Implementation of lean in the elderly care sector
how does it affect the behaviour of the organisation members?
Freytag, Per Vagn; Evald, Majbritt Rostgaard

Published in:
Danish Journal of Management & Business

Publication date:
2016

Document version
Final published version

Citation for published version (APA):
Implementation of lean in the elderly care sector; how does it affect the behaviour of the organisation members?

Per Vagn Freytag & Majbritt Rostgaard Evald

1. Introduction
In recent years, a wide range of private sector industries has adopted the concept of lean in order to increase productivity in manufacturing and in administration (Womack et al., 1990; Hines et al., 2004; Narasimhan et al., 2006; Shah and Ward, 2007). Womack and Jones (1990: 13) define lean as: ‘Lean production is lean because it uses less of everything compared with mass production— half the human effort in the factory, half the manufacturing space, half the investment in tools, half the engineering hours to develop a new product in half the time’. Lean has been implemented in private corporations with the aim to minimize waste and improve value (Halgren and Olhager, 2009), and now the public sector has begun to adopt this concept with the aim of realizing benefits similar to those of the private sector (Evald and Freytag, 2007; Brandao de Souza, 2009; Pedersen and Huniche, 2011). Lean implementation in the private sector, however, is not a guarantee that lean will be effectively adopted in the public sector. Lean is tailor-made for private production firms that are driven by profit. These firms have a clear philosophy: Implement lean in order to obtain the best possible outcome from available resources by using various tools, such as target boards, workflow descriptions, bottleneck management, aligned with production machinery (Arlbjørn, 2006). The public sector does not espouse this commercial philosophy, rather, public organisations ‘produce’ service for the public good and have to fulfil multiple goals (Jørgensen and Bozeman 2007; Hartley et al., 2013). This means that the challenges facing the public sector often are different from those of the private sector and, therefore, the implementation of lean, understood as the applicability of lean may as such not be straight forward (Pedersen and Huniche, 2011, Hood 2015). In the literature on organisational change, it is commonly accepted that the implementation of new structures, workflows or policies will always be difficult regardless of the nature, private or public, of the institution (Borum, 2013). Furthermore, it is not uncommon that the actual outcome deviates from the original plan (Kotter, 2008; Hayes,
2010). However, even though implementation of lean in the public sector may have a direct impact on structures, workflows and procedures (Karlsson and Åhlström 1996; Arlbjørn and Freytag, 2013), these first-order changes may not become an integrated part of organisation members’ (managers, lean agents and other employees) value sets that guide their behaviour and mind-sets (Kuipers et al., 2014). This calls for considering second-order changes as well, characterized by creating new mind-sets among organisation members that make them behave and think differently. For second-order changes to happen communication processes seem central in order to continuously provide information, give guidance about needed changes and make employees understand the meaning of the necessary changes (Schein 1992, McEwan 2001).

Two most frequently employed perspectives seem to dominate explanations for what creates implementation challenges (Kuipers et al., 2014): One perspective states that the absence of a comprehensive communication strategy is the reason for the differential implementation of new tools or processes such as lean. Public organisations may be loosely-coupled social systems comprised of semi-autonomous actors who provide various services which imply a need for effective communication. Effective communication ensures that the right actors receive information, make decisions and direct their performances in line with the new policy’s goals (Rogers, 1995; Kotter, 1997; Alam, 2015). This perspective belongs to the rational-adaptive perspective that understands organisational change as something generated by the intentional actions of agents (Kuipers et al., 2014). In contrast, another perspective focuses on the internalization, or anchoring, of lean. This perspective argues that even if initial communications are clear, the organisation members may (have to) ignore the new management concept if it is not in harmony with their current mind-set or values as expressed in daily tasks and operations (Czarniawska and Secon, 1996; Røvik, 1998). This perspective is inspired by institutionalism emphasizing appropriate behaviour expressed by actors and their environments (Kuipers et al., 2014: 15). Thus, the clue to obtain a successful change process is to bridge concepts with the values expressed during daily operations. This makes continuous communication and dedication of resources until the new concept becomes a natural way of understanding and communicating about activities and processes necessary.

