

# European Journal of Workplace Innovation

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**Volume 8, Issue 2, June 2024**

The background of the lower half of the cover features large, stylized, overlapping letters 'W' and 'I' in a light teal color, set against a darker teal background. The letters are composed of multiple semi-transparent layers, creating a sense of depth and movement.

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The European Journal of Workplace Innovation (EJWI) is an open-access, net-based, peer reviewed and English-language journal. The Journal invites research-based empirical, theoretical or synoptic articles focusing on innovation and workplace development.

The aim of the journal is:

- To develop insights into workplace innovation
- Provide case studies from Europe as well as comparative studies from other continents
- Develop and present new theories in the field of workplace innovation
- To increase international publication within the field
- To become an important publication channel for workplace innovation researches as well as the international research community.

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# Editorial

**Richard Ennals**

**Editor in Chief, European Journal of Workplace Innovation**

## Introduction

EJWI has developed in several ways since it was founded in 2013, in the context of the EUWIN network. The first editor in chief was Öyvind Pålshaugen, from the Work Research Institute (AFI), Norway. He set out an editorial approach which was based on diversity. We publish two issues each calendar year.

Since 2015, the second editor in chief has been Richard Ennals, from Kingston University, UK. Managing editor is Hans Christian Garmann Johnsen of the University of Agder, Norway, where EJWI is published.

In 2023 the EJWI editorial team was joined by Paul Preenen of TNO and Saxion University of Applied Sciences, Netherlands.

In 2024 the editorial team was joined by Egoitz Pomares of the University of the Basque Country, Spain. We are planning further strengthening of the team.

Links have developed with EUWIN (the European Workplace Innovation Network) and Workplace Innovation Europe (based in Ireland since 2016). There has been a series of reports in Discussion Forum, by Peter Totterdill, Frank Pot and Steven Dhondt, of EUWIN. In this issue Egoitz Pomares promotes "The Future of Workplace Innovation", a conference in October 2024, at the University of the Basque Country, in San Sebastian (Spain).

There is a flow of submissions to EJWI General Issues. Further papers are currently under review, for publication in subsequent General Issues. We welcome book reviews, and reports arising from collaborative research.

EJWI has developed relationships with international networks, which have been the basis for previous Special Issues. Two further Special Issues are now in preparation, on "Green Skills, Workplace Innovation and Just Transitions" (guest edited by Kenneth Abrahamsson and Swedish guest editors), and "The Future of Workplace Innovation" (guest edited from the European Commission Bridges 5.0 project). Core participants are from the European Union, with further contributions from elsewhere in Europe and internationally.

## Scientific Articles

The four articles come from Scandinavia, three of which are concerned with public sector organisations.

Päivi Haapakoski, Sanna Wenstrom and Satu Uusiautti address “The correlation between Work Engagement and the Positive Organisational PRIDE Index Provides New Perspectives on Workplace Development: An Analysis of Northern Finnish Public Sector Workers”. They are from Oulu University of Applied Sciences and the University of Lapland, Finland. The research team from Oulu and Lapland have published previous articles with EJWI. Here, in a study of public sector workers in Northern Finland, they explore work engagement. This follows research themes in the UK led by Truss, and the Macleod study on employee engagement. The article is primarily quantitative but shows consistent correlations between engagement and innovation.

Mattias Berglund addresses “Organisational Ambidexterity across multiple levels of analysis: The importance of routinization for promoting innovation”. He is from Mälardalen University, Sweden. The article explores the balancing act by managers as they seek to reconcile exploitation and exploration. It focuses on a qualitative case study in a single organisation in a Swedish municipality. Routinization of innovation is shown to promote organisational ambidexterity. Organisations work actively with innovation, but often lack an innovation strategy. Innovations are rarely explained. Ambidexterity is presented as a key concept. The research focuses on managers, and on obstacles to innovation. Managers can both innovate and support innovation by others.

Caroline Ärleskog and Bertil Rolandsson address “Making place for sustainable welfare in rural settings”, set in Southern Sweden. Here the focus is on employees in rural settings, in a public housing company, with the objective of fostering places for sustainable welfare. The focus is on employee understanding of how to contribute to sustainable welfare. This is more difficult in small municipalities. The analysis addresses placemaking. Examples are taken from areas around the world. The objective is to understand bottom-up processes in rural areas. Place is a social construction and is often seen in top-down terms. Sustainability is a dynamic process. Agency concerns the ability to act.

Anne Inga Hilsen and Johan Reed Steen address “The Norwegian Cooperation Model as a Framework for Innovation in an Industrial Company”. They draw on the tradition of work on innovation by Gustavsen and Pålshaugen, at the Work Research Institute in Oslo. Building on earlier published papers, they provide details of the underpinning arrangements for cooperation, in a paper which provides a useful starting point for “learning from differences”. We are asked to make sense of the single case in a distinctively Norwegian historic and legislative context.

The four papers offer complementary accounts, in terms of content and method. Workplace Innovation is relevant in public and private sector organisations, when considering managers or employees. Large scale quantitative analysis is complemented by qualitative single case studies.

## Discussion Forum

Peter Totterdill presents “How trade unions can influence the adoption of new technologies.” Italy, Ireland. This is an interview with Valeria Cirillo of the University of Bari, Italy.

Peter Totterdill facilitated a round table discussion: “Industry 5.0: From concept to practice.” This involved participants from Ireland, Germany, Austria, and UK.

Egoitz Pomares is hosting “The Future of Workplace Innovation: International Conference” in San Sebastian in October 2024, at the University of the Basque Country, Spain.

Richard Ennals contributed “Review Article: Quality and Workplace Innovation”, which explores the relationship between Quality Improvement and Workplace Innovation, based on experience in the UK and internationally.

Richard Ennals wrote “Book Review: Science meets Philosophy: What makes Science divided but still significant?”, by Hans Christian Garmann Johnsen, University of Agder, Norway,

# The Correlation between Work Engagement and the Positive Organizational PRIDE Index Provides New Perspectives on Workplace Development – An Analysis of Northern Finnish Public Sector Workers

Päivi Haapakoski  
Sanna Wenström  
Satu Uusiautti

## Abstract

In the rapidly changing world of work, more research is needed on the impact of organization-level factors on personal-level work engagement and the mediating mechanisms between them. In this study, we adopted an organization-level perspective to work engagement, applying the positive organizational PRIDE theory as the research framework. The purpose of this research was to investigate the levels of work engagement among employees working in the public sector in North Finland and their association with the positive organizational PRIDE index. The following research question guided the research: What is the relationship between the PRIDE index and work engagement? This was a quantitative survey-based study, in which the data were collected through an online survey. The data collection occurred between October 6, 2020, and February 3, 2021, among public organization employees (N=606 respondents). The factors of PRIDE were analyzed using principal component analysis (PCA). Further, the analysis focused on the connections between background factors and PRIDE and work engagement. A t-test and one-way analysis of variance (ANOVA) were used to determine the statistical significance between different groups. The results of this study indicated that there was at least a moderate correlation between all PRIDE index elements and work engagement, and each element of the index was associated with work engagement. When considering the entire index, the correlation was strong. Based on the results of this study, we recommend that the observation, identification, and utilization of strengths be systematically supported through leadership and organizational practices.

**Keywords:** work engagement, positive organization, PRIDE theory

## Introduction

In today's rapidly changing world, knowledge and expertise require constant updating. Consequently, one of the factors leading to organizational success is employees' willingness and ability to learn and develop in their work (Botha & Mostert, 2014; Luthans et al., 2015). Moreover, adaptability and creativity form the foundation for organizational competitiveness (Eldor & Vigoda-Gadot, 2017).

However, in order to be enthusiastic and open to change and development, people must be happy and satisfied with their work. Proactive attitudes and engagement spur employees' extra-role performances (Bakker, 2017). This kind of active and positive work orientation can be called *work engagement* (Macey & Schneider, 2008; Meyer, 2017; Wenström, 2020). Work engagement is a sort of "black box" of management, a factor that explains the connection between human resource management and organizational outcomes and efficiency (Truss et al., 2013). Furthermore, work engagement is connected with holistic well-being and thus impacts economic outcomes and organizational growth (Albrecht et al., 2015; Demerouti & Cropanzano, 2010; Neubner et al., 2022).

As the positive influence of work engagement on organizations is widely acknowledged, it is important to investigate how to promote work engagement. This has been the main objective of work engagement research, which has shown that when work demands and resources are in balance, it is possible to experience work engagement (Bakker, 2011). While different fields of work have different demands, resources also vary based on the individual employee's values. People experience even similar situations differently and perceive their work-related resources based on their own experiences (Schaufeli & Taris, 2014; Wenström, 2020). In addition, organization-based factors, such as atmosphere and leadership, have an impact on the employee experience (Bakker, 2011).

It is no different for public organizations. Even if they do not pursue profit, they also need to perform equally efficiently as the private sector (Rainey, 2014; Samaratunge & Bennington, 2002). Alongside societal and administrative changes, public sector (municipalities, social and welfare sector, education sector, etc.) organizations must be able to operate more efficiently with fewer resources (Kaltainen, 2018; Wenström, 2020). From the perspective of employees, this means increasing work demands, requiring them to find new resources. This can lead to a decrease in well-being at work (Finnish Institution of Occupational Health, 2023). Thus, it is important to develop and lead in ways that support and strengthen individuals' resources and work engagement (Rainey, 2014; Wijewardena et al., 2014).

In this research, we focus on public sector workers in Northern Finland, seeking to investigate how experienced work engagement is connected with positive organizational elements. This is a quantitative survey research study that employs the PRIDE theory of positive organizations and leadership (Cheung, 2014; Wenström et al., 2018).



## Theoretical Background

### Work Engagement

The concept of work engagement refers to a positive emotional and motivational state that includes dedication, absorption, and vigor (Hakanen, 2011) and can be enhanced by versatile work content and feedback (Schaufeli et al., 2002). Work engagement is a concept that describes well-being at work in a way that emphasizes employees' activity and enthusiasm and willingness to make an effort at work (Wenström, 2020; Wenström et al., 2018a, 2018b).

Research on work engagement has focused on its importance to an employee's holistic well-being as well as positive organization-level outcomes. On a personal level, work engagement is correlated with somatic and psychological health (Garg & Singh, 2020). In a study conducted at a public education organization, work engagement was found to be associated with health and work capability (Hakanen, 2011). Employees working in the public healthcare sector were found to exhibit more positive emotions and friendly behaviors as their work engagement increased (Perhoniemi & Hakanen, 2013). Additionally, their clinical work productivity increased (Hakanen & Koivumäki, 2014). For teachers in vocational education, work engagement has been connected with their enthusiasm to develop their own work and expertise (Wenström et al., 2018). Work engagement among municipal workers was found to be connected to positive attitudes toward change and proactivity (Kaltainen, 2018). In a study involving 40 municipalities in Finland, humane human resource management practices improved work engagement among employees (Hakanen et al., 2019).

To date, work engagement has mainly been viewed from the perspective of resources at work (Bakker & Demerouti, 2017). The job demands-resources model (JD-R) combines two psychosocial dimensions that impact well-being (Demerouti et al., 2011). On one hand, certain demands decrease mental and physical resources (e.g., workload, unclear work roles, difficulties), while on the other hand, various resources increase motivation and well-being at work (Demerouti et al., 2001). Resources enhance work engagement by enabling learning, growth, and development and by ensuring that employees' basic needs are met (Bakker, 2011; Ryan & Deci, 2000). Thus, resources help employees cope with demands and achieve work-related goals (Bakker, 2011). Furthermore, work engagement and work resources have a reciprocal relationship: employees experiencing high work engagement attempt to strengthen their resources, which boosts their work engagement (Bakker & Demerouti, 2018).

Although work resources have been studied for over 20 years, more research on the impact of organization-level factors on personal-level work engagement and the mediating mechanisms between them is needed (Bakker & Demerouti, 2018). Leadership and management practices seem to have a particular influence on how employees perceive demands and resources (Albrecht et al., 2015). Organization-level practices, such as development opportunities and participatory decision-making, enhance work engagement

and performance at work through a positive work atmosphere, caring leadership, and experiences of psychosocial safety (Albrecht et al., 2015; Alfes et al., 2013; Croon et al., 2015; Dollard & Bakker, 2010; Idris et al., 2014). Work resources have also been identified as a mediating mechanism between positive leadership and work engagement (Decuyper & Schaufeli, 2021; see also Breevaart et al., 2014). In this research, we adopted an organization-level perspective to work engagement, applying the positive organizational PRIDE theory as the research framework.

## PRIDE Theory of Positive Organizations

The theoretical framework of this research is PRIDE theory, which was originally developed in Hong Kong as a part of a change management process in an organization operating in the social field (Cheung, 2014). Cheung (2014) recognized five themes that constituted the core elements of organizational outcomes, and the acronym PRIDE is derived from these words: positive practices, relationship enhancement, individual attributes, dynamic leadership, and emotional well-being (Cheung, 2014, 2015). These themes form a 70-item index that predicts how well an organization will perform with regard to staff well-being, efficiency, productivity, quality, and ethical action (Cheung, 2014, 2015). In Finland, Wenström et al. (Wenström, 2020; Wenström et al., 2018a; 2018b) further developed PRIDE theory in a multi-method research study that employed the theory to analyze enthusiasm and work engagement as well as leadership in an educational organization.

**Positive practices** are methods, resources, and operations that occur at the levels of everyday work, leadership, and organizational culture and that promote positive action and well-being, enhance work performance, and improve individual, team, and organizational learning (Cameron et al., 2011). The practices are positive if they promote or support other elements of PRIDE theory, such as interaction or positive emotions. Practical examples of positive practices include well-structured interaction and meeting practices as well as positive communication and teamwork (Albrecht et al., 2015; Cheung, 2014; Richardson & West, 2013).

Previous research has shown that work engagement can be enhanced by practices that create opportunities to individual development at work (Bakker & Demerouti, 2014; Harter & Blacksmith, 2013) or support autonomy and self-directed working (Bakker & Bal, 2010; Lam et al., 2010). At their best, positive practices boost enthusiasm and support efficient working by enabling fruitful teamwork and interaction within the organization, with partners, and with other networks (Gittell, 2012).

**Relationship enhancement** refers to the organization's understanding various viewpoints, providing colloquial support, and showing empathy as a part of building a good atmosphere at work (Cheung, 2014; Richardson & West, 2013). According to Wenström (2020), this is the most central feature of a positive organization and leadership because other elements depend on good interaction and relationships. It promotes well-being, efficiency, dedication,

and communal learning at work (Cameron et al., 2011; Gittell, 2012). In addition, reciprocal relationships support motivation, social well-being, and professional growth (Colbert et al., 2016; Stephens et al., 2013)—particularly in times of organizational change (Boldrini et al., 2019; Lam et al., 2010).

**Individual attributes** relate to appreciating various strengths and expertise in people and perceiving the differences as a part of inclusion, versatility, and deep diversity (Cheung, 2014; Stairs & Galpin, 2013). In work organizations, expertise is not enough, and character strength, talents and abilities, interests, values, and resources (Bakker & Van Woerkom, 2018; Niemiec, 2018; Wood et al., 2011) have become more meaningful. In work situations, where these attributes meet, the employees act in their power zones and exhibit high motivation, enthusiasm, energy, and engagement (Mayerson, 2015; see also Bakker & Van Woerkom, 2018; Hone et al., 2015). A focus on individual attributes is especially important during organizational change, as it can help maintain work engagement in the face of extrinsic threats and change demands (Bakker et al., 2019; Bakker & Demerouti, 2014).

