Making it stick on borrowed time

The role of internal consultants in public sector lean transformations

Abstract

Purpose: This article explores the roles of internal lean consultants in western organizations during lean transformation processes and how these roles affect the outcomes of the changes.

Design/methodology/approach: Findings are based on a qualitative study of four Norwegian public organizations.

Findings: Characteristics of western organizations put internal lean consultants in important roles during the project initiation and change phases. However, consultants have less impact in the last phase of the transformation process while transferring the responsibilities over to line management. The organizations struggle to 'make lean stick' due to the distribution of responsibilities between managers and internal consultants.

Practical implications: The distribution of responsibilities between managers and consultants should be carefully considered in lean transformation processes. Internal lean consultants should serve the managers as teachers and coaches, rather than doing their jobs for them.

Originality/value: The article contributes with in-depth knowledge of the roles of internal consultants in lean transformation processes, a topic that the literature has left unexplored and undebated.

Keywords: lean thinking; management consulting; change management; lean implementation; public sector

Introduction

To secure their existence, modern organizations must continuously innovate and adapt to changing surroundings (Drucker, 2009). *Lean production*, based on the celebrated Toyota Production System (Liker, 2004), remains an inspiration for solutions that promise higher customer value with less effort (Netland and Powell, 2017b). However, many western organizations experience difficulties in following Toyota's lean ideal (Bhasin, 2012; Marodin and Saurin, 2013): either key elements of Toyota' approach are lost in translation (Emiliani and Stec, 2005; Ingvaldsen and Benders, 2016), or a foreign management concept is left in a context which is nothing like Toyota (McCann *et al.*, 2015; Radnor and Osborne, 2013).

To increase the probability of successful lean transformation, western organizations should appreciate the contextual differences between themselves and Toyota, and choose an implementation strategy accordingly (Holmemo and Ingvaldsen, 2018; Thirkell and Ashman, 2014). Unlike Toyota, which refined its techniques and organization through decades of trial and error (Holweg, 2007), western organizations are usually driven by a sense of urgency (Kotter, 1995) and approach lean as a program to be 'implemented' within a pre-defined time frame (Netland and Ferdows, 2014). Programmatic implementation tends to make use of consultants (Sturdy *et al.*, 2015), and despite Rother's (2010) warnings that consultants should be avoided for sustainable lean implementations, their presence seems widespread (Holmemo *et al.*, 2018). With a few exceptions (Holmemo *et al.*, 2018; Radnor and O'Mahoney, 2013), the academic literature on lean has left the consultant roles unexplored and undebated, and offer few advice on how to wisely make use of consultants in lean transformations.

This study contributes to filling this research gap by exploring the roles of internal lean consultants and how they influence the change processes. We start by describing the contrasting nature, context and agency of change at Toyota and in western organizations based on existing literature. Then, we present findings from a qualitative study of change processes in four Norwegian public organizations. Based on those findings, we discuss the different roles of internal lean consultants in different phases of the lean transformation process and the implications these roles have for the outcomes of the transformation processes. We conclude the article by offering practical advice to consultants and western organizations implementing lean.

Change agents in lean implementation

The lean ideal

Lean production, as popularized by Womack *et al.* (1990), was ultimately a description of the philosophy and production system of the Japanese car manufacturer Toyota. Lean was subsequently presented as the global solution to improve efficiency and quality, and aims to constantly and systematically strive for perfection through improving the production flow by removing non-value adding activities (Holweg, 2007). Lean has evolved over time and has been embraced by other industries and in other cultures than that of its origin (Chiarini and Vagnoni, 2015; Hines *et al.*, 2004; Netland and Powell, 2017b; Radnor and Walley, 2008). Five fundamental principles have been claimed to be universally applicable (Womack and Jones, 1996): specification of value, identification of value streams, continuous flow, customer pull and striving for perfection. Netland and Powell (2017a) suggest otherwise. In their review of lean across various settings, they propose that this is not necessarily the case, suggesting that the abstraction level of lean management must be elevated to such a level that, cut to the core, it is simply about continuous improvement and three essential Ls: Learning, Leadership, and Long-term perspective. For example, reflecting over the pull principle, Bateman and Hines (2017) suggest that "demand readiness" is a more appropriate term than pull in the context of public services, where the withdrawal and replenishment materials are not necessarily the signal for authorizing work.