Despite their differences, these two perspectives to organisational change agree that communication plays a crucial role, but emphasize different parts of the change process and different understandings of communication (Weick and Quinn, 1999). The rational-adaptive perspective on organisational change primarily focuses on the initial steps of the change process, and understands communication as something that can be understood by everyone if it is clear and well-articulated (Madsen, 2012). The second perspective, which we refer to as the internalization perspective, focuses on how to anchor organisational change. Thus foremost emphasize the process of change
happening after initiation, and therefore understands communication as a tool that helps create mental images or constructs for people, and thus plays a central role in how these mental pictures about lean will be realized and become part of people’s everyday tasks (Czarniawska and Secon, 1996; Madsen, 2012).

To be able to study second-order changes among organisation members, this study will therefore focus on the internalization process, the process unfolding after the formulation and initial diffusion of the intended plan. The process is characterized by employees and managers, more or less willingly, trying to realize all the intended plans during daily operations and meeting with their surroundings. Thus we foremost contribute to the part of the change literature focused on anchoring challenges (Røvik, 2007, 2011). Underlying the importance of communication is the assumption that for communication to work it requires, on a continuous basis, the active involvement and commitment of organisation members to the new concept (Klausen, 2006; Høpner et al., 2007); otherwise, lean will become just another public management initiative that has no practical impact at the operational level (Røvik, 1998). Therefore, like Pedersen and Huniche (2011), this study examines the shared understandings between organisation members. But unlike Pedersen and Huniche, who focus on ‘negotiations, bargaining, mediation, diplomacy, persuasion and manipulation (...) in order for organisation members to reach shared understandings’ (2011: 407), this article explores the communication process to explain how shared understandings may, or may not, be achieved. We contribute to this literature by setting focus on the role of communication in internalizing new concepts, which still is a relatively under-researched issue (Madsen, 2012; Kuipers et al., 2014).

Our theoretical departure in internalization change literature, illustrated through the content of lean, raises two important questions, which will guide the study: How has the implementation of lean resolved in new structures, workflows and procedures and how has communication about the lean project among organisation members affected their internalization process?

Based on the role of communication we anticipate that the internalization and implementation of lean will suffer if organisation members do not communicate with one another making it very possible that lean will only be implemented at surface (Christiansen et al., 2006; Michaelides and Keohoe, 2006; Madsen, 2012). Kuipers et al (2014) make the point that much is known about implementation on the political and decision-maker level, but that the “change management process within the organizations subject to the reforms remain unknown” (p.9). Thus, this study hopes to elucidate this process in order to understand what role communication plays during implementation processes in a public sector context.
As the public sector is very broad, this article focuses on the implementation of lean within a particular sub-sector, elderly care. Care for the elderly is a growing public service in Denmark, representing a significant share of expenditure in the municipal level. Public organisations that care for the elderly often have several organisation members to ensure that clients will have 24-hour service available. The current workplace norm for the public sector is strict control and performance management wherein employees need to account for every minute of their workday. Lean, however, espouses independent accountability of employees, which is the direct opposite of the current workplace norm (Robinson & Schroeder 2009). For these reasons, elderly care is an interesting subject to study in order to determine the reasons for problems in implementation of change.

2. Internalization new concepts in public organisations

Management concepts such as lean, which originally were developed to meet the needs of the private sector, should not be applied in public organisations without careful consideration for the simple reason that the public sector works under conditions different from the private sector (Burns and Lee, 2004; Evald and Freytag, 2007). Public organisations, to a greater extent than private organisations, are subject to institutional requirements arising from logics other than commercial ones (Dunn and Jones, 2010). Guided by institutional logic, public organisations are rewarded not only for the quality or quantity of their products, but also for their ability to follow norms and rules, as well as respect cultures that exist in the institutional environment (Scott, 1992: 132).

While one could argue that both public and private organisations must meet both types of demands, these two sectors have significant quantitative and qualitative differences that affects how demands, and which demands, should be addressed. In quantitative terms, more public than private organisations must take the institutional environment into account (Jørgensen and Melander, 1996; Evald and Freytag, 2007). Their qualitative difference arises from their special contexts (Jørgensen and Melander, 1992: 65-70). Public organisations are governed by a complex hierarchy, which includes multiple targets. Public organisations must also satisfy normative expectations, specifically procedural and substantive legitimacy. Therefore, the concept, philosophy and tools of lean need to be aligned with the technical, financial and institutional conditions prevailing in public sector organisations (Radnor and Boaden, 2008). This is also the reason why it is important to examine how management concepts such as lean are adopted or implemented in the public sector.