**Emotional well-being** is a broad element of well-being that includes not only emotional states but also well-being at work and safety of work (Cheung, 2014). In Wenström's (2020) research, emotional well-being covered only emotional factors, atmosphere, and positive feelings at work. This definition is in line with the finding that work engagement is based on positive work-related emotional states (Bakker & Demerouti, 2014; Frenzel et al., 2018; Stairs & Galpin, 2013). Enthusiasm as a positive emotion is also a typical feature of a positive atmosphere at work (Bakker et al., 2011; Cameron et al., 2011; Mroz & Quinn, 2013).

In addition to personal features and organizational structures, emotional well-being is greatly affected by the way in which people interpret events in the organization (Härtel & Ashkanasy, 2010). This also depends on the organization culture and, among other things, defines how people express their feelings at work (Härtel & Ashkanasy, 2010) and whether the atmosphere at work is positive or negative (Geue, 2018; Halbesleben, 2010; Härtel & Ashkanasy, 2010). Positive emotions tend to spread from leaders to employees (Tee, 2015). Positive actions and interaction can develop a positive circle (Barker Caza & Milton, 2013; Sekerka & Fredrickson, 2013) if leaders pay attention to the employees' emotional states and try to create a positive atmosphere at work (Helpap & Bekmeier-Feuerhahn, 2016).

**Dynamic leadership** or positively deviant leadership refers to wholistic leadership that encompasses people leadership and management (Northouse, 2010). Leadership is defined as a leader's actions and developing characteristics and skills, not as permanent features (Northouse, 2010). Dynamic leadership is also based on positive interaction (Fairhurst & Grant, 2010). In PRIDE theory, leadership is a central element because the leader and leadership practices applied in the organization lay the foundation for other organizational practices and resources (Gruman & Saks, 2011), attention to human strengths (Bakker et al., 2019; Van Woerkom et al., 2016), and relationships as well as the workplace atmosphere

(Avolio & Gardner, 2005). Therefore, positive leadership practices also support work engagement (Decuyper & Schaufeli, 2020, 2021).

## Method

The purpose of this research was to investigate the levels of work engagement among employees working in the public sector in North Finland and how it is associated with the positive organizational PRIDE index. The following research question guided the research: What is the connection between the PRIDE index and work engagement?

This was a quantitative survey research study, in which the data were collected through an online survey (Hewson, 2017). This allowed us to contact people over a relatively wide region and in several organizations (Best & Harrison, 2009). The participants were recruited by spreading organization-specific links through email, although it was assumed that the loss would be somewhat high (Best & Harrison, 2009; Hooley et al., 2012). However, this was the most convenient way of approaching the participants—and for them, to participate in the research.

## Instrument

The survey had two parts. The first was designed based on the positive organizational PRIDE theory (Wenström et al., 2018; Wenström, 2020). The survey consisted of 25 questions, evenly representing the five elements of PRIDE that were introduced in the theory section. The research participants were asked to evaluate their own workplaces with a Likert scale ranging from 0 to 10 (0=does not describe my workplace at all; 10=describes my workplace fully). An example item is “We collaborate a lot in my workplace.” The second part constituted the work engagement measurement, for which the Finnish version of UWES-9 (Hakanen, 2009; Schaufeli & Bakker, 2003) was employed. The questions were answered on a Likert scale ranging from 0 to 6 (0=I never experience this; 6=I experience this daily; e.g., “My job inspires me”).

The survey also included basic information about the purposes and confidentiality of the research as well as some background information questions concerning the workplace, job status, length of employment in the organization, and age. Before the actual data collection, the survey was tested with voluntary participants. Their answers were not included in the research data.

## Participants

The survey was conducted as part of a positive leadership development project targeting public organizations and enterprises in North Finland. The data collection happened between October 6, 2020, and February 3, 2021. Participation in the survey was voluntary, and five

organizations participating in the project also wanted to take part in the survey. One organization represented the private sector, and four organizations represented the public sector. The latter four were included in our research. Convenience sampling was used because the research participants were recruited based on their availability through the development project (Bornstein et al., 2013). This type of sampling has certain limitations that are discussed later in this paper.

The survey was sent to 1,855 respondents, and they could answer fully anonymously. Two reminders were sent to the participants during the data collection phase. Ultimately, 607 people participated in the survey. One of them belonged to the group “student, trainee, or other” and when they were employees of the organizations, we decided to omit the student’s answer from the data, resulting in data on 606 respondents. The response rates varied between 22 and 54% between the four organizations. The overall response rate was 33%, which is typical for online surveys and can be considered sufficient for generalizability (Baruch et al., 2021). The research participants’ background information is presented in Table 1.

Table 1. The Research Participants’ Background Information.

	N	%
<b>Organization type</b>		
School organization	333	55
Municipal organization	273	45
<b>Professional status</b>		
Employee	536	88
Leader or supervisor	70	12
<b>Length of employment in the organization</b>		
0–10 years	303	50
Over 10 years	303	50
<b>Age</b>		
39 years or under	118	19
40 years or over	488	81
<b>Total</b>	<b>606</b>	<b>100</b>

## Data Analysis

The analysis started with collecting descriptive statistics and frequencies for the variables of PRIDE and work engagement, such as means, standard deviations, and minimum and maximum values. Next, the PRIDE factors were analyzed using principal component analysis (PCA). The purpose of the analysis was to formulate sum variables from the 25 variables in the PRIDE index. The ground rules for the PCA were that the variables correlated with each other, were measured with a Likert scale, and had similar value ranges and directions, which

were true for the PRIDE index. The PCA resulted in five theory-based sum variables. Cronbach's alpha was over 0.9 for all sum variables, varying between 0.90 and 0.98, indicating that the sum variables could be considered reliable (Gliem & Gliem, 2003).

Cronbach's alpha was also calculated for the sum variable for work engagement, which was 0.951. However, during the analysis and based on earlier research (Bakker & Demerouti, 2008), the question "I mainly experience positive emotions at work" could be considered merely the outcome of work engagement rather than its prerequisite. Therefore, the analysis was conducted without this question. The removal of this question did not change the results.

In our research, the correlation analysis was used for assessing the strength and direction of the relationship between variables PRIDE index and work engagement. The analysis showed that the variables are not independent from each other. The analysis focused separately on the associations between background factors and PRIDE and between background factors and work engagement. The t-test and one-way analysis of variance (ANOVA) were used to determine statistical significance between the different groups.

## Results

### An Overview to the PRIDE index and Work Engagement Levels

Both the PRIDE index and work engagement levels were generally good among the research participants. The variable means of the index ranged from 5.2 to 8.0, with standard deviations between 2.2 and 2.8. Among the index variables, the variables "I can get support and help from my colleagues" (7.7) and "I have good relationships with colleagues in my workplace" (8) had slightly higher means than the other variables. The variable with the lowest mean was "My work community invests in dealing with change also on an emotional level" (5.2).

**Table 2. Theoretical Summary Variables, Means, and Standard Deviations of the PRIDE Index Statements.**

Theoretical summary variables and claims of the PRIDE index	Mean	SD	Min	Max
<b>Positive practices (Cronbach's alpha 0.96)</b>				
The practices and procedures in my workplace promote enthusiasm in work	6.0	2.5	0	10
The practices and procedures in my workplace promote the development of my own work	6.3	2.5	0	10
My workplace practices and policies promote the development of competence and professional growth	6.2	2.5	0	10
The practices and procedures in my workplace promote positive interaction and collaboration	6.2	2.6	0	10

The practices and procedures in my workplace promote positive emotions and atmosphere	6.0	2.6	0	10
<b>Relationship enhancement (Cronbach's alpha 0.90)</b>				
My workplace promotes positive interaction	6.4	2.5	0	10
My workplace interactions are mainly positive	6.8	2.3	0	10
We collaborate a lot in my workplace	6.7	2.5	0	10
I can get support and help from my colleagues	7.7	2.4	0	10
I have good relationships with colleagues in my workplace	8.0	2.2	0	10
<b>Individual attributes (Cronbach's alpha 0.95)</b>				
Different strengths are recognized in my workplace	6.4	2.6	0	10
I can utilize my strengths in my work	7.1	2.4	0	10
My skills and strengths are valued in my work community	6.6	2.7	0	10
My job provides opportunities for development	6.5	2.6	0	10
I have opportunities to share my expertise with my work community	6.9	2.5	0	10
<b>Dynamic leadership (Cronbach's alpha 0.98)</b>				
My manager's actions promote well-being and enthusiasm	6.6	2.8	0	10
My manager leads and develops positive practices and day-to-day work	6.4	2.8	0	10
My manager leads and develops interaction and collaboration among people	6.3	2.8	0	10
My manager recognizes, acknowledges, and utilizes individual strengths	6.5	2.7	0	10
My manager is sensitive to emotions and atmosphere	6.4	2.8	0	10
<b>Emotional wellbeing (Cronbach's alpha 0.95)</b>				
I mainly experience positive emotions at work	6.9	2.3	0	10
My work community allows me to experience, express and process emotions	6.4	2.5	0	10
My workplace has a positive atmosphere	6.7	2.5	0	10
My work community is characterized by a shared enthusiasm	5.8	2.7	0	10
My work community invests in dealing with change also on an emotional level	5.2	2.7	0	10

The means of the variables related to work engagement ranged from 4.4 to 4.9, with standard deviations between 1.3 and 1.5 (see Table 3). The statement related to work engagement, "I am proud of my work," had the highest mean (4.9).

**Table 3. Means and Standard Deviations of Work Engagement.**

Work engagement variables (Cronbach's alpha 0.951)	Mean	SD	Min	Max
At my work, I feel bursting with energy	4.5	1.3	0	6
At my job, I feel strong and vigorous	4.5	1.3	0	6



I am enthusiastic about my job	4.8	1.3	0	6
My job inspires me	4.5	1.4	0	6
When I get up in the morning, I feel like going to work	4.5	1.5	0	6
I feel happy when I am working intensely	4.8	1.3	0	6
I am proud on the work that I do	4.9	1.4	0	6
I am immersed in my work	4.4	1.4	0	6
I get carried away when I'm working	4.6	1.4	0	6

### The Relationship between the PRIDE index and the Work Engagement of Public Sector Employees

The relationship between the PRIDE index and the theoretically derived summary variables concerning work engagement was examined using correlations. At least a moderate correlation (correlation coefficient exceeding 0.3) was observed between the individual and summary variables of the entire index and work engagement. The strength of the correlation exhibited slight variation across the summary variables. The highest correlation was found between the theory-based “individual attributes” and “emotional well-being” summary variables of the index and work engagement (correlation exceeding 0.6). These correlations are depicted in Table 4.

**Table 4. Mean Scores for the PRIDE Theory-Based Summary Variables and the Relationship between Individual Variables and Work Engagement.**

	Mean	The connection to work engagement
PRIDE index	6.54	0.604**
Positive practices	6.17	0.556**
The practices and procedures in my workplace promote enthusiasm in work		0.538**
The practices and procedures in my workplace promote the development of my own work		0.526**
My workplace practices and policies promote the development of competence and professional growth		0.534**
The practices and procedures in my workplace promote positive interaction and collaboration		0.497**
The practices and procedures in my workplace promote positive emotions and atmosphere		0.489**
Relationship enhancement	7.10	0.528**
My workplace promotes positive interaction		0.486**
My workplace interactions are mainly positive		0.474**
We collaborate a lot in my workplace		0.461**



I can get support and help from my colleagues		0.379**
I have good relationships with colleagues in my workplace		0.427**
Individual attributes	6.72	0.619**
Different strengths are recognized in my workplace		0.513**
I can utilize my strengths in my work		0.580**
My skills and strengths are valued in my work community		0.564**
My job provides opportunities for development		0.600**
I have opportunities to share my expertise with my work community		0.561**
Dynamic leadership	6.47	0.480**
My manager's actions promote well-being and enthusiasm		0.454**
My manager leads and develops positive practices and day-to-day work		0.458**
My manager leads and develops interaction and collaboration among people		0.462**
My manager recognizes, acknowledges, and utilizes individual strengths		0.488**
My manager is sensitive to emotions and atmosphere		0.435**
Emotional well-being	6.22	0.631**
I mainly experience positive emotions at work		0.713**
My work community allows me to experience, express and process emotions		0.554**
My workplace has a positive atmosphere		0.538**
My work community is characterized by a shared enthusiasm		0.578**
My work community invests in dealing with change also on an emotional level		0.524**

The highest correlation among individual statements was with the statement "I mainly experience positive emotions at work" (0.713). The lowest correlation with work engagement was associated with the statement "I can get support and help from my colleagues" (0.379). The highest mean scores for the PRIDE index survey were observed in statements related to interpersonal relationships and support (Table 2), including "I have good relationships with colleagues in my workplace" (8) and "I can get support and help from my colleagues" (7.7), indicating that these aspects were most realized in the study population. However, these statements exhibited the lowest correlations with work engagement (0.379–0.427). Previous studies have also found that social resources at work have a smaller impact on work engagement compared to work-related resources, which are "closer" to the employee (Christian et al., 2011; Crawford et al., 2010).

Regarding the sum variables formed based on the components of positive organization, the highest, nearly equal correlations with work engagement were observed for the emotional well-being (0.631) and individual attributes (0.619) sum variables (Table 4). Removing the question related to experiencing positive emotions did not change the results.

The lowest mean scores in the index data were associated with statements from the emotional well-being domain, particularly those related to emotional processing, the atmosphere of the workplace, and shared enthusiasm: “My workplace invests in dealing with change also on an emotional level” (5.2) and “My work community is characterized by shared enthusiasm” (5.8). A significant change during the survey was the transition to remote work due to the COVID-19 pandemic, which likely influenced participants’ needs and experiences related to dealing with changes.

Among the PRIDE index sum variables, the lowest correlation with work engagement was observed for the leadership-related composite variable “dynamic leadership,” although the correlation was still moderate (0.480). Similar observations were made by Christian et al. (2011), whose review suggested that the leader–subordinate relationship and leadership were less strongly related to work engagement than work-related resources, which are closer to the employee. Interesting differences in the relationship between the PRIDE index and work engagement were also found when examining their connection with background variables.

### The Relationship Between the PRIDE index and Work Engagement Using Background Variables

The analysis also examined the relationship between respondents’ background variables, the PRIDE index, and work engagement. The relationship was assessed using t-tests and an ANOVA. The background variables considered were age, professional status, and length of service in the organization. There were no statistically significant connections observed between age and the index or the sum variables derived from it.

Professional status was examined using a two-category t-test, with one category for individuals in senior management or supervisory positions and one category for employees. As shown in Table 5, there was a highly statistically significant relationship ( $p < 0.001$ ) between the means of these categories, with a higher PRIDE index for those in senior management and supervisory positions (7.74) than for those in employee positions (6.37).

**Table 5. The Relationship Between Background Variables and the PRIDE Index**

	Mean	Statistical relationship
<b>Professional status</b>		p<0.001***
Leader or supervisor	7.74	
Employee	6.37	
<b>Length of employment in the organization</b>		p<0.05*
0–10 years	6.71	
Over 10 years	6.36	
<b>Length of employment in the organization</b>		p<0.01**
0–4 years	6.89	
Over 4 years	6.36	
<b>Age</b>		No statistical relationship
39 years or under	6.53	
40 years or over	6.54	

The length of employment in the organization was examined using t-tests and was divided into two categories, those working for 10 years or less and those working for over 10 years. When comparing those who have worked for 10 years or less to those who have worked for over 10 years in the same organization, it was observed that the PRIDE index's mean value for those with 10 years or less of service was higher (6.71), and this relationship was almost statistically significant ( $p < 0.05$ ).

