Matching, not merging: how change agents deal with multiple organisation concepts

Christopher Berg

Department of Industrial Economics and Technology Management,
Norwegian University of Science and Technology (NTNU), Trondheim, Norway

Jos Benders

Department of Industrial Economics and Technology Management,
Norwegian University of Science and Technology (NTNU), Trondheim,
Norway and Centre for Sociological Research (CESO), KU Leuven,
Leuven, Belgium, and

Jonas A. Ingvaldsen

Department of Industrial Economics and Technology Management,
Norwegian University of Science and Technology (NTNU), Trondheim, Norway

Abstract
Purpose – Organisation concepts consist of prescriptive ideas concerning how to manage or organise. The simultaneous use of multiple concepts in an organisation may create synergies but also confusion and conflicts. This paper aims to explore how change agents deal with the simultaneous use of multiple organisation concepts within a single organisation.
Design/methodology/approach – A qualitative case study of a Norwegian energy company using lean, agile and design thinking.
Findings – Our findings show that change agents (1) compare the concepts with each other and recognise commonalities and differences. They also (2) match individual concepts and tools to (I) the nature of tasks, (II) the different phases of projects/initiatives based on their perceived maturity or (III) internal communities. Most agents emphasise similarities between concepts and complementarities between tools. This approach creates a versatile toolbox for improvement.
Originality – This study offers a novel understanding of how change agents make sense of different approaches to improvement within a single organisation.
Practical implications – Companies making use of multiple organisation concepts should continuously discuss and actively manage the tensions that exist between concepts while establishing a unified approach and common culture for improvement.
Keywords Lean, Agile, Design thinking, Organisation concepts, Continuous improvement
Paper type Research paper

Introduction

Organisation concepts consist of prescriptive ideas concerning how to manage or organise, which are meant for consumption by managers and are known by particular labels (Benders and Verlaar, 2003). Contemporary examples of influential organisation concepts include lean (management) and agile (management). Such concepts tend to offer fairly general principles and advice, which means that interpretation and adaptation are necessary when they are used by organisations (Benders and Verlaar, 2003; Hekneby *et al.*, 2022; Netland and Aspelund, 2014).

How organisation concepts are interpreted and adapted has been extensively studied in recent decades. Some studies have addressed the use of these concepts across organisations in general (e.g. van Grinsven *et al.*, 2016), whereas other studies have focused on the implementation of particular concepts (e.g. Holmemo *et. al.*, 2016, in the case of lean and Moe *et al.*, 2010, in the case of agile). With very few exceptions (e.g. Benders and Verlaar, 2003; Hekneby *et al.*, 2022; Oudhuis and Olsson, 2015), these studies either purposely focus on a single organisation concept, or they implicitly leave the impression that organisations are working with only one concept at a time. Perhaps organisations are thought to be doing what the practitioner literature prescribes: attempting to adopt organisation concepts 'holistically' and avoiding 'piecemeal' or 'tool-based' implementations (Emiliani, 2007; Hohl *et al.*, 2018).

However, from extant literature and our experience with applied research, it is evident that many organisations use *multiple organisation concepts simultaneously*; for example, organisations are simultaneously working to become 'lean', 'agile' and 'customer oriented'. For individual employees, the simultaneous use of multiple concepts with associated labels, principles and tools might be bewildering (Watson, 2001). At the same time, synergies can be created due to the ability of employees to combine and organise multiple different concepts. However, using different concepts haphazardly rather than systematically might negatively impact performance. Consequently, it is important to gain an understanding of why and how multiple organisation concepts are used simultaneously.

We explore this topic through a case study of 'EnergyCo' (a pseudonym), an international energy company. We argue that the co-existence of multiple organisation concepts triggers a need for sensemaking, whereby different concepts (and their associated labels, principles and tools) are organised into a (fairly) coherent whole. In this paper, we focus on employees using organisation concepts to develop and realise performance improvements, whom we label 'change agents'. Our main research question guiding the empirical analysis is – *How do change agents make sense of multiple organisation concepts within a single organisation?*

Our main finding is that change agents create order via two main strategies: (1) comparing the concepts with each other and (2) matching individual concepts and tools to (I) the nature of tasks, (II) the different phases of projects/initiatives based on their perceived maturity or (III) internal communities. Most agents emphasise similarities between concepts and complementarities between tools. This approach creates a versatile toolbox for improvement. However, when the differences and tensions between concepts are not thoroughly explored, the company may forego opportunities for learning and face challenges in consolidating a unified organisation culture for improvement.