Different theoretical perspectives explain the process of organisational change (Høpner et al., 2007; Cummings and Worley, 2009; Arlbjørn et al., 2011). By helping create mental images or constructs, sometimes labelled as descriptions or rhetoric (Pedersen and Huniche, 2011) communication plays a significant role in internalizing, translating
or anchoring lean in everyday life (Perumal et al., 2009). Communication also plays a central role in how these mental pictures about lean will be realized and become part of the organisation member’s everyday tasks (Czarniawska and Secon, 1996; Czarniawska, 2005).

At the same time, the process itself of realizing or implementing lean can lead to changes in the organisation member’s mental images because unknown variables emerge and some well-known variables change. In the end, practice is transformed. The application of management concepts such as lean takes place, therefore, through action and communication which some scholars may label as translation (Røvik, 1998, 2007, 2011), opinion-forming processes (Weick, 1995) or materialization processes (Czarniawska and Secon, 1996; Czarniawska, 2005).

A major aspect of internalization is when individuals, such as organisation members in the elderly care sector, adapt generally-formulated management concepts like lean to their specific working conditions and work assignments. Internalization provides an alternative theoretical explanation on how management concepts are absorbed in public sector organisations. Traditional theories of change, belonging to the rational-adaptive perspective, have a goal-oriented orientation and understand organisational change as generated by intentional actions of agents (see, for example: Rogers, 1995; Kupiers et al., 2014). In contrast, this article argues that organisations or individuals in an organisation exhibit different degrees of internalization (or translation, or anchoring) which result in the variable materialization of managerial concepts. Depending on how much effort it takes to adapt management technologies, local variants will differ in terms of form and character. This is precisely the consequence of an opinion-forming process wherein individuals and groups try to make sense of their chaotic social reality (Weick, 1995). However, even if internalization happens in different degrees, some communication still has to be explicated.

Therefore, in this context, communication becomes a key tool in the individual actor’s internalization process by providing information about changed rules and modified requirements for task solution (March, 1981). Communication thus helps both managers and other employees to understand ‘what’ to do, as well as ‘why’ they should act in a certain way (Weick and Quinn, 1999; Pettersen, 2009; Piercy and Rich, 2009). Put another way, individuals begin to accept different ways of thinking and, eventually, to understand specific processes and tools and their applications (Miller 2005).

Internalizing the philosophy behind lean is not immediate; on the contrary, it is a continuous process wherein employees and managers ‘begin to learn to think in terms of lean’ (Womack & Jones 1996, Christiansen et al., 2006; Michaelides and Kehoe, 2006). The successful implementation of lean requires a communication effort that (a) sup-
ports the processes of change, (b) provides insights and skills, and (c) supports organisation members as they learn skills to work independently with lean. There is, therefore, a need to constantly emphasize active involvement and participation (Schultz, 1990). The power and strength of each individual is insufficient to realize change. Ideas will spread faster if they are in accord with the implicit or taken-for-granted notions that drive all organisation members’ actions. However, empirical findings demonstrate that the non-decision-making and agenda-setting of decision-making processes can prevent ideas from spreading (Cohen et al., 1972). This is why it is essential to focus on communication among organisation members when lean is being implemented in public organisations. When efforts to make changes is not communicated effectively, this can create unexpected barriers during the implementation of lean.

3. Research design
To be able to answer the twofold research question (How has the implementation of lean resolved in new structures, workflows and procedures and how has communication among organisation members affected the internalization process) a single case study with nine sub-units, covering eight care centres and one home care, are in focus (Yin, 2003). The choice of the care centres and the one home care was based on convenience sampling. The researchers were granted permission through an evaluation project to also collect data on the organisational change process the organisation had went through the last couple of years. A convenience sampling typically is connected with bias, but in this study the large number of within sub-units counterbalance this, securing that we come as close as possible to the total number of care centres and home cares in the municipality. Further, the convenience sampling opened up for the unique chance to get access to various organisation members, e.g. employees, lean agents and managers, across nine within sub-units.