The effect of employment duration was further investigated by splitting the “length of employment in the organization” variable into two groups: those working for four years or less and those working for over four years. It appears that the length of employment has an impact on the PRIDE index. In the comparison, it was found that the PRIDE index's mean value for those with four years or less of service was higher (6.89) than for those with over four years of service (6.36), and this relationship was statistically significant ( $p < 0.01$ ). There was also a statistically significant difference between those with four years or less and those with over ten years of service in the same organization. No such difference was observed in relation to work engagement, although several studies have shown that work engagement tends to decline with years of service but may rise again around 15 years of service (Barker, 2013; Coffman & Gonzalez-Molina, 2002).

Next, the relationship between the background variables and work engagement was examined using t-tests and cross-tabulations (Table 6). For two-class background variables, the relationship between them and the mean score of work engagement was examined using t-tests. For professional status, individuals in top management and managerial positions were compared to employees. The work engagement average for those in top management and

managerial positions was higher (5.12) than that for employees (4.54), and this relationship was highly statistically significant ( $p < 0.001$ ). There was no statistically significant relationship observed between age and work engagement. Similarly, there was no statistically significant relationship between the length of employment in the organization and work engagement.

**Table 6. The Relationship Between Background Variables and Work Engagement**

	Mean	Statistical relationship
<b>Professional status</b>		$p < 0.001^{***}$
Leader or supervisor	5.12	
Employee	4.54	
<b>Length of employment in the organization</b>		No statistical relationship
0–10 years	4.67	
Over 10 years	4.54	
<b>Length of employment in the organization</b>		No statistical relationship
0–4 years	4.69	
Over 4 years	4.57	
<b>Age</b>		No statistical relationship
39 years or under	4.51	
40 years or over	4.63	

There was a statistically highly significant relationship between the PRIDE index and work engagement for both top management and employees ( $p < 0.001$ ). For employees, the association appeared to be slightly stronger, and considering age or length of employment did not seem to affect this relationship. In the case of top management, there was also no significant change in the relationship between work engagement and the index based on whether they had worked for over or under 10 years in the same organization.

## Discussion

The primary aim of this study was to investigate the potential relationship between the PRIDE index and perceived work engagement. There are similarities in the PRIDE index and work engagement variables in the research, for example in statements related to enthusiasm, and differences regarding strengths and individual attributes. These measurements were originally designed to assess different aspects of work. When it comes to work engagement, it is about an individual worker's subjective emotional and motivational state—feelings of vigor, dedication, and absorption in relation to work (Bakker & Demerouti, 2008). The PRIDE index is based on existing organizational theory, and with this index, the workers assess characteristics of their work community (Cheung, 2014; 2015). This difference in focus is

important to notice. However, it can be critically stated that the measurements overlap for certain parts.

The results indicate that there is at least a moderate correlation between all PRIDE index statements and work engagement; each subdomain of the index and statement is associated with work engagement. When considering the entire index, the correlation is strong.

Furthermore, the high Cronbach's alpha value of the index suggests that the components of a positive organization are interconnected and related to the experience of work engagement. This observation is supported by prior qualitative research that emphasized the interactive nature of the components of a positive organization (Wenström et al., 2018). The most significant associations were found between individual strengths within the index and the aggregated variables related to emotions and workplace atmosphere and work engagement.

According to the results, the highest mean scores on the PRIDE index were associated with statements related to interpersonal relationships and receiving help. However, these thematic statements showed the smallest correlations with work engagement. This difference can partly be explained by previous research findings showing that the impact of social resources at work on work engagement is smaller than that of direct job-related resources (Christian et al., 2011; Crawford et al., 2010). Nevertheless, social support and positive workplace relationships have a significant impact on job well-being, commitment, effectiveness, productivity, and learning (Cameron et al., 2011; Gittel, 2012; Halbesleben, 2006).

The examination of the background variables revealed differences in both the PRIDE index and work engagement between employees and individuals in managerial or leadership positions. Similar findings have been reported in previous studies (Hakanen et al., 2019). This result can be explained by the greater autonomy typically associated with managerial positions, which facilitates better self-fulfillment and authenticity, and consequently, a greater sense of well-being and work engagement (Kifer et al., 2013; van den Bosch & Taris, 2014a; Reis et al., 2016; see Sutton, 2020). Accordingly, efforts to enhance work engagement and positive experiences among employees could focus on the better utilization of strengths, allowing for the customization and development of employees' work (Kuijpers et al., 2019).

Another interesting difference observed from the examination of background variables was the impact of length of employment on the PRIDE index. A statistically significant difference was found between individuals who had worked in the same organization for less than four years and those who had worked for over 10 years. However, this difference was not observed in work engagement. This result emphasizes the importance of leadership and organizational aspects in ensuring that individuals at different stages of their careers can both experience a positive work environment and work engagement. Beyond career or

professional differences, positive leadership emphasizes individual variances and experiences; how an individual perceives their work environment, and its resources inevitably influences the individual's role as a member of the workplace community (Wenström, 2020).

Next, we will examine the correlations between the PRIDE index statements and theory-based sum variables with perceived work engagement in slightly detail. Among the individual statements, the highest correlation was observed with the question, "I mainly experience positive emotions at work." As mentioned earlier, work engagement is associated with the experience of positive emotions, meaning that positive emotions result from work engagement (Bakker & Demerouti, 2008; Young et al., 2018). However, it should be noted that this relationship is bidirectional: In a longitudinal study over a five-month period, individuals who were happy, active, and interested at the first measurement point (T1) experienced work engagement at the second measurement point (T2), and those reporting work engagement at T1 reported better mental well-being at T2 (Reis et al., 2015).

In any event, positive emotions hold significant importance within the workplace. Positive emotions are a prerequisite for creativity and learning, and they support recognizing possibilities and creative problem-solving (Sekerka et al., 2013). Positive emotions are contagious in the workplace and can help create a positive atmosphere and positive interactions (Perhoniemi & Hakanen, 2013). Positive emotions also have a resource-building effect, both on individual and collective resources, further enhancing the prerequisites for experiencing work engagement (Xanthopoulou et al., 2009b).

The second highest correlation with work engagement was observed with the statement "My job provides opportunities for development." Other studies have also described opportunities for job development as the most important predictor of work engagement (Lesener, 2020; Wenström, 2020). It is essential that not only the job itself but also the organization provides opportunities for learning and development throughout an employee's career (Schaufeli & Salanova, 2008). It has been noted that practices facilitating opportunities for education are associated with work engagement (Albrecht et al., 2015; Alfes et al., 2013b). Work engagement does not stem from an easy job but rather from a job that offers an appropriate level of challenge and adequate resources (Bakker & Demerouti, 2017).

Statements related to strengths and the appreciation of competencies also exhibited high correlation coefficients with work engagement. The importance of strengths in relation to work engagement and well-being has been demonstrated in previous research (Miglianico et al., 2020; Wang et al., 2023, van Woerkom et al., 2015). In recent years, there has been a growing focus on utilizing strengths as a promoter of well-being, work engagement, and performance (Bakker & van Woerkom, 2018; van Woerkom et al., 2015). Strengths can be seen as both a personal and organizational resource when they are used in the workplace (Van Woerkom et al., 2015). Similarly, the experience of feeling valued has been highlighted in previous research as a well-being factor with links to positive organizational outcomes

(Cameron et al., 2011). Being appreciated has been identified as a significant resource related to work engagement (Bakker et al., 2007). The identification and utilization of strengths are closely related to competency leadership and organizational development.

The statement in the PRIDE Index related to shared enthusiasm in the workplace also exhibited a strong correlation with work engagement. This reinforces the notion and previous findings that work engagement is a social phenomenon; when others are enthusiastic, it becomes easier to experience work engagement oneself (Costa et al., 2014). Team-level work engagement encourages active and proactive work development and predicts better individual work engagement and performance (Tims et al., 2013).

Among the sum variables derived from positive organizational theory, the strongest correlations with work engagement were observed for the “emotional well-being” and “individual attributes” sum variables. In the components of the PRIDE index, we noticed an overlap between work engagement and the emotional well-being component. However, the strong correlation between the component of individual attributes and work engagement cannot be explained by them being overlapping, because the work engagement measurement does not include references to strengths.

The statements in the “emotional well-being” component pertained to experiencing one’s own emotions, the opportunity to address emotions in the workplace, including during changes, and the perception of the team climate and enthusiasm. The significance of the emotional atmosphere in positive organizational-level outcomes, such as customer satisfaction and financial results, has been extensively studied (Ashkanasy & Härtel, 2014). A psychologically and psychosocially safe atmosphere has been found to protect against the negative effects of job demands and strain, including fatigue and depression (Garrick et al., 2014; Hall et al., 2013). A positive emotional atmosphere and, consequently, enthusiasm, well-being, and commitment, are built on the opportunity to express and address various emotions within the workplace (Härtel & Ashkanasy, 2011). Leadership also has a significant impact on the work atmosphere (Yagil, 2014). For instance, if employees feel that leaders genuinely care about their well-being, they view work-related challenges and demands more positively, which enhances their work engagement (Dollard & Baker, 2010).

The “individual attributes” composite, related to strengths, displayed a strong correlation with work engagement. This is an important and timely finding since the management of strengths has gained increasing attention in recent years in the context of work engagement research (e.g., Van Woerkom et al., 2016). The identification and utilization of strengths have been unequivocally linked to work engagement and performance (Ding & Yu, 2021; Wang et al., 2023). As this study also demonstrates, it is crucial that employees believe that they can employ their strengths and that strengths are recognized and acknowledged more widely within the workplace. Strengths in the workplace have an impact on other positive organizational aspects: systematic observation, recognition, and utilization of strengths are



positive practices (P) that also promote positive interaction, collaboration (R), and a positive atmosphere (E), which, in turn, further strengthen team-level work engagement and performance (Bakker & van Woerkom, 2018; Botha & Mostert, 2014; Van Woerkom et al., 2016). The identification and recognition of strengths can be influenced by concrete interventions, such as various strengths-related interventions (Miglianico et al., 2019). Strength-focused interventions have also been considered the most effective for promoting work engagement (Björk et al., 2021, Kuijpers et al., 2019).

The “dynamic leadership” composite, which pertains to leadership, exhibited the lowest correlation with work engagement. This finding reinforces the indirect significance of leadership, consistent with PRIDE theory. Indeed, leadership has the potential to impact other positive organizational aspects, such as practices, interaction, collaboration, strengths utilization, and atmosphere (Wenström, 2020). However, research suggests that leadership, particularly the quality of daily leadership actions, interactions, and encounters, also has an impact, as individual attention, feedback, and encouragement can enhance the experience of work engagement, even on a daily basis (Breevaart & Bakker, in press; Wang et al., 2018). However, this survey did not evaluate supervisors and their interactions. Rather, it specifically examined their actions as leaders concerning interaction, practices, and emotional leadership. The purpose of this survey was to deviate from supervisor assessments and focus on the work community.

## Conclusion

Supporting psychosocial well-being is a topical subject and an employer’s obligation. In addition to identifying stressors, it is essential to recognize and strengthen the factors that protect against the negative effects of job demands and promote work engagement (Bakker & Demerouti, 2018). Previous research has indicated that the promotion of work engagement should be integrated into the strategies, processes, and practices of organizations (Saks, 2017). The research findings of our study contribute to supporting previous research results. Enthusiasm and work engagement can be promoted through positive leadership and organizational practices (Wenström, 2020; Decuyper & Schaufeli, 2020; 2021).

This study demonstrates that the positive organization PRIDE theory is well suited for elucidating the prerequisites for work engagement within an organization (cf. Wenström et al., 2018) and can be reliably measured. By leading positively and considering the elements of a positive organization, a generative positive cycle can be reinforced in the workplace and in the organization (Cheung, 2015).

One goal of the PRIDE index is to depict aspects that typify a positive organization. What is being measured conveys a powerful message to the staff about what is considered important. Through the PRIDE index, these aspects become visible, which is one of the main contributions of this research. Although each component and statement of the PRIDE index is linked to work engagement, a positive organization is more than the sum of its parts. These



sub-factors are interconnected and mutually influential. Therefore, it is beneficial to develop a positive organization holistically rather than focusing solely on individual aspects or components, as is often the case in development initiatives and research.

At the same time, this research highlights the importance of emotions and strengths-based leadership, offering practical implications for practice. Handling emotions, especially during times of change, is crucial (Klarner et al., 2011). While work engagement acts as a positive driver of change and a protective factor for well-being, it is important to acknowledge the diversity of individuals in facing and adapting to change, including their various resources and even the negative emotions elicited by change (Helpap & Bekmeier-Feuerhahn, 2016; Kaltainen, 2018; Wenström, 2020). As change is continuous and recurrent in today's world, it is essential to recognize that change capability can be enhanced by reinforcing work engagement through positive leadership and organizational practices.

From the perspective of strengths-based leadership, it is crucial that individuals can work in roles that allow them to utilize their strengths to the fullest (Bakker & Van Woerkom, 2018). Work allocation, team building, and task planning should be based on employees' strengths, and the role of immediate supervisors is crucial in this process (Bakker et al., 2019; Van Woerkom, Oerlemans, & Bakker, 2016). It is equally important for the leadership and the entire organization to share a common understanding of the significance of strengths for well-being and job performance (Bakker & Van Woerkom, 2018).

Although this study focused on public organizations, the importance of work engagement for employees' well-being extends beyond a single workplace. Work engagement has been shown to have long-term effects on individuals' careers, for example, by reducing the likelihood of early retirement (Hakanen et al., 2021). Therefore, efforts to develop positive workplaces contribute to the quality of working life and to the extension of careers.

## Implications for Practice

The research has a robust connection to the theory and practice of workplace innovation, particularly in relation to the overarching goals of promoting holistic well-being and productivity through new understanding of how people experience their work. At the core of workplace innovation lies the potential convergence of performance improvement and the quality of working life (Kibowski et al., 2019; Uusiautti, 2016). Especially in the public sector, which was the case in our research, there is a need for new methods to foster an innovative and evolving culture and practices, with leadership playing a significant role in this regard (Lindman et al., 2022).

Despite the significance of workplace innovation in enhancing the quality of working life, the development of its measurement has been limited. While a wide range of workplace innovation indicators exists, establishing their connections to actual research findings has proven challenging. As is generally applicable in all fields related to practical work, measuring

results is crucial for reliable assessment of workplace innovation efforts (Kibowski et al., 2019).

The same applies to the implementation of positive leadership. It also requires practical tools and instruments for evaluation, with the PRIDE index being an example. Our research aimed to investigate and develop an evaluation tool constructed from genuine practical needs and new theory, aiming to highlight the implementation and development of aspects of positive leadership within organizations. Positive leadership brings into focus humane and people-oriented management, which is increasingly crucial for organizational effectiveness, employee experience, and innovation in the future (Karima et al., 2022).

Based on the results of this study, we recommend that the observation, identification, and utilization of strengths be systematically supported through leadership and organizational practices (Wang et al., 2023). By approaching the concept of strengths, it is possible to address various aspects that are essential for work engagement, such as experiencing change, different ways of experiencing emotions and interaction, and understanding and harnessing diversity in the work community. The positive organizational PRIDE theory presented in this study and the employee survey developed based on it reveal and reliably measure the factors related to the work community and the organization through which work engagement can be promoted.