Organisation concepts

Organisation concepts have been conceptualised as consisting of a label and contents (Benders and Verlaar, 2003). For this article, we prefer a more fine-grained distinction, where an organisation concept has three parts: (I) label, (II) philosophy (or principles) and (III) tools. A concept's *label* is its identifier, such as 'lean' or 'agile'. Labels may be carefully chosen to create a desirable image concerning what the organisation should become. The *philosophical*

element can be described as the 'guiding principles and overarching goals' (Shah and Ward, 2007, p. 787). The principles explain what should be achieved (e.g. 'creating value for customers') in terms of overall means (e.g. 'optimising production flows'). The principles guide tool application. *Tools* are equated with management practices or techniques, which 'can be observed directly' (Shah and Ward, 2007, p. 787). Well-known examples include value-stream mapping, A3 problem-solving and scrum stand-up meetings.

In practical implementations, the label, philosophy and tools are often decoupled to a certain extent (Benders and Verlaar, 2003). For instance, organisations may (rhetorically) adopt the label but not the content; they may also simply make use of (some) tools without the original philosophy or follow the principles with modified versions of the tools. Implementations may be highly eclectic or stay true to the broader set of principles. In extant literature, piecemeal and tool-centred approaches have often been suggested to explain implementation failure. For example, using lean tools without following the broader management principles has been labelled 'fake lean' (Emiliani, 2007). However, substantial improvements are thought to materialise when organisations integrate the concept's principles into their 'DNA' (Spear and Bowen, 1999) or 'corporate culture' (Liker and Hoseus, 2008). Similarly, a distinction has been made between 'doing agile' and 'being agile' (e.g. Hohl *et al.*, 2018), where the latter is considered superior.

Multiple organisation concepts

The co-existence of multiple concepts within single organisations has been noted and partially explored. First, multiple concepts have been addressed in studies where one concept replaces another concept within an organisation, typically giving rise to tensions and conflicts (e.g. Gill *et al.*, 2020; Oudhuis and Olsson, 2015). Second, multiple organisation concepts have been examined in terms of organisations creating their own management systems with elements from different organisation concepts (Benders and Verlaar, 2003; Hekneby *et al.*, 2022; Netland and Aspelund, 2014). Third, multiple organisation concepts also appear in studies where concepts have been combined with each other to form new concepts. Examples include 'lean six sigma' (Snee, 2010) and 'lean 4.0' (Valamede and Akkari, 2020), that is, a combination of lean with six sigma and industry 4.0, respectively.

However, none of these studies tell us anything about what goes on in organisations where multiple organisation concepts are present over time or how employees within these organisations make sense of these concepts and how they relate. We follow Cornelissen (2012, p. 118) in understanding the sensemaking of change agents, where sensemaking 'refers to processes of meaning construction whereby people interpret events and issues within and outside of their organisations that are somehow surprising, complex, or confusing to them'.

Lean, agile and design thinking

The three prevailing organisation concepts used by the case organisation are lean, agile and design thinking. Common to all three is the transition from an industry-specific concept to a general concept that addresses a wide range of management issues. Table I presents an overview of the concepts' origins, current mainstream understandings of the concepts in the literature, EnergyCo's interpretation of the concepts and EnergyCo's approach to implementing them. The presentation is based on Benders *et al.*, (2019), Holmemo *et al.* (2018) and Holweg (2007) for lean; Beck *et al.* (2001) and Cram and Newell (2016) for agile; and Carlgren *et al.* (2016) and Dorst (2011) for design thinking.

Table I. Overview of the three main organisation concepts at EnergyCo.

Concept origin	Current mainstream understanding	EnergyCo's interpretation	EnergyCo's implementation
Lean originated in the auto industry, where the goal was to perfect the repetitive manufacturing of discrete products.	Lean has become a complete management system, built on five principles: specifying value creation, identifying value streams, creating flow, creating pull and continuously improving.	Short-term improvement response and a way to establish a culture for continuous improvement.	o Top-down and company-wide; o Management driven; o Mainly introduced through an efficiency program, leading to a company-wide initiative to implement lean.
Agile originated as a software-development tool and was made public through a manifesto. The aim was to develop software in a flexible and responsive way.	Agile is developing into a management system, built on the 12 original principles of the manifesto; it highlights responsiveness to changing requirements, minimal up-front planning and team collaboration.	Development approach mainly used for digital products/initiatives.	o Bottom-up and decentralised; o Business unit/ profession driven; o Mainly introduced through the company's different units for IT and digital development; o Spreading gradually to other parts of the organisation, primarily through collaborations and word of mouth.
Design thinking originated in the field of architectural design, offering design processes and problem-solving methods.	Design thinking is developing into a management system. Five characteristic themes have been identified: user focus, problem framing, visualisation, experimentation and diversity (in teams and perspectives).	Development approach mainly used for digital products/initiatives and primarily serves as a way to sketch designs and functionality for IT applications.	o Bottom-up and decentralised; o Business unit/ profession driven; o Mainly introduced through the company's different units for IT and digital development; o Spreading gradually to other parts of the organisation, primarily through collaborations and word of mouth.

Source: Authors' own work.