In line with the single case study approach, different sources of evidence, combining qualitative and quantitative data was used to generate a rich data set (Scholz and Tietje, 2002; Yin, 2003). We used multiple data sources to be able to interpret from different angles how different organisation members experienced the change process in order to increase the credibility and validity of the research findings.

At first, secondary data (e.g. implementation plan, training plan and various documents describing the purpose with lean in the elderly care case) were reviewed giving detailed input on the context of the organisational change and the content of the change process being lean (Kupiers et al., 2014). This material laid the foundation for conducting 23 individual interviews with different subgroups of organisation members, which again laid the ground for the questionnaire distributed to a larger sample of organisation members. The multiple data sources were used with the purpose of exploring various organisation members’ experience and understandings of the lean
Implementation of lean in the elderly care sector

change process they had gone through the last couple of years. The organisation members’ statements were not treated as objective descriptions of reality, but as perceptions and experiences of the social realities in the elderly care sector. That is, the statements are examples of understandings, norms and meanings, which organisation members communicate as different stories (Kjerulf Petersen, 1998, Czarniawska, 1998).

The documents, used to gather background information about the purpose of the change project, helped in designing a semi-structured interview guide. Also, the interview-guide was conducted based on the part of the change theory dealing with internalization challenges. Therefore, the interview sought to uncover the interviewees’ perception of how lean was being implemented in elderly care and what value lean had (not) brought and would (not) bring for the daily operations. Interviewees were chosen from the entire sub-units analysed representing different organisation members involved during the implementation process. The interviews lasted between 1-1½ hours.

The initial interview results were used to design a questionnaire, which was later distributed to all nursing organisation members at the 9 sub units. The questionnaire asked the nursing organisation members about the benefits and drawbacks of the lean programme, and their opinions on the lean tools that could be applied within the next two years. Out of the 250 questionnaires distributed, 99 or 40% were usable; which is a satisfactory response rate. The non-responses were analysed and no bias was found across response groups, across job functions (ordinary employee, lean-agents or managers), or across age groups (young versus older). The purpose of the questionnaire was to get a more general idea of how widespread the opinions discovered during interviews were in general.

4. Findings
The findings section is structured in two main parts: First the initial purpose behind the initiation of the lean programme is presented by focusing on the top-management’s aims with the programme. More, the initial plan for starting up the lean programme is explained to show how the top-management of the nine sub-units thought they could change the mind-sets and working habits of their organisation members. Second, the findings section uncovers how communication among managers, lean agents and other employees belonging to the nine sub-units affects the internalization of lean in these units.

4.1. The background of the lean programme initiated in the elderly care sector
The main objectives of the lean programme, according to management, were: (a) reduction of unnecessary control functions for employees; (b) optimization of the care provided to residents; (c) improvement of employees’ working conditions; and, (d) improvement of communication and cooperation among employees.
On a general level, the programme’s idea was to develop an organisational culture that founded on a forward-looking and independent use of lean in the individual care centres and home care. Thus, the philosophy of lean was expected to be internalized in the employees’ and managers’ modes of operation. Communication and knowledge-sharing among employees were seen as the key tools for the project’s success.

The lean programme itself was based on value stream analyses, upon which standards were subsequently established and used as a framework for task performance. Through the specific mapping of workflows (understand value flows), the establishment of scoreboards (performance management), and the setting of standards (visibility and comparability), resources would be used effectively to enhance care for the elderly (customer value). The organisation members, therefore, needed to map workflows, set goals, generate awareness and promote equality to be able to provide the best possible value for the elderly residents. The top management of the elderly care centres and home care initiated the lean programme (also referred to as the change project), while the education course were prepared by a private consulting firm.

Before implementation, the employees were informed about the purpose of the programme. The actual deployment of the lean programme followed an established sequence. First, all employees attended a brief introduction training where they learned the objectives of lean, the lean concept, specific lean tools (workflow analyses, tables, forms, among others), and how management wanted to involve the organisation members. The eight care centres and the home care had around 250 employees involved in the project. The employees were divided into smaller groups for the different training sessions, which were held consecutively, not simultaneously over a longer period of time. Second, special lean agents were trained. Each care centre and home care typically had three to five lean agents who were expected to ensure that lean projects were implemented in their daily work.