The significance of emotions and work atmosphere within the context of leadership and teamwork should also be acknowledged. The abilities to process, encounter, and lead emotions should be systematically strengthened in order to create a safe and secure atmosphere at the team level that supports well-being and work engagement. Especially in times of change, allowing space for emotions is crucial, as change leadership is primarily about leading emotions.

Leaders, through their roles, have greater opportunities to influence organizational and workplace practices and activities than other employees. When striving to lead work engagement, the PRIDE index and its measurement results provide insights for areas of improvement. It is essential that this research generates positive organizational metrics since traditional metrics and indicators fail to capture the central aspects of positive organizations (Jarden & Jarden, 2017). Metrics send a strong signal about what is valued in organizations (Yagil, 2014). Thus, the PRIDE index supports the implementation of positive leadership, articulating it to the work community, and, in the long run, building a positive organizational culture.

The PRIDE index does not assess or judge the actions of leaders but considers the influence of the work community and the individual's own possibilities. Nevertheless, it is important to recognize that a leader's positive interaction and approach affect how the resources, demands, and challenges of the organization are perceived, and this impact is connected to work engagement, even on a daily basis (Breevaart & Bakker, in press; Wang et al., 2023).

Further research on the index is needed, including longitudinal studies on how interventions like positive leadership coaching and training affect index development. It may also be interesting to examine various background variables, such as education level or industry. Feedback on the index's usage will enable further development. Our future research will also focus on the treatment of the measurement results.

## Limitations

This study examined the promotion of work engagement in the public sector from the perspective of positive leadership. Positive leadership orientation has been identified as a promising approach not only for enhancing work engagement and performance but also because it addresses the requirements of ethics and accountability that are central to the public sector (Decuyper & Schaufeli, 2021; Wijewardena et al., 2014). The research design, in part, supported the participant sample selection, which consisted solely of public sector professionals, including city, municipal, school, and vocational college employees.

The study did not use random sampling, instead targeting all the personnel in specific organizations. Thus, it is assumed that the participants can be considered as representative of the personnel of other similar organizations. In the future, it is essential to collect data from employees in the private sector as well. Overall, additional survey data are needed to ensure the reliability of the index and to establish reference values.

The response rates to the survey were somewhat low. This could be partially attributed to the fact that, due to anonymity, responses were collected on an organization-specific basis using open links, and non-respondents could not be specifically reminded to complete the survey. It is important to consider how non-respondents differ from those who responded to the survey (Dale, 2006). Are respondents more likely to be individuals who have a very positive or negative perception of their organization, while non-respondents are neutral or do not perceive that their organization plays a role in influencing and developing their individual activities? If so, this could impact the emphasis on development opportunities in the results.

Despite some potential overlaps in the measurement between work engagement and the PRIDE index, the instrument nonetheless highlights and provides an opportunity for capturing individual workers' perceptions regarding the workplace, thus serving practical purposes. For further development, additional statistical analyses and discriminant validity should be explored. Refinement and adjustments to the instrument based on the experiences gained would likely be beneficial for its ongoing development in the future.

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# Organisational Ambidexterity Across Multiple Levels of Analysis: The Importance of Routinisation for Promoting Innovation

**Mattias Berglund**

## Abstract

The concept of organisational ambidexterity, a balancing act between the conflicting demands of exploitation and exploration, has been a part of the discussion in innovation research for a long time. A manager's ability to balance tensions is crucial for organisations to be able to promote and support innovation. However, there is still a lack of research that focuses on a single organisation and which takes into account multiple levels of analysis and how organisations can become ambidextrous.

This is a qualitative case study which investigates the balancing of tensions in a Swedish municipality and the connections between the organisational and individual levels of contextual ambidexterity. The article identifies and describes a low ambidextrous environment, how it is affected by the interplay between the two levels of analysis in which the organisational mechanism enforces routines which contribute to a lack of ability to balance tensions amongst individuals and at a group level. Furthermore, in low ambidextrous environments, behaviour amongst individuals alone does not appear to be enough to promote organisational ambidexterity.

The article finds the routinisation of innovation to be an important step for organisations that wish to improve the environment for ambidexterity. The article contributes to the understanding of ambidexterity by showing the need to focus on both mechanisms and behaviours, as well as on the aggregated group level, in order to further develop understanding of how public sector organisations promote and support innovation.

**Keywords:** Organisational ambidexterity, contextual ambidexterity, public sector innovation, innovation capacity

## Introduction

The Sustainable Development Goals (SDGs) put forth by the United Nations (2015) address many of the challenges of today such as gender inequality, poverty, climate change and crime prevention to name a few. Innovation is often argued to be a potential solution for tackling issues which are hard to manage within the current structure of public sector organisations (PSO) (Torfing, 2018). The local government level is an important arena to focus on when it comes to innovation and sustainability since it is the part of government which is closest to the citizens and where many of the responsibilities lie (Bonnedahl et al., 2022; Gustafsson et al., 2022; Lewis et al., 2018).

The Swedish Association of Local Authorities and Regions (SALAR) conducted an extensive survey on innovation in municipalities, regions, and agencies in 2018. SALAR (2019) found that 80 percent of the organisations surveyed claimed to work actively with innovation, but only 18 percent (of the 80%) claimed to have an innovation strategy to support it. SALAR also found that only a few of these organisations claimed to have a culture which supported experimentation and risk-taking (SALAR, 2019), which is important for breaking down the common barriers preventing innovation in the public sector (Clausen et al., 2020; De Vries et al., 2016; Mulgan, 2007).

Quite naturally, previous research on public sector innovation often draws on experiences from past or present innovation initiatives. Empirical studies tend to rely on successful innovations rather than the environments in which they occur according to Lewis et al. (2018). In their systematic review, De Vries et al. (2016) likewise found that empirical studies generally lack explanations as to what happens after innovations are initiated since interest is focused on the innovation processes and/or their adoption. Other issues concern a lack of insight into what precedes public sector innovation processes (Gullmark, 2021), and Clausen et al. (2020) state that there is a lack of research-based insight to guide managers and policy makers.

This focus on innovation processes may have contributed to creating two blind spots when it comes to how PSOs support innovation: a lack of understanding of the environmental factors important for potential innovations, as highlighted by Lewis et al. (2018), and a lack of knowledge concerning the more long-term effects and the actual implications of this, as highlighted by De Vries et al. (2016). According to Sørensen and Torfing (2022, p. 46), research that focuses on innovation processes has created a “myopic gaze at a particular innovative solution that can solve a particular problem.” This might say a lot about attempts, solutions, and processes but less about how innovation could be supported. One potential pitfall created by focusing on innovation processes, especially if they are successful, is that they draw on the experiences from those that Albury (2005) labels as “high performers,” who already have a higher capacity for innovation. This creates issues regarding transferability since innovation is contextually embedded (Nählinder & Fogelberg Eriksson, 2017) and depends on a pre-existing supportive infrastructure (Lewis et al., 2018) or organisations in which the internal context might be more or less conducive to innovation (Cinar et al., 2019).

A low-performing PSO cannot merely copy the experiences of high performers and expect to innovate.

The organisations which attempt to innovate, either by actively pursuing this strategy or allowing isolated attempts to do so, have taken some steps towards trying to manage the trade-off between the concepts of efficiency and effectiveness (Brix, 2020; Gieske et al., 2020; Magnusson et al., 2021) associated with organisational ambidexterity (Boukamel & Emery, 2017; March, 1991; Smith & Umans, 2015). Organisational ambidexterity has developed into a key concept for understanding the capacity for innovation in organisations, and it has been shown to play a key role in innovation (Boukamel et al., 2019; Brix, 2020; Gieske et al., 2020). One emerging discussion today revolves around contextual ambidexterity, which is the capacity to simultaneously align and adapt while maintaining a continuous balance (Boukamel et al., 2019; Brix, 2019; O'Reilly & Tushman, 2013).

Even though ambidexterity has been an established part of organisational research for a long time, there are still aspects that need to be explored further. For one, there tends to be conceptual confusion in studies where there is a lack of clarity if the focus is on ambidextrous behaviours or outcomes according to Pertusa-Ortega et al. (2021). And according to Mueller et al. (2020), previous research on ambidexterity and its different, often interchangeable uses rarely takes levels in an organisation into consideration. Another aspect to highlight is that the understanding of ambidexterity across multiple levels is still lacking according to Raisch et al. (2009). Previous studies on ambidexterity have mainly focused on the organisational level (Pertusa-Ortega et al., 2021; Turner et al., 2013). The empirical studies that have been done at the individual level have often looked at ambidexterity through individual managers (Kobarg et al., 2017; Palm & Lilja, 2017; Smith & Umans, 2015; Sohrab et al., 2021) but often across multiple organisations. According to Mueller et al. (2020), the question of how organisations can become more ambidextrous is not addressed, and there is a gap with regard to the links between levels of analysis. Boukamel and Emery (2017, p. 18) call for a “diagnosis of the tensions” in the public sector, which remains largely unexplored. The interplay and potential tensions between organisational routines and the potential effects on individual behaviours is less explored (Pertusa-Ortega et al., 2021). Given the importance of ambidexterity for innovation, there appears to be a significant gap when it comes to the state of tensions and conditions for innovation in PSOs without previous experience, as well as a lower capacity for innovation.

The purpose of this article is to investigate the contextual ambidexterity in a Swedish municipality. This is achieved by answering the following questions: (1) How do managers perceive organisational and individual abilities to manage tensions? And (2), How can potential connections between the organisational and the individual levels be understood? This is done to help fill the current gaps in knowledge pertaining to the multi-level approach to contextual ambidexterity (Mueller et al., 2020; Pertusa-Ortega et al., 2021; Raisch et al., 2009) and the tensions connected to such an approach (Boukamel & Emery, 2017), and to

provide an empirically grounded study of ambidexterity in the public sector (Boukamel et al., 2019).

The article begins by providing a short overview of the **contextual** conditions for innovation and the managers' role in supporting innovation. This is followed by the article's main theoretical focus on contextual ambidexterity and the conceptualisation of the two levels of analysis.

## Contextual conditions for supporting innovation

Many highly capable organisations innovate and continue to do so, but some do so with unclear long-term effects. Then there are organisations who innovate, but they do so by chance or accident since they lack appropriate support for systematic innovation (Albury, 2005; Nählinder & Fogelberg Eriksson, 2017). Interest in a PSO's capacity for innovation has been increasing over the years, and attempts have been made to create a theoretical and conceptual understanding of innovation capacity (Boukamel et al., 2019), what models support and develop such capacity (Nählinder & Fogelberg Eriksson, 2017; Palm, 2020) and how leadership, networks and drivers contribute to creating innovation capacity (Lewis et al., 2018). There are also examples of studies which have drawn on experiences from innovation processes to find possible implications for capacity (Gullmark, 2021; Trivellato et al., 2021). There have also been systematic reviews of both drivers and barriers specific to PSO innovation (Cinar et al., 2019; De Vries et al., 2016). However, as stated by Gullmark (2021, p. 523), the "one-size-fits-all approach to innovation capability" should be avoided.

Potential for innovation varies across the quite diverse forms of PSOs since some have a higher capacity for supporting innovation while others do not (Albury, 2005). They also receive different degrees of support and encouragement that allow innovation to occur (Lewis et al., 2018). Barriers to innovation tend to be internal in organisational contexts according to Cinar et al. (2019), which makes innovation capacity and support an organisational pursuit in which ambidexterity has been argued to play a key facilitating role (Boukamel et al., 2019; Brix, 2020; Meijer, 2019). Ambidexterity and innovation capacity are sometimes treated as similar or connected concepts in studies of PSO innovation capacity (Bason, 2018; Brix, 2019; Palm, 2020) or as a subset of innovation capacity (Boukamel et al., 2019; Meijer, 2019).

The responsibility for supporting and promoting innovation falls mainly on managers along with the extra challenge of balancing the demands of day-to-day operations while also promoting innovation; unfortunately, this does not always fit in with the organisation's existing processes. Supporting innovation is a complex task in itself for PSO managers since innovation processes are enmeshed in ordinary operations (L. Lidman et al., 2022; Nählinder & Fogelberg Eriksson, 2017). The managers' role in supporting innovation has been looked at from many perspectives, such as boundary-spanning leadership (Bekkers et al., 2014), entrepreneurial leadership (Miao et al., 2018), or courage (Bason, 2018) as important types of leadership abilities required to promote innovation. Other studies have examined managers' psychological traits as a source of organisational performance (Sohrab et al.,



2021). When it comes to innovation support in PSOs, managers are often, as stated by Lidman et al. (2022, p. 104) “wedged between expectations and conditions when public organisations implement innovation support”. Managers are often left to their own devices to find a balance between the contradictory demands of exploitation and exploration (Bason, 2018; Lidman et al., 2022). Creating favourable environmental conditions for innovation hinges on more than just ambitions to innovate; it is enmeshed in the everyday actions by managers tasked with supporting innovation.

## Balancing and managing tensions: An endeavour across levels

Organisations need to be able to deliver on their day-to-day activities while simultaneously developing operations through minor adjustments and major innovations. This has famously been described as a balance between *exploitation*, a focus on production and efficiency, and *exploration*, a focus on innovation and flexibility (March, 1991). An organisation with the ability to manage the tensions between both is seen as an ambidextrous organisation that successfully exploits current resources while simultaneously exploring new opportunities (Boukamel & Emery, 2017; Brix, 2020; Smith & Umans, 2015). According to O'Reilly and Tushman (2013, p. 329), organisational ambidexterity is “reflected in a complex set of decisions and routines that enable the organisation to sense and seize new opportunities through the reallocation of organisational assets”. Ambidexterity is about the “integration of two distinct cultures in one organisation”, one performance-based and one innovation-based according to Khan and Mir (2019, p. 653). The balance, according to Gibson and Birkinshaw (2004, p. 213), is between “hard elements of discipline and stretch” and “soft elements of trust and support”. The pursuit of innovation is generally concerned with the exploration of new opportunities through innovation, while exploitation is concerned with the optimisation of established organisational routines (Gieske et al., 2020).

One emerging discussion on ambidexterity is that of contextual ambidexterity, the capacity to simultaneously align and adapt through balance rather than achieving ambidexterity through periods of change initiatives or by dividing exploitation and exploration between different departments (Brix, 2019, 2020; O'Reilly & Tushman, 2013). Contextual ambidexterity has been identified as an intermediary between innovation and ambidextrous culture in organisations (Khan & Mir, 2019). According to Brix (2020), studies of contextual ambidexterity consist of at least two units of analysis: the organisational context, and individual employees, which are not mutually exclusive. Firstly, organisational routines are needed to enable individual ambidexterity, which in turn is needed for organisational performance (Boukamel et al., 2019; Brix, 2019). Secondly, it is merely not an individual capability, such as ambidextrous leadership amongst individuals, as it is about how “ambidextrous leadership functions within an organisation” according to Mueller et al. (2020, p. 46). According to Boukamel et al. (2019, p. 8) “exploitation and exploration are simultaneously processed by the same structures and individuals”. Even though the levels are conceptually different, individual perceptions can be aggregated to assess the organisational

level if it is homogenous (Gibson and Birkinshaw 2004). The importance of contextual ambidexterity in a municipality, which is the topic of this study, comes from the wide array of tasks they perform. Different parts of the organisation could be involved in innovation processes at different times or whenever issues cut across policy areas and departmental silos. This creates a need for contextual ambidexterity through a simultaneous balance between the two logics and a supportive environment rather than a separation between units or time periods (Boukamel & Emery, 2017; Brix, 2019).