Methodology

EnergyCo is one of Norway's largest energy producers; it focuses on producing oil, gas and renewables. The case company was selected due to its use of multiple organisation concepts and its interest in collaborating with researchers on this topic. EnergyCo's use of multiple concepts has been studied since May 2020.

For data collection, we used qualitative methods. For interviews, we searched for informants who worked actively with multiple organisation concepts and who we expected had given serious thought to the relationships between them. Our main contact persons at EnergyCo – who were themselves working in improvement initiatives and with concepts – suggested we interviewed people from three different ongoing improvement projects: Projects 1, 2 and 3. Projects 1 and 2 concern digitalisation and involve the development and implementation of new hardware and software, whereas Project 3 primarily revolves around continuous improvement. In addition, we interviewed three senior managers responsible for improvement initiatives at EnergyCo. As the informants use organisation concepts to develop and realise performance improvements, we label them *change agents*.

Table II summarises the sample. Overall, 16 participants were interviewed, and each interview lasted 30 to 90 minutes. The interviews were conducted in Norwegian and transcribed. All quotations were then translated into English by the authors. In addition to the semi-structured interviews, we gained access to several project-related documents. Some of these documents highlight the preliminary results of the initiatives (e.g. a handbook for continuous improvement developed in Project 3); other documents describe different ways of working within EnergyCo as well as the roles and responsibilities of departments relevant for the present study.

Table II. Project and interviewee overview.

Affiliation	Short description	Roles interviewed
Project 1	Digital development project, involving both hardware and software components.	o Project owner/leader o Project leader o Product owner o Improvement expert
Project 2	Digital development project, involving mostly software.	o Product owner/project leader o Implementation leader/subject-matter expert o Subject-matter expert o Improvement expert
Project 3	Continuous improvement initiative.	o Project owner/project leader o Two improvement experts/leaders o Improvement expert o Change leader/coordinator
Senior management	Responsible for, *inter alia*, operational efficiency, digitalisation initiatives and the use of concepts, frameworks and tools.	o Three senior vice presidents

Source: Authors' own work.

We began data analysis by studying parts of the transcripts where the interviewees either brought up the topic of multiple organisation concepts, mentioned two or more concepts in the same context or answered questions (directly) related to multiple organisation concepts. This gave us preliminary findings worthy of further study. We put the preliminary findings into context by considering the interviewees' roles, their history and experience with organisation concepts, their position and their project affiliation. We then conducted comparisons and sorting to develop a data structure inspired by Gioia *et al.* (2013), as shown in Figure 1. We made five theoretical interpretations of the empirical clusters: (1) comparing and recognising tools, (2) comparing and recognising principles, (3) task matching, (4) maturity matching and (5) community matching. To indicate a sense of frequency and unanimity in the interviewees'

responses, we quantified the empirical observations (see Figure 1). To do this, we systematically went through each interview and examined whether the statements qualified for one (or more) of the previously identified observation clusters. All informants are represented in at least one of the clusters. We established two theoretical categories representing sensemaking strategies from our interpretations: (1) comparing and recognising and (2) conditional matching. Our model of change agents' sensemaking (see Figure 2) brings together the five interpretations and the two categories from the data structure (see Figure 1).
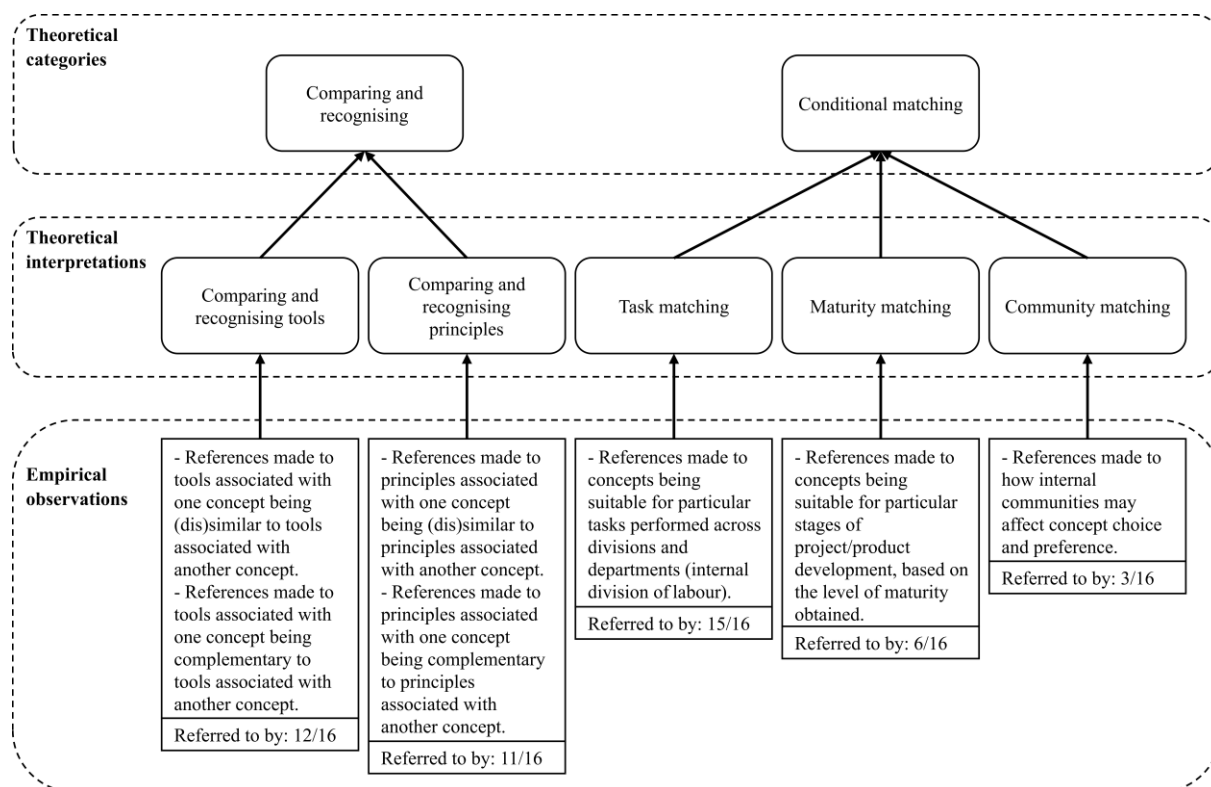