Leaders and senseis at Toyota

Central to the lean philosophy is continuous improvement, where change is ongoing and institutionalized in the organization's culture and practices (Hines *et al.*, 2004). The managers in a lean organization acknowledge the expertise of the production worker, and the potential of problem solving and learning on every level (Spear, 2004). They go to 'gemba' to see the situation with their own eyes. Lean is described as a coordinated management system (Nicholas, 2016), but also a way of practicing leadership (Emiliani and Stec, 2005; Liker and Convis, 2012). In contrast to western organizations subscribing to 'flatter is better', Toyota has kept a dense hierarchical structure with small control spans where the managers can drive systematic continuous improvement (Ingvaldsen and Benders, 2016).

At Toyota, leadership and coaching are dialectic processes where the production process is in focus (Spear, 2004). The leader, coach or mentor will encourage and challenge the subordinate to understand the problem and suggest solutions, but this requires that the coach himself is a specialist that could have been able to solve the problem at hand (Rother, 2010). According to Rother (2010), Toyota has a system of coaching ('kata') throughout the hierarchy. At a higher level, Toyota has "senseis", meaning teachers or masters. In contrast to most western consultants, the sensei uses criticism (Ballé and Handlinger, 2012) as his tool and plays hard to please. This is illustrated in the following example from Womack and Jones (1996, p. 128-129) where a high-ranking manager interacts with the sensei Iwata about a plant design plan:

> '(…) I laid it on the table in front of Iwata, and asked him whether we were doing the right thing. There was a long, frosty silence. Finally, Iwata said, 'If I come to your plant, will you do whatever I tell you to do? George and I said 'Of course'. Iwata responded: 'If this is true, roll up the drawing, let me eat my dinner in peace, and I will come to your plant this evening.'

The sensei behavior shows the authoritarian charisma these experts exert, peeling down top managers to submissive pupils begging for their attention. The sensei does not implement anything, but teaches you how to do it yourself (if you deserve it!).

The planned change organization

Most western organizations implement lean without interfering with the traditional principles of scientific management, hierarchical structure and specialized, functional silos (Liker and Convis, 2012). Bureaucracy has shown to be persistent despite attempts to establish more flexible and dynamic organizational forms over the latest decades (Walton, 2005). Rather, these changes have led to a new type of bureaucracy, where temporal structures, such as change projects and programs, are added alongside the permanent structure to create more dynamism (Farrell and Morris, 2003; Hodgson, 2004; Sturdy *et al.*, 2015). Simultaneously, the permanent structure has been rationalized through de-layering, downsizing and increased centralized control (McCann *et al.*, 2008).

Hence, changes are handled through projects and programs, and a new profession of consultants gains influence as masters of change management (Worren *et al.*, 1999). The theory

and practice of change management shares the rational-adaptive ideology (Kuipers *et al.*, 2014) with the theory of project management. Models of planned change are built on the "change as three steps" paradigm attributed to Curt Lewin (Cummings *et al.*, 2016): unfreeze, change and (re-)freeze. Initially, the organization prepares and plans, then the change will be implemented through a series of steps to replace old routines, technology and mindsets with new ones, and finally the organization creates a new steady-state where the change has been institutionalized in the operational 'business as usual' and corporate culture.

Rational and linear models of change have been criticized in the context of complex and continuously changing organizations (Cummings *et al.*, 2016). In the case of lean, a successful implementation measured in goal fulfillment does not necessarily equal institutionalization of the lean concept. Opposed to a 'frozen' or a stabilized end-state of a change process, the end-state of lean is a continuously changing organization, and thus a series of minor change processes (Brännmark and Benn, 2012). A sustainable lean transformation is recognized by systematical improvement of an organization's practices in light of the five lean principles, independently of any pre-planned program. A review of frameworks of lean implementation shows a dominance of top-down and procedural approaches (Chay *et al.*, 2015). Despite its argued weaknesses and paradox in the case of lean, several papers (both conceptual and empirical) suggest the common sequence of planned change: initiation from the top level, planning, series of piloting and rolling out solutions, and finally institutionalize and sustaining the change (Bhasin, 2012; Marodin and Saurin, 2013; Nordin *et al.*, 2012).