After the training period of two months the employees at each care centre and home care were expected to independently work on mapping workflows with a view to streamlining work processes and using available resources effectively. The employees, lean agents and the managers were expected to work together in this process; that is, to involve employees directly in the continuing process of ‘rooting’ or internalize the lean idea and philosophy. It was therefore expected that the organisation members would be active participants in developing and applying lean tools as well as in implementing new and ‘better practices.’ No additional resources were provided for this stage of the change process. The management of care centres and home care believed that these changes could be implemented while the organisation members continued with their routine duties.
Thus the change project was initiated and sought implemented based on the change theory approach that an effective communication plan supplemented with an effective training period would ensure that the organisation members receive necessary information, was capable of making decisions and direct their performances in line with the new policy’s goals (Alam, 2015; Kotter, 1997; Rogers, 1995).

4.2 The perception of the value the lean programme creates for daily operations

The personal interviews with employees, lean agents and managers uncovered that a large part of the organisation members still needs to bridge the lean concept with the values they expressed during their daily operations. However, their experiences are varying, and in some cases varying experiences exist within the same type of organization members. In the following, the results concerning how organisation members communicate about changed processes, systems and procedures are used as a way to illustrate how internalized lean has become.

Employees

Employees have different attitudes towards, and deploy different competencies for, the lean project. In all of the centres and home care analysed, some employees were self-governing and were strongly committed to the lean project. Their way of thinking made it easy for them to adopt lean, to learn about workflows and standards, and to understand how their services could be made more effective and focused. For this group of self-governing employees, lean facilitated a language which enabled the articulation of issues and the initiation of targeted efforts to solve problems. Previously, this group of employees did not want to discuss specific workplace problems because they did not want other employees to perceive the comments as personal criticisms. This framework of a common language thus enabled these employees to support each other in the implementation of lean.

In addition to creating a common language, the lean programme also provided an overview of workflows and personal roles that improve the employees’ understanding of daily tasks. This gave self-governing employees a better insight into how the whole system works. This outcome was appealing for self-governing employees as it enabled them to discuss and improve workflows with other employees and teams. Some of these employees even tried to implement lean during their spare time (two employees).

However, the majority of employees in the care centres and home care were neither highly involved in the programme nor were they capable of recognizing the immediate benefits of incorporating lean into their daily tasks and operations. They were very hesitant to make changes in their daily tasks. One reason for this passivity was the consecutive organisation of the training course. A large proportion of the ‘unin-
involved' employees were among the first to take the training course. They had to wait for the rest of the courses to end before the lean project could start and become implemented in the different units. This wide time lag between training and implementation resulted in the corrosion of their motivation and their understanding of how the tools should be used and for what purpose. They had simply forgotten how to include lean in their daily tasks and operations.

Another reason for the lack of involvement was the heavy workload of the organisation members. The employees simply did not have enough time to recollect lessons learned and share their experiences with each other. It seemed difficult to find time and resources to work on single lean projects, assume new duties and have those duties sent through the lean machine (discussing workflows etc.).

Amongst the passive group of employees, there was a smaller group who actively took the stance that the lean programme was not the right way to go. In a few instances, there was direct resistance to change; however, this was not the general trend in the units analysed for this study. This smaller group of employees usually exhibited resistance towards the lean programme during mandatory meetings, where they focused on the negative aspects of lean and the challenges in implementing lean into daily tasks and operations. In most cases, however, resistance was often conducted passively, such as when employees did not join single projects or did nothing to ensure the implementation of lean. Non-communication of lean and the practice of ignoring lean tools also characterized this group of employees.

**Lean agents**
The employees designated as lean agents generally had very positive outlooks, were committed to single lean projects, and actively tried to root lean thinking and tools in everyday work. Lean agents, however, faced several problems: (a) some employees did not want to take an active role in the project; (b) some employees were doubtful if management would focus consistently on single lean projects; and (c) some employees felt there was a lack of time to work with lean. The lean agents were expected to be firm in ensuring that the single projects were implemented in their daily work. Since the lean agents did not have decision-making authority in the organisation, they sometimes felt uncomfortable in urging other organisation members to implement lean. The lean agents therefore, despite their enthusiasm, found it difficult to focus on lean and on their everyday work simultaneously.