Figure 1. Data structure.
Source: Authors' own work.

The sensemaking process

Figure 2 shows how change agents at EnergyCo make sense of multiple organisation concepts. The process is triggered by the presence of multiple concepts that have entered the organisation from the outside – in this case, lean, agile and design thinking (see Table I). We note that the different concepts were not brought into the organisation according to a masterplan for combined use. Furthermore, EnergyCo is a large organisation consisting of multiple business areas and geographically spread-out production units. Although EnergyCo is governed by regulations, procedures and guidelines as well as hierarchical structures, it has a culture of partial autonomy within the different business and production units. In general, the company has a decentralised approach to concept use, which means that change agents are responsible for making sense of and organising the concepts being used. From Table I, it is evident that their sensemaking is not uniform, even though it converges on important issues.
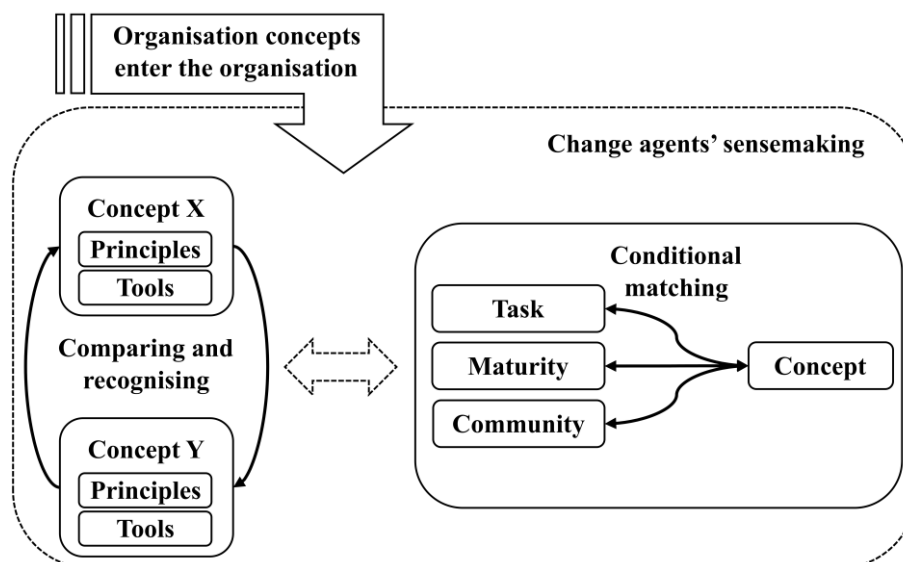
Figure 2. Change agents' sensemaking strategies at EnergyCo.
Source: Authors' own work.

In the following sections, we elaborate on the two sensemaking strategies identified: (1) comparing and recognising and (2) conditional matching. In the first strategy, agents *compare* the concepts and *recognise* commonalities and differences between them. In the second strategy, agents match organisation concepts to (I) the nature of tasks, (II) the different phases of projects/initiatives based on their perceived maturity or (III) internal communities. The strategies inform each other, as most informants compare concepts before matching them to different tasks, maturity levels or communities. However, a small number of informants match concepts without explicitly discussing how they relate.

Comparing and recognising
Change agents relate concepts to each other through *comparison* and *recognition*. In general, our informants emphasised similarities and complementarities between the concepts. For example, one product owner (Project 1) stated the following: 'lean and agile are not the same, but they can coexist well'. Tensions between the concepts were rarely brought up unless informants were asked directly about them. Very few informants stated that they had a clear preference for a particular concept, though such attitudes were indeed attributed to communities within EnergyCo (see section on community matching).