The internal consultants taking on change

Planned change activities combined with delayered organizations bring out the need for enhanced capacity of management support functions. External consultants have been widely described and criticized for driving these changes as a colonizing force, by conning their way in to organizations through selling fashionable management concepts (Lapsley *et al.*, 2013). Yet, others have shown the alternating and collaborating roles of internal and external consultants in the process of implementing management concepts, demonstrating that the internal organization do take an active part in the change process (Heusinkveld *et al.*, 2011; Kitay and Wright, 2004). Organizations recruit dedicated internal managerial experts, such as organizational developers, project managers, financial analysts and human resource servants, organized in a staff function outside of the operational hierarchy. These professionals

("consultant managers") are mediators between the internal organization and an external and generic specialist knowledge within the management field, filling leading roles in temporal structures or supporting roles of the permanent structures, as described in Sturdy et al (2015, p. 188):

> 'Rather than characterising their work in terms of positions in a hierarchical chain of command, consultant managers characterised it in terms of being advisers and service providers to their 'clients' and senior sponsors in the organisation.'

The influence of these professions are founded on their knowledge and relationships within the core organization and the external interface of the organization. The lack of formal authority make them dependent on a well-functioning relationship with managers in order to influence the chain of command, where they have to use political as well as structural competence to reach their aims of their ambitions (Sturdy *et al.*, 2015).

Sturdy et al.'s (2015) portrait of the internal consultant shows an important difference from the sensei in terms of authority: Where the sensei makes top managers their pupils who have to work hard to deserve their attention (Ballé and Handlinger, 2012; Nash and Poling, 2007; Rother, 2010), the internal consultant is a servant of the managers.

Table 1 summarizes the differences between Toyota (representing the lean ideal) and western organizations in terms of the nature and context of change and the change agents. In the next sections, we will investigate the roles of the internal consultants involved in lean transformations in four Norwegian public service organizations and discuss how these roles contribute to organizations becoming lean.

Table 1: Differences between the Toyota ideal and Western organizations

	Toyota / lean ideal	Western organizations
Nature of change	Long term development Continuous improvements	Planned change sequences, followed by institutionalized continuous improvement
Context of change	Permanent dense hierarchy, narrow control spans	Delayered hierarchy Matrix of permanent and temporal structure (programs and projects)
Change agents	Hierarchical system of employees and managers practicing coaching kata, including senseis	Permanent managers delegating temporal mandates to internal and external consultants

Methodology

The empirical basis for this study is the lean transformation processes at four Norwegian public organizations. The organizations are serving a majority of Norwegian inhabitants within areas such as taxes, immigration, public welfare, employment and specialized healthcare. The number of employees in the organizations ranges from one thousand to twenty thousand, and all of them have geographically distributed offices in Norway. All four organizations have implemented lean-based changes in strategies, processes and routines, either in the whole organization or in certain departments during the period 2008-2015, and all have involved external consultants from various firms and to varying extents. All four companies continue to employ internal lean consultants throughout their organizations. Although the organizations represent a range of dissimilarities concerning lean conceptualization, approach to change, domain and contextual factors, data analysis revealed a set of common features that is the focus of this study.

The data collection was carried out as part of a Norwegian research program on lean, employing qualitative research methodologies and case studies with semi-structured or open interviews and observations of practice (Bryman, 2016). The organizations were contacted concerning their interpretation of the lean concept and their chosen implementation processes. During the period of data collection, we discovered a pattern of the appointed spokespersons being internal consultants with lean expertise, and that these informants demonstrated similar roles, experiences and reflections. Recognizing the addressed issues from our own backgrounds as management- and lean consultants led to further informal conversations and e-mails 'among peers' with several of the informants. This contact in addition to own experience has both validated our findings and strengthened our insight.

Structural analysis was performed in NVIVO 10.0 on transcripts of the recorded interviews with a total of 23 informants, where 12 informants had the roles of internal lean consultants. Other interviews and documents were read systematically to elaborate on both the process at hand and the organizational context of the consultants, as well as to control the grounded theory based analysis (Corbin and Strauss, 2008) against the general and intuitive interpretations of the situation. Table 2 presents an overview of the material. The process of data analysis was characterized by 'Stepwise Deductive Inductive' (Tjora, 2012) where we performed iterations of combining top-down with bottom-up structured data in the NVIVO-

system. Quotations concerning the internal consultants' roles were coded thematically (Braun and Clarke, 2006), grouped and finally sorted along two dimensions. First, a role dimension where we identified two different internal consultant roles, the *advisor* and *navigator*. Second, we sorted our findings along a time dimension according to the three phases of planned change: Initiation (unfreeze), Change projects (change) and Sustaining (re-freeze). The findings are thus extracted descriptions of an overall implementation process that is recognizable in all four organizations, showing the common patterns rather than details of each individual process.