### Ambidexterity at the organisational level: Mechanisms

Ambidexterity at the organisational level can be defined as the administrative mechanisms which foster certain behaviours and provides the incentives and informal systems of belief (Gibson & Birkinshaw, 2004). Ambidexterity is the capacity for both alignment, which represents the coherent patterns of activity, and adaptability, which is the capacity to reconfigure activities and routines due to changing environmental demands (Brix, 2020; Gibson & Birkinshaw, 2004; O'Reilly & Tushman, 2008).

Organisational routines which support both exploitation and exploration are needed to create a link between optimisation and innovation (Boukamel et al., 2019; Gieske et al., 2016). Not having mechanisms for adaptability risks enforcing path-dependent developments which might be based less on needs since they are connected to historical developments (Becker, 2004; Piening, 2013). Supportive conditions for creating balance at the organisational level are slack resources, incentives or rewards connected to the pursuit of new opportunities, and routines of different rationalities which promote a culture tolerant of risk and ambiguity (Boukamel et al., 2019; De Vries et al., 2016).

### Ambidexterity at the individual level: Behaviours

In this article, the focus on ambidexterity at the individual level is concerned with the managers' behaviours. Managers do not have to be innovators themselves, but they do have a crucial role in enabling others through organisational design, decision-making, and recognising the need for exploration and exploitation (Bason, 2018; Hijal-Moghrabi et al., 2020; Smith & Umans, 2015). At the individual level, the balancing of tension is a skill which needs to be developed and supported in order to achieve organisational ambidexterity (Mueller et al., 2020).

Ambidexterity at the individual level relies on individual skills, relationships, and the policies and routines which shape organisational behaviour (Boukamel et al., 2019; Hijal-Moghrabi et al., 2020; Smith & Umans, 2015). Managers are important for ambidexterity (Hanneke et al., 2016; Smith & Umans, 2015) because their ability to balance between exploitation and exploration is a key aspect of promoting and supporting innovation in organisations (Bason, 2018; Boukamel et al., 2019; Brix, 2020). Ambidextrous behaviour is contradictory in the



sense that balance is achieved by developing two contradictory behaviours and having the ability to make judgements on how to manage tensions (Gibson & Birkinshaw, 2004; Mueller et al., 2020; Pertusa-Ortega et al., 2021).

Individual attributes which promote balance and contribute to performance have been identified by Birkinshaw and Gibson (2004). They indicate four types of individual attributes: being able to take initiative and search for opportunities outside of one's own stated responsibilities, being co-operative and seeking to collaborate with others, being committed to constantly searching for internal linkages, and being able to multitask and be comfortable in more than one role. Ambidextrous behaviours are essentially concerned with identifying possibilities and acting outside of one's day-to-day activities as well as developing relationships which are outside of one's own area of responsibility.

Ambidextrous behaviours are about the balancing of tensions and the ability to manage them appropriately while simultaneously making connections between innovation and ordinary processes, as well as harbouring conflicting values at the individual level (Gieske et al., 2016; Magnusson et al., 2021).

## **A multilevel approach: Summary of connections between the levels**

The individual level of ambidexterity is linked to the organisational level. Even though individual ambidexterity is concerned with behaviours, these are situated within the organisational context. According to Gibson & Birkinshaw (2004), ambidexterity is achieved by having systems which encourage individuals to make judgements on how to behave when faced with tensions. Organisations are dependent on ambidextrous individuals for improved performance, and individuals are dependent on organisational routines that allow for divergence from standard operations. This is achieved by linking innovation to the standard organisational routines, practices, and goals of the organisation, as well as fostering commitment and tolerance towards innovation processes (Boukamel et al., 2019; Gieske et al., 2016). Being able to make individual judgments on how to divide one's attention and switch between conflicting rationalities requires tolerance and an expectation to receive permission at the organisational level to do so (Brix, 2020).

### Setting

This article is based on a larger project being carried out in a Swedish municipality that wishes to improve its capacity for innovation and collaboration (internal as well as external). This makes it an organisation with ambition, but not necessarily a high-performing one in the context of innovation. The municipality has slightly more than 100,000 inhabitants, and the municipal organisation employs roughly 10,000 of them. The researcher is following two groups of managers, top and mid-level, who are responsible for promoting safety and security.

Municipalities constitute the largest part of the Swedish public sector (SALAR, 2022), and it is the level of government tasked with delivering public services since it is in closest contact with the citizens, thus making them key in the effort to create innovation (Lewis et al., 2018). Swedish municipalities possess features that are often associated with creating difficulties for innovation, such as their size and structural complexity, their wide array of tasks, a high degree of specialisation in silos, and a tendency towards stability over flexibility (Adolfsson & Solli, 2009; Andrews et al., 2015; Bason, 2018; Magnusson et al., 2020).

At the time of this study, the municipality did not have an innovation strategy or a structure to support innovation. A search of public records (in February 2022) identified nine policy documents showing that innovation was mentioned for the first time in 2011. There has not been a policy specifically targeting innovation since 2015. Innovation has since been used sparsely, undefined and as a side effect connected to other issues such as public procurement and digitalisation. There have been developments which could be understood as innovative, but the municipality is still lacking strategic direction and systematic support for innovation. This makes the studied municipality an interesting example of the Swedish municipal sector, in which innovation does occur but is not governed by a strategy (SALAR, 2019).

## Method

This case study is based on a larger co-production project in a Swedish municipality with an interactive approach (Lindhult & Axelsson, 2021) in which the ambition lies in achieving particularisation rather than generalisation all while still striving to generate further knowledge of an issue (Stake, 1995). The goal of this qualitative study is to research a phenomenon in its natural setting (Denzin & Lincoln, 1998), where the researcher is personal rather than impersonal (Lindhult & Axelsson, 2021; Stake, 1995). The article is primarily based on exploratory interviews with middle-managers (n:7), top managers (n:10) and respondents with supporting functions (n:3) during which the researcher introduced a theme and then followed the subjects' responses in search of new information (Kvale & Brinkman, 2009).

The interviewed managers had responsibilities that covered a large part of the municipal operations, such as education, including adult education, social services, city planning, parks, public housing (corporation), culture, and recreation, as well as labour market services. The article also covers top management with strategic responsibilities encompassing social sustainability, communications, and security. The respondents with supporting functions are responsible for safety, communications, and security. The city manager was also interviewed. This broad range of municipal responsibilities provides an in-depth look at much of the municipality's strategic management in terms of ambidexterity. None of the respondents, however, is expressly responsible for promoting innovation, or managing personnel with innovation in their job description. Nevertheless, senior managers have an important role in promoting innovation (Hijal-Moghrabi et al., 2020) and are ideal respondents for studying ambidexterity (Smith & Umans, 2015).

The interviews were structured around three themes: innovation, collaboration and complexity. The themes were chosen to identify how tensions were perceived by the managers and how they are connected to the discussion on public sector innovation and the inherent tensions PSOs need to balance to promote and support innovation (Boukamel & Emery, 2017; Boukamel et al., 2019; Gieske et al., 2020; Gieske et al., 2016; Meijer, 2019). Innovation is important due to its inherent connection to exploration and how ambidextrous capacity has been identified as a subset of innovation capacity (Boukamel et al., 2019; Gieske et al., 2020). Collaboration was chosen as a theme since collaborative skills are an important aspect of individual ambidexterity (Birkinshaw & Gibson, 2004), and the importance of inter-organisational collaboration is commonly cited in the literature on PSO innovation (Bekkers et al., 2014; Torfing, 2018). Finally, complexity was chosen as a theme to identify potential tensions in issues which cannot be managed by mere exploitation, such as the SDGs. Complex issues challenge the PSOs' functional divisions and siloed operations (Torfing, 2018), and ambidexterity is important for organisational performance in a changing environment (Brix, 2020; O'Reilly & Tushman, 2008). The open format of the interviews allowed for follow-up questions while letting subjects tell their stories more freely (Bryman, 2011) and made it possible to explore the difficulties connected to the tensions the respondents identified. The data from the interviews were supplemented with a review of internal documents (67 pages) related to the annual cycle of strategic planning for each of the departments involved.

## Data analysis

The analysis was guided by an inductive approach which recognises that the participants are knowledgeable agents and that the study's focus is on how people understand, construct, and make sense of their experiences (Gioia et al., 2012; Kennedy, 2018; Weick et al., 2005). The interviews lasted between 35 and 60 minutes (a total of 863 minutes), and approximately 14.5 hours of interview data were transcribed and coded in Nvivo. The analysis was carried out using a three-step process inspired by the Gioia methodology (2020). First, all the transcripts were read in full with a focus on the managers' perceptions, which were then coded based on recurring concepts identified in the respondent's answers and using their words as much as possible (such as encouragement, trust, routines, leadership, and time). These codes were neutral in the sense that if one respondent identified trust as an enabler for innovation while another respondent highlighted lack of trust as a problem, they were both coded as trust since the aim of the study is concerned with the tensions connected to the continuous balance of contextual ambidexterity, not barriers and drivers. Second, the first-order categories and subsequent quotes were read again in search of overarching themes and how the tensions connected to the two levels of analysis, (individual and organisational) the interplay between them, as well as other themes, emerged from the data. Third, the themes were reread to look for patterns that revealed aggregate dimensions, two of which were identified: the *Lack of systematic support for innovation*, and *Innovation ambiguity*, which are presented in Table 1. Quotations are translated from Swedish by the author.

Table 1: Data structure and examples of supporting quotations.

Theme	Representative quotes
<b>Lack of systematic support of innovation</b>	
Collective promotion of exploitation at the cost of innovation	<p>“Public sector organisations use terms like trust, we are supposed to govern by trust. It never happens, we are way too cemented in new public management “ (5).</p> <p>“Today, you are expected to show exactly what you are supposed to do with the tax money you have. You need to show to the Crown exactly what the effects are and how you achieved them” (3).</p> <p>“We are fairly traditional in how we govern, which could be a barrier to innovation (...) If we then identify an idea that a department wants to try, which would be quite expensive, but if successful would be beneficial for many others, we still end up with “who is paying and how” (15).</p> <p>“So even if we have a group which is innovative, the organisation is still slow” (9).</p>
Group mechanisms as obstacles for individual behaviour	<p>“I think we are quite anxious, what will this lead to; will we create expectations which we will not be able to live up to and we end up asking ourselves, how can we resume control again? (...) To actually try, let loose, and to live in it a little longer to try. There is not really any space for that today. It does not conform with our structures” (4).</p> <p>“That idea was interesting, maybe we could do something like that? And then you know how it is. Then the everyday operation comes along, and it turned out to be something else instead” (7).</p> <p>“All of us are different, some have a harder time joining a process which comes with a high degree of uncertainty” (16).</p> <p>“Sadly, I am not part of promoting innovation enough, and we are not that good at incorporating it within the organisation” (9).</p>
Room for action in pursuit of innovation	<p>“And then we still need to dare to try, and unless we feel that this step is doomed to fail, well then, we should not do it, but there has to exist some acceptance for attempts as well” (2).</p> <p>“What are you allowed to do? What do we allow managers to do who identify potential improvements and to do something completely new which we are not used to” (9)?</p> <p>“I think it’s easy for an organisation to state that we are going to steer towards innovation, but instead of actually opening up for a variety of processes which could lead to something new, it’s easier to ask for successful projects” (18).</p> <p>“I would like to see where we are now, what we need to modify to create conditions for our managers; I do not think we take enough the time to stop. Everything just goes on and on” (1).</p>

	<p>“Innovation is not a priority; it must be conscious and part of the discussion from the beginning. If you only talk about it as something we need to do and then attempt to, it will not happen. It must be structured and systematic” (3).</p>
<p><b>Innovation ambiguity</b></p>	
<p>Lack of conceptual clarity concerning innovation</p>	<p>“There is something bigger in innovation. It takes quite a lot of us to be innovative” (2).</p> <p>“It has to create value to count” (13).</p> <p>“It is daring to think in new ways (11).</p> <p>“There are a lot of objections when discussing innovations (...) It is trendy to talk about being innovative, and then it is limiting since you are not allowed to mix it with something else” (15).</p> <p>“It is a rather dull term (...) It needs more content for organisations to be able to get anywhere” (17).</p> <p>“I think that we are making things more complicated than it has to be with all these terms” (4).</p> <p>“It is a term I rarely use, it almost creates pressure on myself when am I actually innovative.” (7).</p> <p>“Buzzword, I have a hard time with the term” (8).</p>
<p>Perception on novelty and context</p>	<p>“Evolution is about adjusting and making small improvements all the time and not abandoning everything in pursuit of something new which never gets a chance to settle. Then you will not have improvement” (8).</p> <p>“Even if all the other municipalities have done something, it would still be innovative for us to think in new ways” (10).</p> <p>“It is everything from the small-scale decisions to the grand complex issues” (13).</p> <p>“An innovation is something new which is useful and you choose to use” (14).</p> <p>“It is not enough to do something slightly better; it is about doing something else, something different” (2).</p> <p>“To take steps that others have not” (5).</p> <p>“It does not have to be completely new, something which no one has done before. It can be something that someone else is already doing, but we then do slightly better or exactly the same. It is both” (6).</p> <p>“To dare to think new thoughts, to be inspired or to take something from others and make it your own” (11).</p>

The internal documents were analysed using the content analysis research method (Weber, 1990) with a focus on descriptions related to capacity (fiscal conditions, demands, new and/or changing tasks and responsibilities), references to innovation (in descriptions related to tasks and/or as a potential approach/solution/strategy) and the potential need for collaboration from outside the departments. The interviews were used as the primary data, and the

documents were used as secondary data and will not be the primary focus of the following section discussing the findings.

## Findings

These sections will focus on the tensions that come with promoting and supporting innovation and how these relate to the different levels of analysis as well as the interplay between them.

### Lack of systematic support for innovation

Managers describe how mechanisms promote exploitative work, which creates difficulties in grasping how one is supposed to act to promote innovation. Throughout the interviews, there was a clear view that mechanisms provide strong support for exploitation and weak support for exploration. Organisational mechanisms appear to enforce exploitation rather than supporting contradictory cultures (Khan & Mir, 2019) and adaptability towards new opportunities and changing demands (Brix, 2020; Gibson & Birkinshaw, 2004; O'Reilly & Tushman, 2008). Respondents described a rigidity at the organisational level when it comes to goals and a lack of dynamism while pursuing them through the reconfiguration of activities. The organisational routines did not support adaptability since the goals were set and static. Managers had a role in formulating and setting goals and creating policy, but there was less room for reconfiguring previously set goals or policy. This was summarised by a top manager talking about the difficulties in pursuing innovation:

*“We should be able to reconsider our goals at least once a year, which requires us to be more dynamic, to be able to follow developments and then see what happens when we try new things. It is a perspective we need to, to dare to be, dare to think again, to change and to constantly reconsider during our work”*  
(15).