The change agents' emphasis on similarities and complementarities was particularly pronounced regarding the concepts' principles – despite different origins, wordings and tools. The following quote illustrates this:

> Agile and lean, it's very aligned. In agile, there is quite a lot about empowerment of teams, right. So, self-managed teams. […] Continuous, frequent, contact with [the] customer. So, it's quite a lot of those common principles. So, that's why I say that they are complementary. What's in the base of lean? Empowerment of people, bottom-up approach. [Elaborates further and brings in design thinking]. So, there are slightly different methodologies but still a common set of principles. Common mindsets. (Improvement expert, Project 3).

Our informants also highlighted similarities between tools as well as differences. Importantly, such comparisons helped agents to measure concepts against each other. The two following

quotes are illustrative of this:

> Also, people mix, right? Then, some new trends arrive. Then agile comes in as a part of the digitalisation. For me, agile is really just a lightning-fast plan–do–check–act, right? If you think lean, plan–do–check–act, in the 'ordinary' lean, when you sort of get a time interval between plan, do, check [and] act. While agile, then they sort of have everyone present in the room, and you get to really 'test' people quickly, [and] if you look at leadership and so on, you are needed in relation to lean and agile and so on, then there's a lot of likeness, right? Then, there's someone who have made it so that there is competition between such 'mottos' too. For me, it just becomes nonsense. For me, it's kind of a set of tools, and you sort of have to use what is appropriate for your situation. (Senior vice president).

> So, there is a big part of scrum, [the] agile approach, that has a lot of the same elements as, say, traditional A3 mindset, and [the] PDCA approach. […] Since I have been working with lean for many years, and that is what I know the best, that is what we use the most. But we do see that there is a lot of, call it, similar elements. (Improvement expert/leader, Project 3).

Informant responses regarding labels were more diverse. Although labels are beneficial in terms of keeping track of the different concepts and making comparisons possible, some agents claimed that they also created unnecessary confusion and resistance. One informant even argued that the labels should be significantly downplayed in favour of organisational objectives:

> And we are sort of met with 'oh yes, is it lean all over again?' No. For me, it's a bit like, it doesn't matter what we call it; probably like cursing in church, but it's a bit like, it doesn't matter. We are not that concerned about whether it's called lean or agile or design thinking or integrated operations, but what we are going to achieve. That's what's important, and how we are going to get there. (Project owner/project leader, Project 3).

Another source of confusion is that, in some parts of the organisation, lean is referred to as continuous improvement. This confusion seems to have been created by a decision in Project 3 to highlight the purpose of the improvement activity rather than the label 'lean' and its associated tools:

> To the extent that there is confusion and questions, it is probably mostly connected to lean and continuous improvement. But I think that, in order to avoid making this a bigger thing than it needs to be, we are doing continuous improvement, and then some people will recognise some elements from lean and some tools from lean, but that it is about building continuous improvement. (Project owner/project leader, Project 3).

Conditional matching
In this section, we elaborate on the sensemaking strategy *conditional matching*, whereby agents judge when or where it is suitable to use a particular concept. We identified three main types of matching: (I) task matching, (II) maturity matching and (III) community matching. *Task matching* concerns matching the concepts with the different tasks performed across the organisation's divisions and departments; in other words, it refers to the internal division of labour. *Maturity matching* concerns matching the concepts to different phases in the lifecycles of projects or initiatives, which are considered to 'mature' as they progress. *Community matching* concerns matching the concepts to different internal communities in the organisation based on their actual (or presumed) preference for particular concepts.

We start with the most common type of matching found at EnergyCo (see Figure 1), namely *task matching*, as exemplified by the following quote from a senior vice president:

> So, you could say, if you distinguish the three forms of improvement support, then you could say that we use lean often in relation to standardisation. […] We use agile where you have a bit more uncertainty and are not completely sure where we are going, and we use design thinking when you don't really know what you want. So, and that is probably a bit like the theory as well, but it works pretty well. […] So, I would say that production, that is typically lean. [Field] exploration, that is typically agile, and a lot of what we do within digitalisation, that can actually be design thinking.

Here, lean is associated with task standardisation as well as production, where the underlying level of uncertainty is low; it is not a question of whether something should be done but, rather, a question of how. Agile is to be used in the presence of uncertainty and when it is not completely known where the organisation is going. This is exemplified by the task of (oil and gas field) exploration. Design thinking should be used when uncertainty is at its highest, and, in this context, exploring different options seems to be the main goal. Digitalisation is presented as a typical design-thinking task, as it is viewed as a method of improving how things are done and visualising potential outcomes.