Table 2: Overview of data material from four case organizations

Case organization	Empirical material	Number of internal lean consultants
A	15 respondents (11 individual and 3 group interviews, 2 respondents interviewed twice) 6 days of observation (different scenes/places) Internal documents such as project plans, presentations and reports	6
B	2 respondents, 1 recorded group interview 2 observed seminars/presentations, project level Internal documents such as project plans, presentations and reports	1
C	4 respondents, 3 recorded interviews (2 individual, 1 group) 1 public presentation, top manager 3 days visit (informal interviews and observation) Internal documents as project plans, presentation and reports	3
D	2 respondents, 2 recorded interviews 1 public presentation, top manager 1 observed seminar/presentation Internal documents as project plans, presentation and reports	2
Total		12

Findings

The different roles of internal consultants: advisor and navigator

Our analysis identified two different internal consultant roles: advisor and navigator. Although advisors and navigators sometimes fulfilled overlapping tasks, there were important differences between them in terms of background and impact in different phases of the transformation process.

The advisors were primarily staff members in functional departments at the strategic level of the organization, typically highly competent and holding degrees within management science or the core fields of the organization with further education within management. Often, advisors had prior experience within the organization as operational managers, functional experts or union leaders, and knew the organization well. They had often changed positions by moving between similar organizations or had experiences as external consultants. Advisors were characterized by their awareness of lean prior to the organizations' lean transformation processes, both from prior experience and from professional networks, where they picked up new ideas and management concepts. The following quote is illustrative:

> 'I attended a one-year course in the 90s in quality development. That is where I have all my ideas from. They led us systematically through several methods, frameworks and tools (…). That led me to what I do today. Additionally, I had some practical, relevant experience before this and after (Advisor, B).'

With a few exceptions of external recruiting, the navigators were internal managers or employees from lower levels of the organization, being experts on core production processes. The majority of the navigators did not have knowledge of the lean concept prior to the transformation process, but were trained in lean thinking and lean techniques during the process. Among the navigators, there were also highly skilled employees that just happened to need new assignments, as the following reflection from one of the informants shows:

> 'Some things happen by incident. I came in here because I needed a break from being a manager, and they had to find a new task I could fulfill. I wonder if they had kept it [lean] going if not (Navigator, A).'

People in the navigator role were usually organized on lower levels in the hierarchy compared to the advisors, in both the permanent and temporal structures, and belonged to parts of the organization they knew particularly well. In this position, they could be inspiring colleagues, coaches, trainers and advisors to local managers.

The advisors sow the seeds of lean

The initiation phase is where the ideas of lean are captured as suitable solutions to the organizations' challenges, and where the decision makers on the top level start planning a transformation program.

The advisors are highly influential in this phase. Many of the advisors are recruited from peer organizations or management consultancies, and bring in new ideas to the organization, as illustrated in the following example:

> 'Initially, [advisor] was in charge of the program. She came from management consulting and had ICT education, and from this she brought the processual thinking that initiated the transformation (top level advisor, D).'

Attending to conferences, courses, visits and collaboration with peer organizations, they would build knowledge on lean often ahead of the decision makers. Working closely with top-level management and other important interest groups, the advisors are in positions to spread their ideas and influence the strategic choices when the time is right, or as one advisor puts it:

> 'It's about acquaintances. Because I once used to be a trustee, I know all the directors. It is quite easy to just have a chat and discuss the matters (top level advisor, C).'

In this, the advisors have an important role in the initiation phase by suggesting solutions to organizational challenges or put strategies into operational actions, most often formed as change programs or projects.

Advisors and navigators at the core of the change program

In phase "change program", both navigators and advisors are designated formal roles in a temporal organization structure like programs, projects or 'pilots', where the internal consultants have central roles in being experts and driving the projects forward. Advisors often have a useful competence to act as experts and to take on leading roles in the process, and navigators fill formal change agent roles by being trained as lean specialists or managers for pilot unit projects.