Having mechanisms which encourage adaptability at the organisational level is an important aspect of ambidexterity (Gibson & Birkinshaw, 2004), as is the existence of supportive conditions such as slack resources (De Vries et al., 2016). Judging by the documents connected to the annual planning process, the general descriptions concerning each department's operations are generally directed towards the need to focus on the core mission of each department in response to increasing demands, fiscal strain, and capacity issues. The risk here is that each department focuses on their respective core as a response to difficulties, which strengthens silos at the expense of potential innovation. Innovation is only mentioned twice in relation to the departments' identified priorities for the following fiscal year. Both co-ordination and collaboration (inter and intra) are highlighted as potential solutions but rarely in connection to specific priorities. All the departments highlight coordination and collaboration, but none highlights a clear priority to develop this by calling for additional resources for example. Collaboration is highlighted as a response to fiscal strain rather than a more systematic search for potential new opportunities and connections

outside of the department that would be in line with ambidexterity (Birkinshaw & Gibson, 2004; Brix, 2020). There is less room for identifying and developing potential cross-departmental issues or synergies in the budgetary planning process, where each department competes for resources for their internal priorities. Innovation is at risk of being siloed or levelled even though there might be possibilities within the departments for innovation if it is closely connected to the core mission or if individuals are able to act within their own areas of responsibility.

### Collective promotion of exploitation at the cost of innovation

The perceived lack of supporting mechanisms at the organisational level, such as an innovation policy and processes for innovation support, leads the managers towards a collective promotion of exploitation at the cost of innovation. The managers, while focusing on themselves as individuals and at the group level, are aware of the constraining conditions for innovation but struggle to find potential ways forward. The lack of systemic support is explained by the respondents as being conditioned by time constraints, the prioritisation of performance/output measurements, the demands of everyday operations and a lack of incentives to explore. There are factors making it difficult for managers to be ambidextrous, such as not having room to recognise opportunities outside their areas of responsibility or incentivised to build linkages suggested by Birkinshaw and Gibson (2004) when mechanisms are described as primarily promoting exploitation.

Even making conscious attempts to innovate risks reinforcing existing operations rather than exploring new innovations since there is less room to support exploration when individual managers tend to adhere to exploitative behaviour over explorative behaviour. Ambidexterity is about harbouring conflicting rationalities and the ability to make judgments between them (Khan & Mir, 2019; Mueller et al., 2020; Pertusa-Ortega et al., 2021). Even though the respondents were aware of this conflict, the ability of the individual to make judgements and switch between logics, as suggested by Brix (2020), appears limited. As put by a mid-level manager concerning the potential room to act in pursuit of innovation:

*“In the end, you do what is expected of you, then it is mostly about the delivery of measurements, performance indicators and goals” (3).*

There are tensions generated between the organisational levels themselves due to the lack of mechanisms for innovation, which makes it difficult to maintain a continuous balance with the individual level, which can constrain potential innovative initiatives. The individual managers stated that anxiety exists at both the individual and group level in the face of uncertainty and the divergence from routines:

*“I think that, if we wanted to, we could have all the possibilities if we had more time. If we were encouraged to be less cautious and less worried about the next step” (4).*



Across all the interviews, managers described the conditions which they perceive to constrain innovation as tensions between current modes of operations versus perceived conditions which are assumed to be supportive of innovation. Managers, both individually and as a group, have a role in reproducing the conditions which make the balancing of tensions difficult, though they sometimes question them themselves.

*"I see it like this: all of us become representatives. We must be in some way for how we govern and the culture surrounding it. And as managers, it is very hard when we have the strong governance system that we do, and to question it and to say, 'now we need to ask ourselves if this really helps us to succeed'" (16).*

Managers as individuals are aware of the conflicting logics associated with individual ambidexterity (Gieske et al., 2016; Magnusson et al. 2021) but not in terms of actions which would promote exploration. The respondents questioned aspects about current practices, but there is a lack of collective discussion about the implications of the current order. Because of this, the lack of support is reproduced by the managers by following and enforcing routines while refusing to discuss the implications of innovation amongst themselves as a group and the potential consequences on organisational performance.

### Group mechanisms as obstacles for individual behaviours

The lack of opportunity to question current modes of operation makes it difficult to adopt ambidextrous behaviours. Stability and alignment with routines and static goals are prioritised at the expense of adaptability and reconfiguration. The individuals harbour conflicting rationalities associated with ambidexterity (Gieske et al., 2016; Magnusson et al., 2021), and express ideas about strategies such as trust and encouragement, which are assumed to promote contextual ambidexterity, but which are hard to act on.

*"It is a lot about culture as well. If I believe that something is not working, how do I reach others? it is quite a long step to just go to someone and wish for something else" (7).*

The difficulty adopting ambidextrous behaviours is not only an individual concern. It is also combined into collective behaviours which promote exploitation and are enforced by mechanisms. Interviewees used a "we," which refers to their own behaviours as well as those of other individuals and as a group. The demands of their day-to-day activities appear to constrain innovation in terms of time, what you are allowed to do, and other managers, who may not agree on a shared need to innovate or believe that changing their operations through innovation will affect the organisation's capacity to explore. A particularly prominent tension connected to these behaviours is identified by Birkinshaw and Gibson (2004), who state that part of being an ambidextrous individual is to seek collaborative opportunities and build internal linkages. This was described by a top manager while discussing the difficulties of acting on potential opportunities which require collaboration:

*“We are not on the same page regarding how to collaborate. Some are very hierarchical, believing that everything must pass through the manager, and others are not” (15).*

The low degree of individual ambidexterity concerning intra-organisational collaboration across departments is an apparent barrier in promoting innovation in the municipal organisation. The default behaviours are described as a focus on fiscal control and alignment with current routines and goals rather than innovation as a means to respond to changing circumstances. A mid-level manager emphasised this when discussing conditions for citizen involvement in pursuit of co-production with citizens:

*“You can talk about it a lot, for instance involving citizens in the development and innovation of new solutions for public sector services, but we always fall back to modes of governance which promote performance measurements” (3).*

Individual behaviours may constrain potential exploration for others when issues cut across departments that affect the ability to act together since the potential for exploration can clash with policies that prioritise exploitation between two departments. Even though individual managers could practice ambidexterity in certain cases within their areas of responsibility, it is still a question of departmental ambidexterity within certain silos rather than organisational ambidexterity through a simultaneous balance.

### Room for action in pursuit of innovation

The respondents talked about leadership as being important in creating an environment in which exploration is allowed. This endeavour applies not only to the individual manager's relationship with their employees but also to the relationship between managers. The perceived room to act is constrained by a lack of mechanisms and routines that promote balance between exploitation and exploration at both levels of analysis. The individual room for action is also constrained by the rules and routines at the organisational level and the constraints related to daily operations at the individual level. A mid-level manager highlighted the difficulties in promoting innovation:

*“I think my role is about thinking beyond the horizon and reflecting upon my operations a lot more, to be given space for it (...) It is an ongoing process, but it gets diminished since you have thirty minutes here and thirty minutes there when you have time to be creative, and then it is on to the next meeting and you have lost the thread and are forced to start all over again” (7).*

None of the interviewees in this study used terms like risks or being risk-adverse when discussing tensions. Instead, they tended to talk about the lack of spaces and resources to be able to even dare to attempt to innovate by supporting exploration or to find space for themselves to contribute through their roles as managers.

*“There is rarely room to let go some more. To try and let go and to live in it a bit longer, to actually try. There is no space for that today, and it does not conform to our structures” (2).*

The use of *space* and *dare* is not another way to frame risk-adverse behaviour. It is about a lack of tolerance for ambiguity, where organisational routines and day-to-day operations do not allow any room for daring; instead, anxiety is created when diverging from routines. It is less about the trade-offs of risk management, strategic choices between flexibility and stability, or conscious efforts by managers to avoid risks; rather, it is the perceived lack of space, tolerance of uncertainty, and the current routines which reduce room for adopting ambidextrous behaviours such as pursuing opportunities outside one’s own operational sphere (Birkinshaw & Gibson, 2004).

### Innovation ambiguity: A value-loaded concept

Innovation lacks conceptual clarity for the interviewees at the individual level in the organisation studied. This is not only rooted in the lack of an innovation policy; innovation is also a value-loaded concept with ambiguous meaning, and this contributes to difficulties in achieving ambidexterity. The ambiguity is both an issue connected to the *lack of conceptual* clarity towards innovation and how managers perceived the *novelty aspect* of innovation. Some see innovation as incremental adjustments and adaptation of current practices, while others have a firm image of innovation as something completely novel and disruptive. When discussing innovation, the bar can be set rather high for when something can be called innovation. It is about *“finding solutions to questions which are almost impossible to ask”* (16), or *“taking steps that no one else has done”* (5), or *“when we do something that others want to copy”* (2). There is a perceived right or wrong use of the term, which managers see as a problem and source for potential conflict when innovation is used.

*“I think that there are a lot of stalemates when it comes to talking about innovation. There are a lot of arguments like, ‘no, that is not an innovation, and you are using it wrong.’ And we cannot say that we are going to be innovative and use examples from history such as inventions because it is not the same thing (...) It is trendy to say that we are going to be innovative and that creates limitations since you are not allowed to mix innovation with something else” (15).*

The lack of conceptual clarity makes it a difficult concept to approach and to promote, which contributes to unclear conditions for individual judgments for balancing conflicting rationalities.

*“I think that is part of the difficulty and it is a bit sad; it makes your head spin. That is why we get innovation as something on the side, or that we think we are supposed to do on the side. For some reason, I do not know why, but we cannot get it to work systematically” (13).*

Innovation ambiguity is a factor for contextual ambidexterity in the sense that if the issue of innovation falls outside of common practices, it is something else instead of something that is part of the balance. Managers claim innovation should be an inherent part of how the organisation operates, but due to the lack of routines and the lack of conceptual clarity, they see no tangible ways to systematically support it. Innovation might still occur, but in siloed attempts since the room for supporting exploration across departments is low. This is especially true if other managers do not share the same view of what innovation means or if there is even a need for it.

## Discussion

Improving organisational ambidexterity appears to be difficult in the organisation studied. There is a lack of systemic support for innovation in the environment, and managers struggle to balance tensions. The municipality serves as an example of when organisational ambidexterity could not be clearly observed, and this makes for an interesting discussion. There is extensive research on ambidexterity, but less so when it comes to achieving it or addressing the obstacles which organisations need to overcome (Boukamel & Emery, 2017; Mueller et al., 2020). Based on the findings, this study identified a low ambidextrous environment which could be summarized as an organisation with weak support for exploration, where organisational mechanisms promote exploitation and individual behaviours reinforce these mechanisms. Individual assessments of organisational ambidexterity can be aggregated (Gibson & Birkinshaw, 2004) to say something about the organisational level, and it was quite clear that individual struggles were reflected in a lack of mechanisms that promoted exploration at the organisational level.

Previous empirical studies of ambidexterity have been dominated by quantitative studies in which the organisational level is the primary unit of analysis across multiple organisations (Mueller et al., 2020; Pertusa-Ortega et al., 2021). This study has been an attempt to look further into the gap in the literature on ambidexterity by attempting to merge both the organisational and individual levels of ambidexterity. The results from this study indicate that the organisational level is restricting the ambidextrous behaviour of individuals in organisations that appear to have a low capacity for innovation. Ambidextrous behaviour amongst individuals alone does not appear to be enough to promote organisational ambidexterity without some form of routinisation or support for innovation at the organisational level. Gullmark (2021) found that innovation capacity in municipalities can be routinised to either a high or low degree, but both will produce innovation. In the context of this article, the routinisation of innovation at the organisational level appears to be a potential prerequisite for increasing ambidexterity. The lack of an innovation policy and supporting routines in the organisation studied was an apparent problem for the managers.

In low ambidextrous environments, behaviour amongst individuals alone does not appear to be enough to promote organisational ambidexterity without some form of routinised support for innovation. There is less potential opposition connected with exploitation than exploration

(Brix, 2020), and when there are no routines to support exploration or strategies for creating a balance, the bias is towards the path of least resistance. So even though in theory the relationship between exploitation and exploration is not a dichotomy with trade-offs between different choices (Boukamel & Emery, 2017; Brix, 2019), this study shows that the lack of balance between exploitation and exploration causes them to be perceived to exist as an either/or relationship rather than two concepts whose tensions can be managed simultaneously. This is further complicated by the confusion surrounding innovation and its inherent ambiguity. Innovation does not have a thematic place in existing practices and just means different and/or better in general discourse. Unless there are organisational mechanisms which contribute to conceptual clarity and routines which help promote innovation, achieving ambidexterity will remain difficult. Linking standard operations and innovation is part of individual ambidexterity, which requires routines for both (Boukamel et al., 2019; Gieske et al., 2016).

Risk aversion is part of the discourse concerning barriers to public sector innovation (De Vries et al., 2016; Mulgan, 2007) and a subset of innovation capacity (Boukamel et al., 2019). However, risk is not talked about by managers. Even the term *risk* was not used across all interviews. Instead, they talked about the lack of *daring* and *space* regarding innovation in current practices. The concept of daring should not be seen as another framing of risk or risk-taking. Risk is often calculated by managers through trade-offs and choices between different alternatives rather than through the continuous balance of contextual ambidexterity. Daring is more about supporting innovation and accepting leaps of faiths rather than taking calculated risks and making optimal decisions. Bason (2018, p. 297) talks about managerial courage in which innovation leadership is “played out in a force field” between different values. In the context of this study, courage is daring to step outside the confines of organisational routines and practices, which is not perceived to be supported.

Wihlman et al. (2016) found a difference between senior and middle managers in municipalities regarding the implementation of innovation policies and their perceptions of the barriers hindering innovation. However, this study did not find any discernible differences in the interviews between top and mid-level managers or persons with supporting functions. For this study, the only real divergence between individuals were connected to the lack of conceptual clarity concerning innovation through perceptions of what could be considered an innovation. Similar to Wihlman et al. (2016), however, this study found that the respondents were aware of the difficulties, but that there was a lack of action towards change. Lidman et al. (2022) found that first-line managers in municipalities were caught between conflicting expectations to innovate while simultaneously experiencing contextual conditions which did not support it. The results from this study add to these findings by identifying similar difficulties, but they were perceived by both middle, and top-level management in a municipal organisation.

According to Gibson and Birkinshaw (2004, p. 213) “too much emphasis on discipline and stretch creates burnout and disillusion,” and the subsequent one-sided focus on support and

trust did not lead to getting any work done. When the work to be done is innovative, a perceived lack of support and trust seems to reinforce the disillusion of managers, who see the need for something else but without appropriate means to reach it. Since managerial support has been identified as important for successful PSO innovation (Boukamel et al., 2019; Lidman et al., 2022; Nählinder & Fogelberg Eriksson, 2017), this disillusion risks turning into innovation-frustration, which in turn continues to contribute to the lack of systematic transformation within the public sector.

## Conclusion

The purpose of this article was to investigate the contextual ambidexterity in a Swedish municipality by answering the following questions: (1) How do managers perceive organisational and individual abilities to manage tensions? and (2) How can potential connections between the organisational and the individual levels be understood? For the first question, exploitation is strongly promoted while exploration is weakly supported, which makes it difficult for managers to attempt to balance tensions in the organisation studied. For the second question, in weak ambidextrous environments, the mechanisms at the organisational level promote exploitation, which in turn affects an individual's ability to act ambidextrously. Overall, this affects the organisation's ability to support exploration other than through delimited, siloed attempts with limited potential to innovate with regard to the complex issues facing the public sector.

The results show the importance of highlighting the context that precedes innovation processes through the balance of contextual ambidexterity. Sørensen and Torfing (2022) have proposed a new set of questions concerning the need to further investigate the strategic management of institutions and processes to better support innovation. This study contributes to this discussion by highlighting the importance of multiple levels of analysis and the interplay between them as previously suggested by, for example, Raisch et al. (2009), and the environmental conditions which may or may not support innovation (Lewis et al., 2018). Contextual ambidexterity appears to be a key concept in this pursuit since it encompasses both the standard operations and innovation process which managers need for balance, and it focuses on multi-level analysis.