Next, we present *maturity matching*, where multiple organisation concepts are made sense of in terms of their suitability for the different phases that products or services go through. The following quotes are illustrative of this:

> By using agile and design thinking in an early phase of product development or, yeah, whatever it may be, right, and that we have a lean approach when we get into a stabile process. Stabile operations. (Improvement expert/leader, Project 3).

> We see, to an increasing degree, that we pull on lean expertise in the digital projects, because we have gone from a pilot, made a minimum viable product, to broad scaling. At that point, it is about work processes and so on. (Senior vice president).

Under this logic, design thinking and agile should be used early on at an immature stage, when uncertainty is high. Lean is used mostly when the 'product' is in operations and can be categorised as mature. At this point, uncertainty is quite low. Maturity matching is used considerably less than task matching by our informants (see Figure 1), but it shares a common rationale in that the choice of concept is based on the underlying uncertainty in the work activities.

Lastly, we present *community matching*. Although task and maturity matching indicate a purely instrumental approach to concept use, interviewees also suggested that, in parts of the organisation, concepts act as signifiers of social identity and, perhaps, status. An improvement expert/leader (Project 3) made this point indirectly:

> Yes, it's good that you say feels because it won't be a fact-based statement from me, right. But I think that we have – so, there is a lot – we have many approaches to it, and where you belong and which congregation you belong to really decides which tools [and] methods you use. So, I think that if I were to look at the whole of [EnergyCo], then I think that there are quite large differences.

The word 'congregation' alludes to religion, which we also saw in an earlier quote with the phrase 'cursing in church'. The words point in the direction of communities of employees with strong convictions towards a particular concept. Some suggested that, within the IT departments, one can find employees who identify strongly with agile and (to a lesser extent) with design thinking, but, at the same time, they show little interest in lean, which is considered old fashioned. One informant explained this resistance:

> […] IT was quite late with this [lean], so in a way, [the] IT organisation did not implement this until far out in the process. That is, ran lean courses and approach, and that kind of stuff. […] Within at least parts of [the] IT environment, agile is in a way – so, both this lean thinking, in relation to a focus on elimination of waste, and a few of those principles, are in a lot of our methodologies already and was not that new in that sense. But EnergyCo's lean was something different again. In a way laid up for the business, and our processes, out in the business, and maybe – I can't speak for the entire IT – but I think that IT probably sits and thinks that it's sort of old news in a way. But in relation to influence; no, that is, I won't say that we were very influenced by lean, really, along the way. (Product owner, Project 1).

The extent to which change agents choose concepts based on social identity or status is hard to assess with the current data. On the one hand, community matching was mentioned by relatively few informants compared to the other forms of matching (see Figure 1). On the other hand, choosing concepts on such grounds might go against the norms of rationality that pertain to both EnergyCo and the interview situation. Hence, we might expect that such motives are rationalised as either task matching or maturity matching. In practice, the result would often be the same, as internal communities typically perform tasks of a particular nature and are involved in projects at a certain stage of maturity.

Although the different forms of matching created some order in the clutter of labels, principles and tools, they also resulted in new issues and internal discussions. These revolved around exactly how to distinguish between an 'immature' and a 'mature' product or project and which concepts to apply to projects that do not neatly fit into pre-existing categories, such as projects that are not about software development or work-process improvement:

> [We have] discussion[s] about; what is digital vs. lean? […] There is still a bit left when it comes to which work methods you use. Then it's more agile vs. lean, that one can choose to problematise. We probably have a bit left when it comes to drawing it up. What we see especially is, again, back to software development in the product teams, and lean in [EnergyCo] has more of a framing towards work processes and that bit. You won't find all the answers, if I am a software or product developer, in [EnergyCo]'s lean framework. You need to [go] to agile, sprint, backlog, which don't exist in the lean-toolbox today. So, there have been a few discussions that are still [unresolved]. (Senior vice president).

Discussion

The central features of sensemaking strategies at EnergyCo include (1) emphasising how the concepts are complementary and (2) offering different tools for different activities. On the positive side, these sensemaking strategies prevent unnecessary conflicts over which concept is the 'right one', and they provide change agents with a versatile toolbox for improvement initiatives. On the negative side, these sensemaking approaches might result in dysfunctional consequences.

First, opportunities for learning might be foregone when the differences (together with the similarities) between the concepts are not thoroughly explored. Literature on organisational learning has shown how working with tensions and paradoxes might help employees generate new knowledge and discover novel approaches to management problems (Cunha *et al.*, 2019). A premature closure of tensions – thinking about the elements as simply similar or opposites – means that prevailing mental models will not be challenged (Smith and Lewis, 2011). The relationship between lean and agile is a case in point. As we have seen, the two concepts have many similarities. Yet, if we look closely at their philosophies, it is evident that they differ in their approach to process standardisation. Although disciplined execution of standard procedures is the building block of most lean systems, including Toyota's (Ingvaldsen and

Benders, 2016), the agile manifesto clearly prefers flexibility and freedom over planning and documentation (Beck *et al.*, 2001). In the case study, we saw similar arguments used against lean within the software communities. However, what could have been an interesting confrontation between the concepts' philosophies in a particular context was effectively avoided by the practice of task matching (and community matching). Through task matching, the IT communities' existing preferences for organisation concepts were justified as suitable for their type of work.