Despite the internal consultants, the organizations do not have the initial capacity to drive the lean implementation based on internal consultants alone. All our case organizations engaged external consultants at this point, which made formal marks of the beginnings of the implementation processes. All public organizations in Norway must follow procurement and tendering procedures due to legal regulations. Not all of our case organizations presented lean as the specific required solution at this point. Here, the internal advisors act as gatekeepers in both formulation of requirements specifications and evaluation of the bidding offers from the consultancies, securing that external impulses are coherent with the organizational culture and

their own perspectives. The following quotation demonstrates this definitional power of the internal consultants:

'We had a bidding process where we asked to present suggested solutions, where [external consultants name] sold in lean. (…) [external consultants name] was really smart, because he understood that he wouldn't succeed with predefined answers. He was inviting and open to adjustments (…) He was not puzzled when we rejected his first suggestion (…) He had not frozen into a specific pattern he was to sell (Two top level advisors in dialogue, B).'

From the mandate of program or project managers, the advisors collaborate with the external consultants in defining the lean content and design, and further driving the lean implementation. In various ways, but a common feature, the lean implementation program forms a temporal organizational structure, with more or less coordinated local projects and a hierarchy of central- and local resources. In all our cases, there were program owners or steering committees from the top management, acting as sponsors and legitimate owners. The internal consultants appreciated the positive attitude top managers showed, but generally stated that though they may be enthusiastic, they often did not show interest in developing in-depth knowledge about lean or the consequences of implementing it, and left the responsibility to the program managers. One of the advisors sarcastically exclaimed:

'We have been given latitude to form the change strategy. In one way we get training in being CEOs (top level advisor, C).'

This quote is illustrative for the important impact the temporal lean organization has during the project period. They have formal mandates and authority to drive change processes in the organization and the network of advisors and navigators collectively have organizational knowledge and informal influence in a large span of the hierarchy, and they develop expertise in lean by collaborating with external consultants and peer organizations in various arenas.

During the implementation process, the advisors' and navigators' roles become overlapping and alternating. Some of the navigators continue in project roles outside their domestic, spreading their fresh enthusiasm concerning lean thinking and new learnings across functional silos. In other cases navigators go back to their ordinary positions in the permanent structure and act as informal change agents through local improvements and enthusiasm concerning lean.

Frustrated spectators of the sustain phase

The transition from a functioning change program to the institutionalization of new operational practice (sustain phase) can be characterized as gradual processes of 'handing over' lean from the temporal support function to the operational hierarchy. This phase marks a critical part of the process. Implementation programs tend to be prolonged as the implementation process turns out to be more time consuming than originally planned. In some instances, the lean experts continue in their roles in new established projects. However, overall, the temporal organization ceases to exist. The internal lean experts we interviewed expressed their concern about lean not being sufficiently "stuck" in the organization. The lean concept was still "a thing" in addition to the operations, not sufficiently institutionalized as a practice in a lean organization. Unfortunately, the internal consultants witnessed the lean enthusiasm draining out in several of the organizational units involved in the program.

Most of the internal consultants keep on working as champions for lean. Former navigators tend to work in the new lean way within the units where the local management favored lean. The majority of the advisors return to being functional staff members, some of them still having the responsibility for 'improvement work' or the like, and arranging lean courses or helping local managers on demand. Concerned about the sustainability of lean, they expressed the persistent need for the lean experts' services, as many local managers 'did not yet understand the essence of lean'. This is quite a dilemma since the internal lean experts are the people that have been the most schooled into the thinking of lean as a concept where change should be led and driven in the core operational hierarchy, rather than as a management support function. At the same time, the consultants are under time pressure to complete their mandates, and leaving more responsibility to the managers is accepting delays in completion.

Although the advisors have managed to integrate the lean ideas into the strategic documents, these are often only loose guidelines at the operational level. They expressed frustration of having no authority to force the managers to own and pursue the transformation to become a lean organization. The competence and support from the group of lean experts were only of benefit 'on demand' from local managers who maintained some enthusiasm about the lean ideas, though with only a local improvement focus. One of the advisors (C) illustrated this by telling us that it was up to each manager to see the benefit and invest in improvement projects on their delegated budgets:

'A strategic decision was taken whereby we would receive no budget, thus we cannot finance any projects. I see this as a hopeless model. If we had a separate budget, we could have supplied projects to the units to get the processes risen and standing. We could have helped them with internal or even external consultancy. Now it is up to the unit managers to dare to invest in development projects, and this is hard for them with tight budgets. This situation determines the progress of lean implementation. We are at the mercy of the local managers. They have to really want this [lean].'
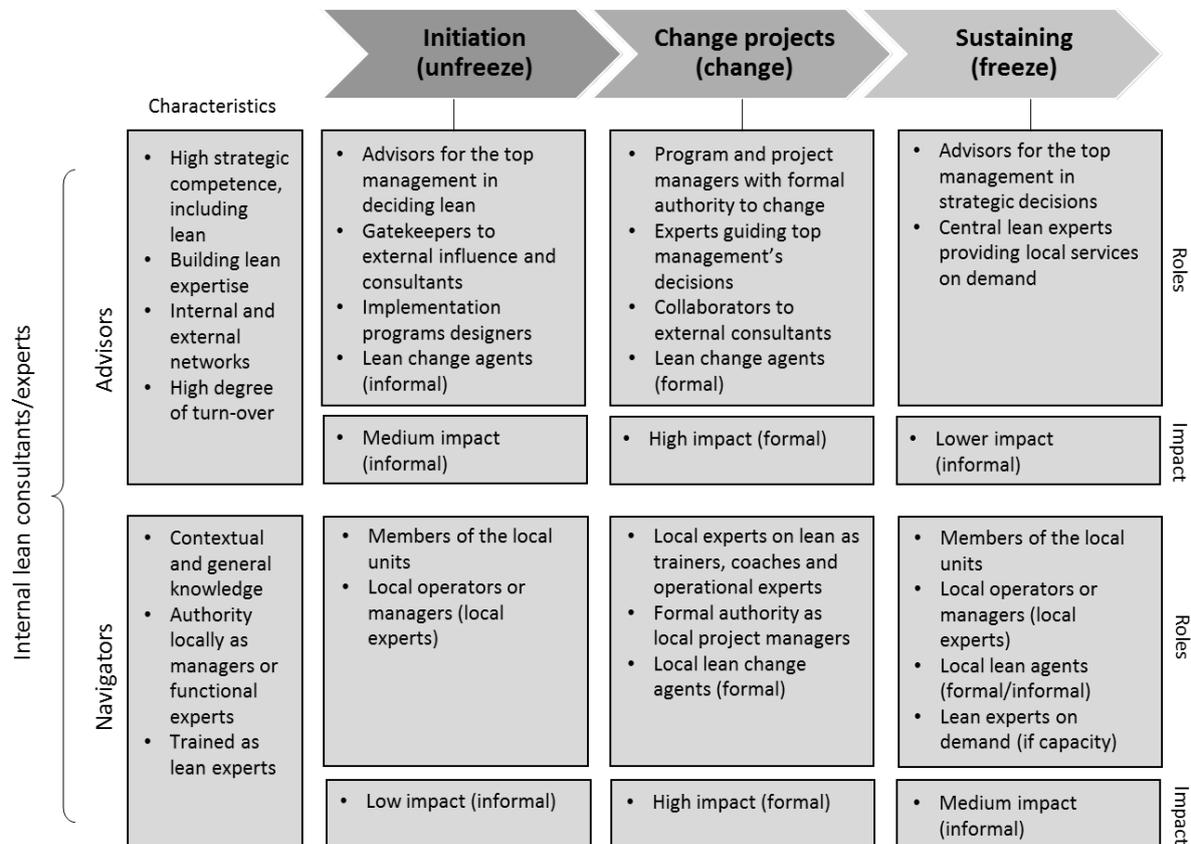
At this point, the internal lean consultants expressed the lack of support from the top management. Going from a celebrated program to an assumed established method far down in the hierarchy; the internal experts have lost their power to perform changes on behalf of the top management. In one of the organizations (D), the program manager was concerned that the whole idea of a lean organization would go down with the retirement of their current CEO:

'This our concern now: What do we have to accomplish in a hurry before he goes, so lean will survive in the organization, and when the new CEO arrives, he will make sense of continuation?'

Within parts of our case organizations, other large structural changes had already led to termination of the lean approach, and managers were focusing on other large challenges and goals. Accordingly, this required a shift in the attention and capacity of the advisors. The final conversations showed us that several of the internal lean experts move on to other organizations or other change programs, wishing that some of the ideas and methods of lean would survive or reappear in the future.