Municipalities are complex and siloed types of PSOs (Adolfsson & Solli, 2009; Nählinder & Fogelberg Eriksson, 2017), which calls for attention to be placed on the intra-organisational environment. Collaboration was called for but rarely connected to actual departmental priorities. It thus becomes a way to highlight issues that are difficult, but it does contribute to improve operations by allocating resources towards collaboration. This suggests that mechanisms at the organisational level which incentivise and encourage cross-departmental collaboration in the ordinary planning process, together with the routinisation of innovation, are two main steps towards ambidexterity in low ambidextrous environments.

Concerning ambidexterity for PSOs, there is still unexplored territory which needs to be covered in future research. The hardships of supporting innovation through ambidexterity found in this study are not solved merely by formulating and implementing an innovation policy at the organisational level, just as the solution is not merely the promotion of skills at the individual level. The findings of this study suggest the need to further investigate the relationship between organisational and individual levels of contextual ambidexterity and to continue to develop an understanding of the mechanisms at the group level in organisations which is less theoretically conceptualized. Future research should also look deeper into the interplay between organisational and individual levels of ambidexterity in organisations which have previously excelled at innovation, preferably drawing on multiple cases to identify factors amongst high performers. Finally, this study reveals the need for further research into the political governance of an organisation and politician's potential role in promoting innovation since this subject was not mentioned frequently in the interviews. There were a few comments in this regard, but this study did not find any clear results on how political aspects influence ambidexterity. Future studies should investigate the roles of politicians in organisational ambidexterity to identify potential aspects which are specific to PSOs.

The implications of promoting ambidexterity in practice constitutes an important part of the discussion concerning the conditions for innovation in an organisation, which based on the results from this study and from Lidman et al. (2022), seem to exist across multiple management levels in municipalities. The first step forward appears to be the routinisation of innovation through policy measures and supporting routines in organisations having difficulty supporting and promoting innovation. This is not merely handled by creating innovation policies where there are none, but rather by developing a mutual understanding of innovation and highlighting conditions in the current environment as a first step.

Finally, there are limitations to this study. Since it draws on experiences from a single municipality, transferring results to other contexts must be done with care. The studied organisation's difficulties with ambidexterity were an apparent obstacle on the path to innovation. It should be emphasised that the lack of conceptual clarity concerning innovation may have clouded the interviewees' answers. If the interviewees' view of innovation pertained strictly to novel, radical changes, they may have failed to highlight ambidextrous behaviours that pursued more incremental innovations. Finally, this study is based on a manager's perceptions over a limited time span. The focus of contextual ambidexterity was on behaviours which might be difficult to identify in individual reflections. It is possible that longitudinal observations could highlight ambidextrous behaviours of which the managers themselves were not aware.



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# Making Place for Sustainable Welfare in a Rural Setting

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## Abstract

This article investigates how employees in welfare organisations address challenges to foster public places that can accommodate sustainable development. The overall aim of the study is to increase our understanding of the innovative states of mind among employees in rural welfare organisations, guiding how they forge places for the provision of legitimate sustainable welfare. Data were collected through ethnographic field studies in a public housing company in a rural municipality in southern Sweden. As we investigate the daily making and shaping of place in a rural public housing company, assigned to provide sustainable welfare, we will set out to analyse how employees act to create legitimate forms of sustainable welfare. Our unit of analysis concerns employees' innovative state of mind as they engage in identifying placemaking activities recognised as able to provide appropriate contributions to sustainable everyday life for the rural population. The results show nuances due to place, forming patterns in the innovative states of mind that guide the property managers' actions as they create legitimate, sustainable welfare in rural settings. The findings further suggest that placemaking, the daily making and shaping of places, in welfare organisations may sustain existing recognition of rural areas as peripheries or deprioritised places, reproducing a distinction between centre and periphery.

**Keywords:** Welfare organisations, workplace innovation, placemaking, rural, sustainability.

## Introduction

This article investigates how welfare organisations address local challenges in fostering public places that are capable of accommodating sustainable development. The focus is on the daily making and shaping of places that allow welfare organisations to provide legitimate sustainable welfare in rural settings. More precisely, we analyse how employees in a rural welfare organisation, who are subject to political demands and expectations from a variety of local stakeholders, engage in placemaking activities to forge a sustainable everyday life for the rural population. Here, sustainability refers to development of welfare “that meets the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development 1987). Further elaborated, this means that analysed employees address different durability issues that require their awareness of economic, ecological, and social conditions for the provision of rural welfare (Edwards, 2019). Previous research indicates that these are three common but broad conditions that often become specified at local level as welfare organisations struggle to make sense of them (PwC, 2023; Keskitalo & Andersson, 2017). Therefore, instead of treating economic, ecological, and social sustainability as entities that can easily be evaluated, we set out to explore how employees address and attribute different meanings to sustainability issues in their making and shaping of public spaces (Porter & Kramer, 2011; Caselunge et al., 2019; Edwards, 2019).

Here, placemaking is referred to as a bottom-up and hands-on process involving how employees intentionally or unintentionally create, shape, and change places (Baur et al., 2014). Thus, the analysis investigates the interplay between placemaking and employees’ abilities to solve problems and be innovative in everyday work practices (Lew, 2017; Ewalt, 2018), as central to emerging forms of sustainable welfare. By investigating the daily making and shaping of places, we are interested in frugal, innovative everyday activities. Such activities are not understood as eureka moments or attempts to bring inventions to the market (Albert, 2019). Instead, we align with previous research that has conceptualised innovative activities as mundane improvements of conditions at work (Delmas & Pekovic, 2018; Farooq et al., 2019; Gao et al., 2021). Our focus is on the employees’ understanding of how to contribute to a sustainable welfare in a rural setting (Wohlfart et al. 2016; Ploeg et al., 2021; Hossein et al., 2021), by capitalising on ideas that allow them to improve their daily work (Gao et al., 2021).

Research presents sustainable welfare as being more challenging in rural settings, often depicted as peripheries or deprioritised places, shaped by depopulation and communities falling into despair (Sällström, 2015; Carlow et al., 2016). Due to low tax revenues, welfare is perceived as being difficult to finance (Blix, 2013; Mörk et al., 2019; Sävje & Baars, 2022). Therefore, organisations assigned to provide rural settings with welfare can be expected to struggle to identify realistic means and measures that could serve a sustainable future welfare; they are expected to seek out new, innovative ways of managing and organising

services (Silvestre, 2015; Ghavempour & Valde, 2019; Pot et al., 2020; Bolten & Park, 2022). This means that employees become subject to what previous research depicts as demands for an innovative state of mind (Greenland et al., 2019; Galvin et al., 2020; Tiwari & Thakur, 2021), meaning that they must continuously change the way they think and act to contribute to sustainability (Masood & Afsar, 2017; Bicchieri, 2017; Bergquist et al., 2019). Such demands placed on employees in rural welfare organisations can address attempts to seek out both measures, potentially disrupting business as usual (North & Smallbone, 2000; Tiwari & Thakur, 2021), and more subtle changes based on new ways of performing daily actions (Wohlfart et al., 2016; Hossein et al., 2021; Ploeg et al., 2021).

While addressing such mundane workplace innovations, in the daily making and shaping of public places in a rural setting, the analysis recognises that place has an impact on behaviours and actions that are perceived as meaningful (Richardsson & Jensen, 2003; Halford, 2008); that is, places can either enable or obstruct action (Delmas & Pekovic, 2018; Vitello & Willcocks, 2020; La Fuente et al., 2022). In our exploration of employees' innovative states of mind, we recognise the need to identify and prioritise place-bounded actions (Ellery et al., 2021). Thus, our analysis complements existing studies identifying demographic and broader socioeconomic challenges to rural welfare by recognising the interplay between the dynamic forging of employees' innovative states of mind and rural placemaking. Concretely, this is done by analysing how property managers, at a public housing company in a Swedish rural municipality, engage in placemaking activities. Public housing is seen here as a critical case, where the daily work practices allow us to examine emerging forms of sustainable placemaking within the welfare sector (Albert, 2019; Farooq et al., 2019; Hossain, 2020; Hossain et al., 2021). When doing so, our emphasis on daily practices also enables us to revive discussions about how demands for innovative solutions to sustainability challenges in a rural context involve everyday adaptations and changes in the provision of welfare (Rau, 2018).

Hence, the overall aim of the study is to increase our understanding of the innovative states of mind among employees in rural welfare organisations, which guides how they forge places for the provision of legitimate sustainable welfare. The following questions have guided the analysis:

- How do employees in welfare organisations act in their daily work practices to create a sustainable everyday life for the population in rural areas?
- How do employees' actions interplay with conditions constitutive to place?

The article continues with a review of previous research, followed by a presentation of the theoretical framework for the analysis. After describing the setting and methodology, the results will be presented through subheadings based on the themes found in the analysis of the empirical data. The article concludes with a discussion, including theoretical analysis, and a list of references.



## Previous research

Several studies have focused distinctly on urban placemaking activities in the design of public places. One example is a study by Matthews and Gadaloff (2022) on public art as a placemaking device to boost social capital and drive urban regeneration in three cities in Australia, highlighting variations in planning approaches to manage public art. Another example is Truong et al. (2022), who studied the enhancement of urban nature and placemaking through community gardening in social housing. The study showed how community gardens had strengthened a placemaking approach in these communities, fostering a stronger sense of community and enhancing the provision of green space. However, not all urban placemaking studies have focused on concrete or planned activities. Mohammed and Saad (2022) investigated the concept of place attachment in relation to placemaking and urban quality of life. Such a perspective differs from Kärholm et al. (2020), who studied placemaking in relation to migration and the transformation of urban space, investigating how practices of everyday life could challenge new and existing spatial scale relations and how they could be addressed by planning. From previous research, we know quite a lot about how urban areas can thrive and develop in a favourable and more sustainable direction through the making and shaping of place. As previously indicated, placemaking in rural settings is encompassed by unique and often challenging conditions constitutive to the rural.

Even though research has often neglected rural placemaking in favour of an urban perspective (Cresswell, 2009; Ghavempour & Vale, 2019; Platt, 2019; Johnson-Woods & Feldpaush-Parker, 2022), there are some researchers looking into the topic (see e.g., Gallagher & Ehlman, 2020; Hill et al., 2021; Xue, 2022). Within existing research on rural placemaking, it is common to depict the rural as something that emerges in relation to the urban. As an example, Johnson-Woods and Feldpausch-Parker (2022) studied the so-called “New ruralism”, which consists of approaches that enhance or preserve rural-urban edges to benefit urban areas, suggesting placemaking activities in a small village near the Canadian border. Tourism-oriented studies are also common in this field of research. An example is Zhang et al. (2021), who focused upon rural tourism by paying special interest to smallholders; specifically, how they adapted to a new rural paradigm and coped with changes in the experience, significance and importance of rural place.

Previous research has shown that placemaking can constitute a powerful tool in reaching sustainability goals (Buhl et al., 2016; Donovan, 2017; Ghavempour & Vale, 2019) and contribute to sustainability (McClinchey, 2021; Toolis, 2021). For example, the making and shaping of places in a sustainable direction can be about improving public transportation and greenways, resulting in more environmentally sustainable communities (Toolis, 2021). It can also relate to well-designed places providing a sense of security and stimulating social interaction (London, 2020), which relates to a social dimension of sustainability. Increasing knowledge of how placemaking is manifested in practice is relevant since several studies have attributed employees’ key functions in terms of enabling organisational contributions to sustainable development (Nidumolu et al., 2009; Haug & Talwar, 2010; Jenkin et al., 2011;

Sharma et al., 2021; Yuriev et al., 2022). Similar conclusions have often been drawn in research about the propensity of organisations to innovate (Yasir & Majid, 2020; Munoz-Pascual et al., 2021; Gao et al., 2021), which often is considered synonymous with the ability to forge sustainability. Still, we know considerably less about how sustainable welfare is created from the bottom up in organisations' daily practices. Instead, the emphasis is usually on investments, implementation processes and governance to innovate sustainability – that is, a top-down perspective (Adams et al., 2016; Gao et al., 2021; Tiwari & Thakur, 2021; Kim, 2022; Yuriev et al., 2022).

Studies on placemaking in organisations have also traditionally been characterised by a top-down approach. A plethora of studies have examined placemaking from a policy perspective (e.g. Nicodemus, 2013; Frenette, 2017; Guo, 2023), or in relation to management and governance (Vukmirovic & Gavrilovic, 2020; Yu et al., 2022; Son et al., 2022). However, placemaking in everyday practices has received attention during recent years (Ewalt, 2018; Rau, 2018; Hossain et al., 2021; Pink et al., 2022; Yuriev et al., 2022). Existing studies of placemaking in everyday work practices have primarily focused on activities within four walls, neglecting the making and shaping of public places. For example, Wilhoit Larson (2021) studied how and why employees create home at work, such as engaging in placemaking activities like decorating offices to be more like home. Another example is Cho et al. (2022), who investigated placemaking based on psycho-social impacts of the COVID-19 pandemic, focusing on experiences of working from home. The study included matters such as reimagining the physical space and the construction of home as a place that served multiple and, in some cases, conflicting roles.

This article contributes to research by deepening our understanding of the innovative states of mind, guiding the daily placemaking in welfare organisations, unfolding as the employees seek out legitimate opportunities to address demands for sustainable welfare in rural areas frequently depicted as peripheries or deprioritised places.

## Theoretical framework

In the analysis, place is considered a social construction, meaning that places do not simply exist but take shape in interaction with human action. Places are seen as subjects that are created by people – that is, other subjects – and their understanding of place. This means that places are constantly created and re-created, made and re-made (Giddens, 1979; Friedman, 2010; Fuller & Löw, 2017). Moreover, the central concept of placemaking is diverse in its definitions. Placemaking can refer to the explicit or tacit cooperation among people to maintain, create and bring meaning to places through bodily occupation of differential resources and constraints (Chica, 2021). The concept can refer to an unplanned, organic bottom-up and local initiative process or approach to the creation of place. Similarly, placemaking can refer to planned, top-down, intentional, and professionally defined processes or paths (Lew, 2017). In some definitions, placemaking involves planning,

designing, and managing public places (Pascucci, 2015; Ewalt, 2018). Other definitions emphasise a hands-on approach and the aim to improve a place, such as a neighbourhood, by a process that inspires to reimagine and reinvest public places (Vukomirovic & Gavrilovic, 2020).

Due to the focus on welfare organisations' daily provision of sustainable welfare, placemaking will be referred to as a bottom-up and hands-on process that recognises the way employees intentionally or unintentionally create, shape and change places (Baur et al., 2014). Furthermore, placemaking encompasses every aspect of place, including sustainability (Courage, 2013; Pascucci, 2015). Like place, sustainability should not be seen as a dichotomous concept. It is not a matter of organisations or their employees contributing or not contributing to a sustainable development. Rather, sustainability is a dynamic process that unfolds over time, a becoming, meaning that sustainability must also be made and re-made (Mohrman & Worly, 2010; Adams et al., 2016; Ghavempour & Vale, 2019). The forging of places for provision of sustainable welfare is essential for the legitimacy of public organisations. To be considered legitimate, organisations must respond to and align with societal norms and needs and meet the exhortations of its stakeholders (Dowling & Pfeffer, 1975; Suchman, 1995; Buhmann, 2017; Vodonick, 2018:459). To be considered legitimate, organisations must then contribute to sustainable development (Lins et al., 2017; Dyck et al., 2019).