Second, due to a lack of thorough engagement with the philosophies alongside retaining multiple labels, EnergyCo does not clearly state which unified principles should guide the application of the versatile toolbox. Hence, the normative basis for improvement activities seems to be underdeveloped. Building a strong company culture around improvement principles and inspiring leadership change have been highlighted as key success factors when implementing single organisation concepts (Bhasin and Burcher, 2006; Hohl *et al.*, 2018; Liker and Hoseus, 2008) and company-specific management systems (Besser, 1996; Hekneby *et al.*, 2020). For instance, Hekneby *et al.* (2020, 2022) showed how much effort their case company spent on relabelling and integrating different tools and ideas into a management system that was actively preached by top managers and described as a 'religious belief' by middle managers. Interestingly, agents within EnergyCo also reference religious convictions, but this takes place in the context of diverse congregations existing alongside each other, not in a unified belief system.

Conclusion and future research directions
In this paper, we explored the simultaneous use of multiple organisation concepts within one organisation, focusing on the sensemaking of change agents. We also discussed the pros and cons of the sensemaking strategies discovered at EnergyCo.

Future studies might explore other instances of sensemaking or pursue other lines of enquiry to obtain a broader and more robust understanding of the simultaneous use of multiple organisation concepts within companies. For example, future studies could address the full scope of the phenomenon: to what extent do organisations make use of multiple concepts? Is this use confined to large organisations with highly diverse internal operations or to organisations with a culture for business unit autonomy? Are the approaches to sensemaking similar in other organisations? Do they, similar to EnergyCo, use different concepts for different types of activities, or do they have other methods of organising the labels, principles and tools? Another interesting research direction is to examine why organisations make use of multiple concepts: is it a deliberate strategy to create synergies, or does it come about when different groups of employees bring in their preferred ways of working? Furthermore, research could address the effects of having multiple concepts within the same organisation: are operations improving through novel combinations of ideas and do the improvements justify the efforts required for deliberations and sensemaking? Both survey and case study research might shed light on these questions.

The main practical implication of our study is that companies making use of multiple organisation concepts should keep discussing tensions and exploring synergies while consolidating a common culture for improvement. Exactly how this balancing act should be performed is hard to prescribe from existing knowledge. Perhaps the companies should relabel the concepts and reframe the principles in their own terms, as in company-specific management systems (Hekneby *et al.*, 2022). Perhaps the tensions and synergies between concepts are best explored in the context of concrete activities and work processes, which would require a fairly deep understanding of different concepts – their principles and tools – across the organisation to ensure that appropriate decisions can be made.

References

Beck, K., Beedle, M., van Bennekum, A., Cockburn, A., Cunningham, W., Fowler, M., Grenning, J., Highsmith, J., Hunt, A., Jeffries, R., Kern, J., Marick, B., Martin, R.C., Mellor, S., Schwaber, K., Sutherland, J. and Thomas, D. (2001), "Manifesto for Agile Software Development", available at: http://agilemanifesto.org/ (accessed 22 August 2022).

Benders, J., van Grinsven, M. and Ingvaldsen, J.A. (2019), "The persistence of management ideas: How framing keeps 'Lean' moving", in Sturdy, A., Heusinkveld, S., Reay, T. and Strang, D. (Eds.), *The Oxford Handbook of Management Ideas*, Oxford University Press, Oxford, pp.271-285.

Benders, J. and Verlaar, S. (2003), "Lifting parts: putting conceptual insights into practice", *International Journal of Operations & Production Management*, Vol. 23 No. 7, pp.757-774.

Besser, T.L. (1996), *Team Toyota: Transplanting the Toyota Culture to the Camry Plant in Kentucky*, State University of New York Press, Albany, NY.

Bhasin, S. and Burcher, P. (2006), "Lean viewed as a philosophy", *Journal of Manufacturing Technology Management*, Vol. 17 No. 1, pp.56-72.

Carlgren, L., Rauth, I. and Elmquist, M. (2016), "Framing design thinking: The concept in idea and enactment", *Creativity and Innovation Management*, Vol. 25 No. 1, pp.38-57.

Cornelissen, J.P. (2012), "Sensemaking under pressure: the influence of professional roles and social accountability on the creation of sense", *Organization Science*, Vol. 23 No. 1, pp.118-137.

Cram, W.A. and Newell, S. (2016), "Mindful revolution or mindless trend? Examining agile development as a management fashion", *European Journal of Information Systems*, Vol. 25 No. 2, pp.154-169.