Our findings are summarized in Figure 1. The internal lean consultants have a significant role in the lean transformation process. By having the expertise within the internal and external network, they can suggest lean as a solution to the organizational challenges when the timing is right, and have a large impact on how lean is interpreted and introduced to the organization. In the next phase, they are given a formal mandate and form an efficient structure of external expertise, and inside network and knowledge, and drive the lean implementation throughout the organization according to a programmatic structure. The last phase seems to be a critical point for the survival of the lean in the organizations. The formal mandate and program structure deteriorate, and the responsibility of continuity and further initiations of lean initiatives are moved from the temporal structure of internal lean consultants to the permanent structure of

management. The advisors still have the internal network and available expertise, but it is no longer their call to drive the process on.

Characteristics		Initiation (unfreeze)	Change projects (change)	Sustaining (freeze)	
Advisors	• High strategic competence, including lean • Building lean expertise • Internal and external networks • High degree of turn-over	• Advisors for the top management in deciding lean • Gatekeepers to external influence and consultants • Implementation programs designers • Lean change agents (informal)	• Program and project managers with formal authority to change • Experts guiding top management's decisions • Collaborators to external consultants • Lean change agents (formal)	• Advisors for the top management in strategic decisions • Central lean experts providing local services on demand	Roles
		• Medium impact (informal)	• High impact (formal)	• Lower impact (informal)	Impact
Navigators	• Contextual and general knowledge • Authority locally as managers or functional experts • Trained as lean experts	• Members of the local units • Local operators or managers (local experts)	• Local experts on lean as trainers, coaches and operational experts • Formal authority as local project managers • Local lean change agents (formal)	• Members of the local units • Local operators or managers (local experts) • Local lean agents (formal/informal) • Lean experts on demand (if capacity)	Roles
		• Low impact (informal)	• High impact (formal)	• Medium impact (informal)	Impact

Internal lean consultants/experts

Discussion

The lean literature continues to search for the secrets of success in Toyota, developing prescriptions for western managers (Liker and Convis, 2012; Nicholas, 2016; Poksinska *et al.*, 2013; Rother, 2010). Consultants are generally seen as superfluous in the ideal of lean (Rother, 2010), and descriptions of their roles are scarce.

In contrast, this study has shown that internal lean consultants are highly influential in change efforts towards the lean ideal, but that their roles are distinctly different from those of the Toyota sensei. Technically both act as lean experts. Both senseis and internal lean consultants use coaching techniques as described in Schein (1999), adopting the helper role and demonstrating expertise of both process and content (Worren *et al.*, 1999). What separates senseis from internal consultants is that the first act as masters and the latter as servants in relation to the organizations' managers. The sensei has authority through his extensive

experience and personal charisma. The internal lean consultant is a technical expert who performs activities of procedural nature with his tools and methods. The consultant's power is borrowed from the manager for limited time; it ends with the sustain phase. Hence, compared to the sensei, the influence of the internal consultant is weaker, more unpredictable and transient.

The internal consultants have much in common with the 'consultant managers' described by (Sturdy *et al.*, 2015). They differ from external consultants in terms of local knowledge and network that give them informal influence in initiation and driving through processes. By this, the internal consultants are both change agents aligned with external consultants, but also change champions ahead, during and after the ongoing change project. In addition, they act as gatekeepers, intermediators and interpreters between the external expertise and the operational staff and managers (Sturdy et al., 2015). In this the advisors, navigators and external consultants combined form effective change process networks throughout the organization (Worren *et al.*, 1999) providing the internal consultants with a central position in terms of the translation process of lean in the organization (Andersen and Røvik, 2015).

The power of internal lean consultants peaks during the 'change projects' phase. Planned change implies formal power structures, although only temporal. It is more intriguing to see how the informal impact seems weaker in the sustain phase compared to the initiation phase; the influence on top management decisions and sponsorship seems to decay after the change projects are finished and 'given back' to the permanent structure. There are several possible explanations for this. First, fashion theories (Abrahamson, 1996; Kieser, 1997) suggest that lean has lost it power of attractive novelty, and has been decoupled from the 'real' organization after the project has been released and terminated. Second, the expert power of the internal consultants weakens as 'prestige [is] a perishable commodity' (Sturdy et al., 2015 p 149). By being servants rather than gurus, they become occupied with other tasks or leave the organization. Without rejecting these two explanations, we will suggest a third explanation, built on the organization of the change process and its discrepancy to the essence of the lean concept.