Lean agents felt that meetings with employees in the other care centres and in home care enabled them to share knowledge and experiences which, in turn, might ensure that single lean projects continued and succeeded. They felt that continuous communication was needed to enable employees to further incorporate lean in the performance
of their everyday tasks. Over time, there could be fewer mandatory meetings of this nature. However, the lean agents soon felt pressured by management's lack of persistence; the lean agents experienced that management drew their support back, by not communicating about the necessity in adopting lean and by not being particular visible in supporting different lean activities. Over time some lean agents felt discouraged as management unintentionally legitimized the reluctance and hesitation of some employees in adopting the philosophy and tools of lean. Other lean agents kept on fighting, but the passivity of management seemed to have consequences for the workload of lean agents. They simply felt that it took more effort to implement lean.

**Management**

Management in the eight care centres and one home care were at first aware of the necessary elements for the successful implementation of the lean project. The managers thought that their role would be initially during the implementation process to be visible, to step into character, and to communicate about lean on daily basis. On the contrary the continued implementation of the lean process depended they felt, on the support of employees and lean agents. As time passed the managers came to realize that this was not the case as they came to realize that the single lean projects did not necessarily run by themselves, and that it was important that they all followed the direction as planned.

The managers, however, found it very challenging to run multiple change projects simultaneously. From the management’s perspective, these projects did not naturally overlap with each other. This juggling act therefore drained the energy of management and shifted their attention away from activities that could support the implementation of the single lean projects. As a result managers diminished the time they spend in communicating about the lean programme.

**Varying opinions among organisation members**

In general, the responses to the questionnaire supported the impression gained from the interviews that lean agents and other employees had very different approaches to the value that implementing lean would bring them in their daily operations. The responses showed that almost one-third of lean agents and other employees expected that both the value stream analyses and the standards would still be used in the next two years (see table 1 below). A large group, around 40%, was unsure what would happen with the aforementioned lean project tools in the future. A significant, part of the respondents answered “don’t know” (around 15%) and only low number answered “no” (around 10-11%).
Table 1: Application of lean tools in the future

<table>
<thead>
<tr>
<th>In about two years ...</th>
<th>1) ... will value stream analyses still be implemented?</th>
<th>2) ... will the standards still be in use?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>30.6</td>
<td>34.3</td>
</tr>
<tr>
<td>No</td>
<td>10.2</td>
<td>11.1</td>
</tr>
<tr>
<td>Maybe</td>
<td>44.9</td>
<td>38.4</td>
</tr>
<tr>
<td>Do not know</td>
<td>14.3</td>
<td>16.2</td>
</tr>
</tbody>
</table>

n = 99

The lean agents and other employees, who expected that value stream analysis and standards would still be used in the future, also believed that the single lean projects would provide long-term advantages such as more time for personal care, more time to prepare working procedures, less need for strict controls over work performance, greater involvement of elderly residents, improved working conditions, and better communication within and between organisation members teams. For instance 57%* and 59%* of this group (see Table 2 below) also believed that lean would improve working conditions.

Conversely, those lean agents and other employees, who did not believe that standards and value stream analysis would still be used in two years, had very low expectations about the positive effects of the lean project in the long run. For instance, only 28%** and 29%** expected lean to improve working conditions (see table 2 below).

Across the group of lean agents and employees both more positive and pessimistic future expectations existed. Appendix A only reveals that, on average, lean agents tended to have slightly more positive expectations about the effects of lean than employees who were not lean agents. The differences in expectation, however, are not statistically significant.

Finally, looking across the nine sub-units providing elderly care revealed very few differences. The survey provided no significant differences among the nine-sub units. Although, based on the interviews, the local management in some of the sub-units seemed more indulged/concerned with the implementation of lean than in some of the other sub-units.
Table 2: Lean agents and other employees’ expectations for the future

