cover improvements to processes, services or employees' competences.

V. CONCLUSION AND FUTURE WORK

The research problem of this study is: How does change resistance occur in IT service management programmes and how can it be decreased systematically? We used case study methods to identify symptoms of IT service management related change resistance. Data was collected from case studies, ITSM seminars, ITSM training sessions and ITSM action research periods with IT service provider organizations. Our results contribute to the research field of service science and organizational change. We identified triggers for establishment of ITSM programmes, studied how change resistance is visible in ITSM and how IT companies deal with the change resistance. There are certain limitations related to our study. First, data were collected from five IT service provider organizations in Finland by using qualitative methods. Quantitative data collection and analysis could have provided new insights to the research topic. Second, we used qualitative content analysis only for case study material. The content analysis could have been used also for article material related to ITSM as an organizational change. Third, case study research method has received criticism that results from case studies cannot be generalized to other organizations. However, the research method literature indicates that they can still be used to improve and extend the theory. Further research could explore deeper the establishment of IT service management programmes and how change resistance has been taken into account in planning the programme.

ACKNOWLEDGMENT

We would like to thank the case organization's representatives for valuable feedback and responses that helped us to perform this study.

REFERENCES

- [1] Cabinet Office, *ITIL Service Strategy*. The Stationary Office, UK, 2011.
- [2] COBIT 5, Control Objectives for Information and related Technology: COBIT 5: Enabling Processes. ISACA, 2012.
- [3] ISO/IEC 20000:1, Part 1: Service management system requirements. ISO/IEC JTC 1 Secretariat, 2010.
- [4] J. Helms-Mills, K. Dye, and A. J. Mills, Understanding Organizational Change. USA: Taylor & Francis, 2009.
- [5] OGC, ITIL Planning to Implement. The Stationary Office, UK, 2002.
- [6] W.-G. Tan, A. Cater-Steel, and M. Toleman, "Implementing IT service management: A case study focussing on critical success factors," *Journal of Computer Information Systems*, vol. 50, no. 2, 2009.
- [7] C. Pollard and A. Cater-Steel, "Justifications, strategies, and critical success factors in successful itil implementations in u.s. and australian companies: An exploratory study," *Information Systems Management*, vol. 26, no. 2, pp. 164–175, 2009.
- [8] J. Iden and T. R. Eikebrokk, "Understanding the ITIL implementation project: Conceptualization and measurements," in *Proceedings of 2011* 22nd International Workshop on Database and Expert Systems Applications. Washington, DC, USA: IEEE, 2011.
- [9] J. Ford, L. Ford, and A. D'Amelio, "Resistance to change: The rest of the story," *Academy of Management Review*, vol. 33, no. 2, pp. 362–377, 2008.
- [10] R. Baskerville, "Investigating information systems with action research," Commun. AIS, p. 4.
- [11] R. Yin, Case Study Research: Design and Methods. Beverly Hills, CA: Sage Publishing, 1994.
- [12] K. Eisenhardt, "Building theories from case study research," Academy of Management Review, vol. 14, pp. 532–550, 1989.
- [13] A. Hochstein, G. Tamm, and W. Brenner, "Service oriented it management: Benefit, cost and success factors," in *Proceedings of the 2005 European Conference on Information Systems (ECIS 2005)*. AIS Electronic Library, 2005.
- [14] D. Stelzer and W. Mellis, "Success factors of organizational change in software process improvement," *Software Process: Improvement and Practice*, vol. 4, no. 4, pp. 227–250, 1998.