Discrepancy between the planned change process and lean success is concerned around two aspects: the concept of lean and the leadership role. Regarding the first, it is widely recognized that lean implementation takes time. This is not easily fixed through a short-term change project (Womack and Jones, 1996). Rather than a large replacement of an old practice, lean corresponds to ideas of continuous, cumulative evolving change (Pettigrew *et al.*, 2001).

The importance of contingency and learning in the lean philosophy (Hines *et al.*, 2004) questions the applicability of a preplanned process such as planned change models. Lean is never done implemented, and thus some even claim that lean cannot be implemented (Ballé and Handlinger, 2012). This discrepancy has led to suggestions of transformations in more self-organized and emergent fashions (Holmemo and Ingvaldsen, 2018; Smeds, 1994) where external agents have less room in the dialectic process between the expert employees and the culture carrier and facilitating manager (Poksinska *et al.*, 2013).

Regarding the leadership role, this is emphasized as a key success factor in much of the lean literature (Andersen *et al.*, 2014; Netland, 2015). However, lean leadership is more than coaching people to come up with improvement ideas (Poksinska *et al.*, 2013). The coordination between levels in the management structure (Nicholas, 2016) is crucial for achieving improvement benefits in the larger value chains (Portioli-Staudacher and Tantardini, 2012). When the internal consultants experience that the lean concept in the organization is at risk in the sustain phase, this is not only caused by their vanishing power, but also caused by the large extent of power and responsibility they exert in the change project phase. Holmemo and Ingvaldsen (2016) show how the network of internal and external lean consultants ('lean silo') by-passes mid-layers of management that is crucial for a successful lean implementation. Although it might be convenient (or even necessary) for busy managers in delayered organizations to form these fast-tracks of temporal structures and delegate the work to change and lean experts, lean is not a concept suitable to implement and hand over at the last mile stone of a project. The nature and context of change in western organizations are aspects one cannot ignore. However, the managers need to take an active part in lean implementation at earlier phases to secure that the sustain phase would succeed. In difference from the internal lean consultants, the sensei would never implement lean for the managers, but make the managers struggle and improve by learning, while he enjoys his dinner. In this way, the organization is getting closer to becoming lean.

Our study is performed in the public sector, and the findings cannot directly be generalized beyond this sector. Lean transformations in the public sector have been found to be characterized by various and partial adaptions of lean and dominated by tool-based understandings rather than managerial and holistic approaches (Bateman *et al.*, 2018). Furthermore, the bureaucratic nature of the public sector strengthens the importance of formal authority over other forms of influence, which can explain why the internal consultants' influence declined so rapidly during the sustain phase. Nonetheless, several large private sector

firms share the same bureaucratic features, and it is documented that manufacturing also implement lean through programmatic approaches (Netland and Ferdows, 2014). Hence, we encourage future research to investigate the relevance of our findings beyond the public sector.

Conclusion

This study has addressed the roles of internal consultants in lean transformations in the Norwegian public sector, and demonstrated how the consultants' influence varies during the transformation process. Lean transformations are dependent on internal lean consultants to succeed, as they function as important change agents in initial phases and during change projects. Nonetheless, their roles can also be hurdles for sustainable lean transformation.

Our main managerial contribution is emphasizing the need for careful consideration of the design of the lean transformation. The programmatic nature of change in western organizations accentuates the role of consultants taking on responsibilities and replacing line management. Our findings imply that top management should reconsider programmatic designs for continuous and never-ending change concept such as lean. The lean transformation should not be driven by internal consultants' borrowed formal authority, but rather by managers' permanent authority, supported by the informal influence of both managers and lean experts. Line managers on all levels should be challenged and supported towards more commitment and responsibility in the earlier stages of the transformation process, acknowledging lean as a management system and way of leadership towards continuous change rather than production methods implemented once and for all. Training line managers in lean thinking and lean leadership during the implementation phase might be an effective way of changing their priorities.

Internal consultants are important resources as gatekeepers, introducers and translators of new ideas into the organization. During change, they have important roles as trainers and coaches to managers, but should be supporting rather than performing the tasks of change management. With inspiration from the Toyota senseis, they should act more like respected teachers than humble servants. To be able to fulfill this ideal role, internal consultants need informal authority grounded in seniority, internal knowledge, access to networks, management experience and lean expertise. Internal consultants finding themselves engaged as responsible for lean implementation projects should take advantage of their borrowed authority to challenge their principals and encourage the line managers' practical involvement in the early phases.

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