<table>
<thead>
<tr>
<th>Agree/totally agree</th>
<th>Believe in the use of value stream analyses in 2 years</th>
<th>Do not (maybe) believe in the use of value stream analyses in 2 years</th>
<th>Believe in the use of standards in 2 years</th>
<th>Do not (maybe) believe in the use of standards in 2 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>More time for personal care</td>
<td>37%</td>
<td>16%</td>
<td>42%</td>
<td>15%</td>
</tr>
<tr>
<td>Improved working procedures</td>
<td>71%</td>
<td>44%</td>
<td>66%</td>
<td>45%</td>
</tr>
<tr>
<td>Less control of the work performance</td>
<td>56%</td>
<td>10%</td>
<td>50%</td>
<td>13%</td>
</tr>
<tr>
<td>Higher involvement of residents</td>
<td>44%</td>
<td>19%</td>
<td>45%</td>
<td>19%</td>
</tr>
<tr>
<td>Improved working conditions</td>
<td>57% *</td>
<td>28% **</td>
<td>59% *</td>
<td>29% **</td>
</tr>
<tr>
<td>Improved communication and cooperation in their own team</td>
<td>73%</td>
<td>45%</td>
<td>60%</td>
<td>50%</td>
</tr>
<tr>
<td>Improved communication and cooperation among teams</td>
<td>62%</td>
<td>38%</td>
<td>57% *</td>
<td>43%</td>
</tr>
</tbody>
</table>

\(n = 99\)

5. Discussion of findings
The data collected from various organisation members at the nine sub units shows a number of interesting patterns and explains why the particular lean programme proposed to be implemented in the elderly care sector did not succeed as intended. The data essentially shows that daily communication among organisation members is vital in deepening their understanding of lean philosophy and its tools. Communication is also a crucial tool to provide information about changed rules and task solutions, as well as to facilitate the internalization processes of individual actors. In cases when communication about lean is forgotten or intentionally neglected, there is no active translation, anchoring or internalization.

But, the findings of this study also have implications for theories of change in general. Specifically, five explanations may contribute to a better understanding of the role that communication plays when seeking to implement change.

First, the data shows that the implementation of lean is highly affected by the organisation member’s decision to actively internalize, translate, or root the single lean projects in everyday task performance (Czarniawska and Sevon, 1996, 2005). Some of the organisation members did work actively to materialize the lean philosophy and to use lean tools because these employees gained a better understanding of the tasks and
processes of their organisation. The lean programme so to speak gave them new ways of expression themselves. A large percentage of the organisation members, however, were so cautious or suspicious about the use of lean that they hesitated in applying that concept. This hesitation had long-term consequences: because the organisation members were not communicating these concerns, the cautious organisation members did not have the opportunity to internalize lean into their daily duties. Internalization, anchoring or translation of the single lean projects did not occur in several instances and, as time passed, the organisation members appeared to have forgotten how to incorporate lean. Thus, the organisation was unable to reap positive results in a work-life characterized by sparse resources.

Second, the case study shows the consequences when the perspectives of managers and employees diverge (Weick and Quinn, 1999). On the one hand, managers intended to implement lean by leaving it to the employees and lean agents; on the other hand, most employees felt a need for further guidance to translate the concept and tools of lean in their daily tasks. Only a small group of employees were able to link their daily tasks with lean, and were able to implement lean through self-governing. The gap between management’s intentions and how lean is actually implemented in practice is reinforced by management’s passive non-communication in the single lean projects. By not being particularly visible in the implementation of lean in daily operations, management unintentionally legitimized the reluctance and hesitation of some employees. The passivity of management had another unintentional negative effect – lean agents and positive-minded employees felt that it took more effort to implement lean. This is reinforced by the fact that management, in general, seemed to be unaware that a top-down implementation approach, where employees get some initial training but are not given extra time for post-training implementation, is ineffective for a larger organisation. Management, through their passive engagement, reinforced what some employees were saying: ‘let’s wait and see if this [the lean project] doesn’t go away again’.

Third, this study’s theoretical framework argues that communication is vital in a continuous sense-making process (Weick, 1995). However, it is challenging to reshape an actor’s understandings of reality, roles and duties as such an endeavour touches upon their image of the ideal employee. The behaviour of actors is partly rational in the sense that actors do what they do within their specific socially-constructed reality; but this reality may not necessarily be compatible with management’s attempts to move the organisation toward a particular direction. This conflict is particularly evident in the elderly care sector which has developed a distinct workplace where control and performance management is central in how employees are governed in general. The implementation of lean, however, assumes that employees undertake accountability and independence, and expect employees to adopt a number of skills such as taking an active role in a self-organizing entity. The development of such qualities rests upon
a different culture where there is constant communication among employees about how to handle and improve their daily service tasks. Commitment to the implementation of lean, therefore, depended not only on having adequate time and resources, but also on the employees’ perceived utility of lean thinking as a guiding principle in the organisation (Luke et al., 2011).