Cunha, M.P., Bednarek, R. and Smith, W. (2019), "Integrative ambidexterity: one paradoxical mode of learning", *The Learning Organization*, Vol. 26 No. 4, pp.425-437.

Dorst, K. (2011), "The core of 'design thinking' and its application", *Design Studies*, Vol. 32 No. 6, pp.521-532.

Emiliani, M.L. (2007), *Real Lean: Understanding the Lean Management System (Volume One)*, The Center for Lean Business Management, Wethersfield, CT.

Gill, M.J., McGivern, G., Sturdy, A., Pereira, S., Gill, D.J. and Dopson, S. (2020), "Negotiating Imitation: Examining the Interactions of Consultants and Clients to Understand Institutionalization as Translation", *British Journal of Management*, Vol. 31 No. 3, pp.470-486.

Gioia, D.A., Corley, K.G. and Hamilton, A.L. (2013), "Seeking qualitative rigor in inductive research", *Organizational Research Methods*, Vol. 16 No. 1, pp.15-31.

Hekneby, T., Ingvaldsen, J.A. and Benders, J. (2020), "Managing adoption by cultural development: exploring the plant-level effect of a company-specific production system in a Norwegian multinational", *Journal of Industrial Engineering and Management*, Vol. 13 No. 2, pp.402-416.

Hekneby, T., Ingvaldsen, J.A. and Benders, J. (2022), "Orchestrated learning: creating a company-specific production system (XPS)", *International Journal of Lean Six Sigma*, Vol. 13 No. 2, pp.361-381.

Hohl, P., Klünder, J., van Bennekum, A., Lockard, R., Gifford, J., Münch, J., Stupperich, M. and Schneider, K. (2018), "Back to the future: origins and directions of the 'Agile Manifesto' – views of the originators", *Journal of Software Engineering Research and Development*, Vol. 6 No. 15, pp.1-27.

Holmemo, M.D.Q. and Ingvaldsen, J.A. (2016), "Bypassing the dinosaurs? – How middle managers become the missing link in lean implementation", *Total Quality Management & Business Excellence*, Vol. 27 No. 11-12, pp.1332-1345.

Holmemo, M.D.Q., Rolfsen, M. and Ingvaldsen, J.A. (2018), "Lean thinking: outside-in, bottom-up? The paradox of contemporary soft lean and consultant-driven lean implementation", *Total Quality Management & Business Excellence*, Vol. 29 No. 1-2, pp.148-160.

Holweg, M. (2007), "The genealogy of lean production", *Journal of Operations Management*, Vol. 25 No. 2, pp.420-437.

Ingvaldsen, J.A. and Benders, J. (2016), "Lost in translation? The role of supervisors in lean production", *German Journal of Human Resource Management: Zeitschrift für Personalforschung*, Vol. 30 No. 1, pp.35-52.

Liker, J.K. and Hoseus, M. (2008), *Toyota Culture: The Heart and Soul of the Toyota Way*, McGraw-Hill, New York, NY.

Moe, N.B., Dingsøyr, T. and Dybå, T. (2010), "A teamwork model for understanding an agile team: a case study of a Scrum project", *Information and Software Technology*, Vol. 52 No. 5, pp.480-491.

Netland, T.H. and Aspelund, A. (2014), "Multi-plant improvement programmes: a literature review and research agenda", *International Journal of Operations & Production Management*, Vol. 34 No. 3, pp.390-418.

Oudhuis, M. and Olsson, A. (2015), "Cultural clashes and reactions when implementing lean production in a Japanese-owned Swedish company", *Economic and Industrial Democracy*, Vol. 36 No. 2, pp.259-282.

Shah, R. and Ward, P.T. (2007), "Defining and developing measures of lean production", *Journal of Operations Management*, Vol. 25 No. 4, pp.785-805.

Smith, W.K. and Lewis, M.W. (2011), "Toward a theory of paradox: a dynamic equilibrium model of organizing", *Academy of Management Review*, Vol. 36 No. 2, pp.381-403.

Snee, R.D. (2010), "Lean Six Sigma – getting better all the time", *International Journal of Lean Six Sigma*, Vol. 1 No. 1, pp.9-29.

Spear, S. and Bowen, H.K. (1999), "Decoding the DNA of the Toyota Production System", *Harvard Business Review*, Vol. 77 No. 9/10, pp.97-106.

Valamede, L.S. and Akkari, A.C.S. (2020), "Lean 4.0: a new holistic approach for the integration of lean manufacturing tools and digital technologies", *International Journal of Mathematical, Engineering and Management Sciences*, Vol. 5 No. 5, pp.851-868.

Van Grinsven, M., Heusinkveld, S. and Cornelissen, J. (2016), "Translating management concepts: towards a typology of alternative approaches", *International Journal of Management Reviews*, Vol. 18 No. 3, pp.271-289.

Watson, T.J. (2001), *In Search of Management: Culture, Chaos and Control in Managerial Work*, Routledge, London.