The elderly care sector is also characterized by numerous change projects that come and go in a steady stream and typically overlap without any obvious linkages (Røvik, 2007, 2011). This is the fourth reason why a large number of organisation members were reluctant or hesitant to incorporate lean into their daily tasks and operations. The public sector, in general, has a tendency to follow the latest trend or to respond to new issues initiated by politicians and/or experts. Therefore, the organisation members did not know whether or not it would be wise to fully commit to the lean project because it might just fade away. Moreover, since many employees had prior experience with projects that eventually failed, they simply did not want to be disappointed if the project is not effectively rooted and internalized by all of the employees.

Finally, there were not enough resources to help anchor the single lean projects after the initial training course (Hopner et al., 2007). Extra resources were provided for the training stage, but no additional resources were dedicated to support the ensuing implementation process. Instead, management expected that organisation members could independently implement lean in their daily work routines. There were only a few employees, at least two, who invested their own spare time to implement lean. Overall, employees refused to use their spare time to work independently on implementing the lean project. This also brings up the issue of changing an organisational culture characterized by the strict management of the employees’ time at work. Management apparently did not consider the need to change organisational culture, which explains their passive approach and reliance on lean agents.

However, data from the lean programme also raises some questions concerning the change theory approach adopted in this study. As the case study showed, some independently-minded employees, such as lean agents and the positively-lean-oriented employees existed. They understood the purpose of the lean programme right away, as the lean programme provided them with the necessary initial understanding and motivation to learn more about the benefits of lean. In comparison other employees learned by doing, i.e. they understood lean better when they practiced the concept and tools in their daily tasks and operations. This eventually helped them to internalize lean thinking and lean tools. Besides from showing that there is, no one best way to implement changes, the data also indicate that it may not be productive, as we have done and many other researcher have done, to divide theories on change into two separate, unconnected approaches (see Table 3).
Traditionally, some researchers use change theories that have a goal-oriented conception of change (Kotter, 1997; Rogers, 1995); other researchers use change theories with a process-oriented conception of change (Czarniawska and Secon, 2005; Røvik, 2011). While this division may be a useful analytical tool, the case study reveals that the factors studied by these two theoretical approaches may, in some situations, be interconnected. In some instances, combining the two approaches to change may actually be more productive. At least the data tells us that for some employees (minor percentage) the first approach might be enough, whereas the other approach might be what supports other employees (larger percentage) in effectively internalize change. Thus, future research needs to examine the application of both approaches in order to determine the persons and contexts that would benefit from combined or separate approaches.

6. Conclusion
The results demonstrate that the implementation of lean in the elderly care sector is challenging and that second-order changes among organisation members, the internalization of lean, not just appear unless communication is expedient and going on for a while. There is a need for adequate resources and time, management has to remain focused on the implementation process and the concept and tools of lean have to be securely anchored in order to succeed. On the one hand, management did not communicate adequately or constantly, and they did not hold follow-up meetings or discuss
post-training procedures; on the other hand, many employees did not accept change or understand the value of lean in their work situations. Thus, lack of communication is found to be the central challenge for organisation members if their work habits, mind-sets and understandings are to be changed.

This case study brings to light several managerial implications in terms of maintaining and internalizing change projects in the long run. There are four important challenges for management. First, managers need to understand what motivates employees to become involved, and how to support positively-oriented employees to maintain and further develop the lean project. Second, management needs to understand how to take care of the employees who have not yet developed an understanding of, and an appreciation for, the positive impact that lean could make in the different care settings. Third, management also needs to understand how to support lean agents in their work, such as ensuring that meetings are held and helping employees manage the simultaneous discharge of regular duties and the implementation of lean. Finally, managers need to understand how communication can be used to support the internalization and legitimization of lean projects.

Appendix A

Expectation for the future – black=lean agents and grey=employees – non lean agents
References
Implementation of lean in the elderly care sector