Like most sociologically informed analyses of the making of places, our focus in this study is directed towards actors; that is, the ones who create and change place (Baur et al., 2014). Due to the focus on employees, the concept of agency becomes prominent; that is, employees' social commitment and capacity to control and plan their actions based on their own considerations and what is happening in their surroundings (Emirbayer & Mische, 1998). Agency is ultimately about people's ability to act, often to achieve some kind of change, linking the concept to an innovative state of mind (Bennet & McWorther, 2019; Zhou & Deneen, 2020; Hillebrand et al., 2020). Furthermore, agency comprises different elements. The *iterational element* means that people act based on what is already known, such as routines and existing ways of working. The *projective element* has a more project-oriented character, where people act to achieve specific goals and visions of the future. The *practical-evaluative element* derives from the ability to make judgements and evaluate different options for action, considering both obstacles and opportunities. These three elements are always present, to varying degrees in different situations, mainly determined by the prevailing conditions (Emirbayer & Mische, 1998). Furthermore, there is an interplay between employees' agency and place. Contextual characteristics influence how people think, act and whether they are to change their behaviours (Flyvberg & Richardsson, 1998; Richardsson & Jensen, 2013; Wilhoit, 2016; Van Renswouw et al., 2022; La Fuente et al., 2022). As examples, work environments are crucial for organisational innovativeness as they impact on employees' creative behaviours (Pakos et al., 2023), and the fact that peripheries are usually attributed lower status than cities affect the people who reside there (Heldt Cassel & Stenbacka, 2020).

Placemaking is the doing and negotiating within an existing place or space (Chica, 2021). Organisations providing welfare are, in themselves, spatial landscapes containing factors that can enable but also obstruct action. Even if these factors are not fixed once and for all, employees must navigate among them (Richardsson & Jensen, 2003; Halford, 2008). The same applies to the broader context, which can also be both actions enabling or obstructing (Delmas & Pekovic, 2018; Vitello & Willcocks, 2020; La Fuente et al., 2022); this means that employees' work locations impact upon their mindsets and actions. To provide an example, placemaking requires resources and social capital (Wyckoff, 2014; Chica, 2021). Access to resources differs between contexts and the access affects employees' abilities to act and, by extension, the external setting (Richardsson & Jensen, 2003). Another example relates to our sense of place, constituting an important foundation for the engagement of making sustainable places, by referring to places as being attached to memories and experiences. When talking about our sense of place, we also refer to elements like emotional attachment, meaningfulness and belonging (Matsunobu, 2018). The element of belonging has also been defined as place-belongingness comprising a personal, intimate feeling of being home in a place (Antonsich, 2010). Since people respond differently to places, their sense of place varies. However, these responses are dynamic, not static (Pascucci, 2015; Vitello & Willcocks, 2020; Ellery et al., 2021). The attachment to place becomes represented in peoples' cognitive maps (Rapoport, 1990). A strong and positive sense of place can stimulate initiatives to improve place, which in turn can generate an even more positive sense of place (Wyckoff, 2014; Ellery et al., 2021). To relate this to sustainability, people who are attached to a place, and ascribe meaning to it, become more concerned with issues like environmental matters in their surrounding (Ghavempour & Vale, 2019).

As we investigate the daily making and shaping of place in a rural public housing company, assigned to provide sustainable welfare, we will set out to analyse how employees act to create legitimate forms of sustainable welfare. Our unit of analysis concerns employees' innovative state of mind as they engage in identifying placemaking activities that are recognised as able to provide appropriate contributions to sustainable everyday life for the rural population. We will pay special attention to the interplay between employee's actions and the conditions constitutive to place. In doing so, we recognise both that place is created, shaped, and changed by people's action and that place also influences these actions.

## Setting and methodology

### The setting

The setting for the study is a public housing company in Sweden. Instead of offering government-subsided housing specifically directed to households with limited incomes, public housing companies in Sweden are owned by the municipalities, and their main aim is to provide sustainable and affordable rental housing for the entire population (Svärd, 2016;

Sveriges Allmännyttan, 2017; Boverket, 2021). These companies are required by law to take social responsibility and contribute to the general welfare (SFS 2010:879). Accounting for almost 20 per cent of Sweden's housing stock, they are also required to conduct their operations based on commercial principles, distinguishing them from many other public services. While their social responsibility is in line with the general nature of the public sector, and their business approach is closer to the private sector, we may thus describe them as hybrid organisations (Mair et al., 2015).

The analysed public housing company operates in a rural municipality in southern Sweden (Jordbruksverket, 2019; Tillväxtverket, 2021). Geographically, 4 per cent of the municipality is made up of populated areas. The rest consists of 74 per cent forest land, 13.5 per cent agricultural land and 8.5 per cent other, such as marshland. Since the 1970s, the population has decreased by approximately 6000 residents. Approximately 37,000 people now live in the municipality, the majority in the central town (81 per cent). The average age of the population is 47 and almost 30 per cent of the residents are older than 65 ([www.scb.se](http://www.scb.se)). The company owns approximately 3300 apartments, mostly located in the central town but rarely in the town centre. In addition, the company conducts management services in non-owned properties, such as municipal school buildings and elderly care-homes. Within the company there is a CEO, eight department heads and about 150 employees. The average age of employees is close to 50 and most of them are men.

In this study, our point of departure is the company's sustainability work. This is a strategic decision as challenges in contributing to sustainable development are obvious to organisations that account for local welfare in rural settings, often lacking strategic and long-term work on sustainability issues, partly due to a lack of expertise and resources, but mainly for economic reasons (Sävje & Baars, 2022). This forces welfare organisations to address a variety of tense demands for sustainable welfare and everyday life, fostering costs and concerns as they try to turn rural regions into places capable to offer the population a sustainable way of living. Sustainability then places demands on workplace innovation. We focus specifically on the approximately 60 property managers who work in teams in different parts of the municipality. This allows us to move closer to the actual practice for placemaking as a bottom-up and hands-on process.

## Data collection

The empirical material draws on ethnographic field studies, a methodology that is often used and advocated for grasping short-term processes such as interactions about place, space and spatial practices (Baur et al., 2014; Merriman, 2015; Schoneboom, 2018; McClinchey, 2021; Chica, 2021). We chose this methodology because it provided an opportunity to be close to employees' work practices so that we could get hold of the conduct of their innovative state of minds. Being close to the actual practice for placemaking was considered beneficial for creating deep and detailed knowledge about the different perspectives that are played out (Descombe, 2014). Ethnographic data were gathered between February 2020 and January

2021. The company's sustainability work was observed on 135 occasions, for a total of 346.5 hours. Some observations aimed to increase the understanding of the organisational context, while others aimed to increase the understanding of the sustainability work conducted in the organisation and in employees' daily work practices. Meeting observations were conducted both at management meetings and meetings at the departments between managers and employees. Observations were also conducted by following employees, mostly property managers, during their workdays. One-third of the observations, mostly meeting observations, were conducted digitally due to the COVID-19 pandemic. Data were also collected through ethnographic interviews with employees and managers; that is, informal, exploratory and often spontaneous interviews at the setting (Allen, 2017). Eventually, we also recognised the importance of collecting data covering staff that worked in different rural contexts, ranging from those who worked in the central town to those who worked in peripheral areas of the municipality. This type of variation in the type of data that is collected is common in this type of field study and is considered beneficial to attempts to elaborate and test preliminary interpretations throughout the analysis (Carpiano, 2009).

## Analysis

The data consist of field notes written during the observations and the interviews. A total of 759 pages of computerised field notes were produced, forming the basis for the thematic analysis (Carlsson, 2010). Initially, the field notes were divided into observations and interviews at management level and operational level. Fieldnotes from observations and interviews with property managers were then sorted out. The analysis began by reading the field notes. During a second read-through, data were coded with an empirical approach. While the first step was characterised by open coding (cf. Charmaz, 2014), the second step was more theoretically informed, as the codes were reviewed to create more stringent codes. In doing so, the focus was on finding patterns within the codes that would form empirical subthemes and, by extension, overarching themes. The longer period for data collection facilitated the analysis and increased the reliability since it allowed follow-ups for validating interpretations. The analysis resulted in three overarching themes: (1) attaching to places, (2) renewing places, and (3) restoring places. Each of the overarching themes included subthemes, referring to nuances in the data collected from residential areas and more peripheral areas; see Table 1.

## Ethics

Ethical considerations and principles were integrated in the research design to protect the integrity and confidentiality of the informants and the organisation, such as in handling and storing data as well as in the synthesis of the results. Informants were given written information about the study and their consent was requested consistently, with the right to withdraw consent (Vetenskapsrådet, 2017). No formal ethical review was required for the study because Swedish law does not require ethical approval for interviews with staff



concerning work-related issues (Lag om Etikprövning [Swedish law of Ethic Regulation], SFS 2003:460).

## Results

The results show how the company operated in two different kinds of rural settings: rural residential areas and rural peripheral areas. Residential areas were located in central town, while peripheral areas consisted of smaller communities in the municipality. In some residential areas, property managers faced challenges related to matters such as integration, overcrowding, and crime, sometimes described in terms of: “drug sales and people shooting with air rifles”, “10-year-old girls who don’t dare to go outside”, or “the gang gathers outside the apartment. It’s drug dealing outside the kitchen window, not so nice ...”. These kinds of challenges were regularly discussed at management meetings and the company took active measures to overcome the challenges, such as by collaborating with the local police and social services. Challenging conditions also occurred in peripheral areas, with the difference that property managers did not experience the same organisational support as in the central town. The interviewees depicted these areas as less prioritised and complained that they had to “strain themselves bloody” to get support from management, or local politicians. One employee said, “All the money goes to the central town before we get anything”. Peripheral areas were also characterised as places with poor Internet connections, a lack of charging stations for electric cars and disabled parking, etc.

In the following three sections we focus on property managers’ innovative state of minds at work and how this has been shaped in interplay with the conditions characterising these two types of rural areas. The first section concerns how the interviewees’ attachment to these different rural areas motivated them to invest in being innovative, trying to create a sustainable everyday life for the population in their area. In the second and third sections, we focus on how property managers engaged in placemaking activities, aiming at *renewing* places or *restoring* places, as they set out to create a sustainable everyday life for the rural population.

### Attaching to places

Property managers, working in both residential and peripheral areas, frequently expressed how they felt dedication towards place. Their dedication was commonly sprung from attaching to the place; that is, having a sense of home or belonging. Places in focus to their work were seldom just sites where the property managers engaged in their work practice, as they often worked and lived at the same location where both family and friends resided. It was also common that they had grown up in the area, meaning that their attachment to the places they were in charge of often went far back in time and that they had previous classmates, teachers, old babysitters and so on in the area. Several of the property managers managed the property that they had grown up in or school buildings where they once had



been pupils. When following one property manager during his workday at a school building, he described how the green floor, as well as the wall bars in the gym, were the same as when he had been a pupil. He talked about when the school had been rebuilt, many years ago, and how he as a young boy had thrown one of his old gym shoes into the solidifying concrete, resulting in his shoe now being cast in the concrete foundation of the school. The manager said, "It's a certain feeling to have a history with the properties".

Nonetheless, the property managers had a sense of home, or attachment, that varied between residential areas and peripheral areas, and that fostered different innovative states of mind, ultimately also affecting their practice. In peripheral areas, property managers felt a sense of belonging to places that had decayed over the years and struggled with upholding welfare. Peripheral areas were characterised by a certain fragility, and the interviewees often stated that there was an urgent need to take action. Property managers also described how they could not expect nor wait for someone else to get things done but had to act themselves; they were depicting themselves as responsible for the local community, or as "the extended arm of the municipality". One property manager explained the situation as follows: "We can't lie down and die; we have to do something". Property managers who worked in peripheral areas often took the initiative, constantly acting to create a sustainable everyday life for the population, albeit in a rather ad hoc manner as they acted on local needs. This differed from the residential areas, where property managers acted in more organised ways. As opposed to peripheral areas, activities in central town were characterised as rather stable. Welfare was not being threatened in the same way, and collective, societal measures were taken to preserve and develop local welfare. Even when the stability in central town was challenged by factors such as crime, property managers had access to organisational support, as well as support from the local police, for example. The property managers described the creation of a sustainable everyday life for the rural population as considerably more manageable. Property managers could focus on making an extra effort to improve welfare, not because there was an urgent need to do so, but as a good deed. For example, one property manager helped a tenant with a physical disability to arrange a locking device for his walking aid. This meant that the tenant could leave the device outside the apartment without any significant risk of it being stolen.

The differences between the peripheral and residential rural settings were further confirmed by one of the managers as follows: "There is more commitment in rural areas [areas outside of central town] to change and improvements. In those areas, it's not as easy as just calling someone. It is more difficult to stimulate change in the central town". Nevertheless, staff working in the peripheral areas expressed concern for the reliance on individual commitment to tackle urgent matters outside by stating that they may have problems the day when they retire or resign. In one smaller community, property managers also expressed doubts about whether the same dedication to act on urgent matters would remain if future property managers did not live at the location. They saw a risk that property managers who lacked a certain sense of belonging to the place where they worked would simply regard work as

nothing but a job, restricting their activities to formal work tasks, and neglect less formalised demands for a wider engagement in the area.

In the upcoming sections, we will describe how this attachment to place also became linked with different innovative states of mind, manifested in practices aiming to create a sustainable everyday life for the rural population. We identify two ideal typical practices that aim to renew or restore places. In brief, these are two practices that can be illustrated by referring to an initiative in a residential area, aiming to manage a great number of abandoned bicycles in the area. The responsible team intervened to make it “look good in the area again” by collecting these bicycles. They were cleaning up; that is, restoring places in the area. However, when they realised that all the bicycles could not be returned to their owners for several reasons, they also managed to find a new way to manage abandoned bicycles by donating them to a second-hand organisation whose profit benefited the local associations, and thus indirectly contributing to the renewing of local places by involving others in the maintenance.

### Renewing places with support from the organisation or with a little help from my friends

To create a sustainable everyday life for the rural population, interviewees sometimes saw the need to renew places; that is, to change or adjust existing facilities and services. One example of how property managers acted to renew places was manifested in their attempts to nudge tenants to develop ecologically sustainable behaviours, such as increasing the recycling of materials. For instance, in one peripheral area, property managers engaged in nudging by putting up an informal sorting station for metal and cardboard outside a rental property. Property managers mentioned that while there was a formal sorting station in the area not far from the property, it was considered too far away for the elderly tenants in the property, justifying measures to facilitate and stimulate recycling by creating a new, more available and closer sorting station. Another property manager in one of the residential areas decided to designate a shelf allowing informal recycling in a municipal service operation building. In doing so, assistant nurses who worked in the building would become more aware that they could place products like broken light bulbs or old electronics on the shelf. The property manager motivated this extra service by stating that it is “better than if it would end up in the garbage,”. In both examples, property managers took responsibility for discharging the materials at the formal recycling facilities.

When renewing places, property managers often referred to their own attachment to the place they engaged with to identify local needs to act upon; that is, they were reflecting on their own personal experience of what would be appreciated by those populating the area. Initiatives based upon identified needs could then consist of, for example, creating social meeting venues. In one residential area, one team choose to build an outdoor furniture that enabled wheelchair users to get close to the table surface and use the furniture as intended, improving their access to outdoor environments. Peripheral areas often lacked social meeting

venues for the broader population, encouraging a team to build a public barbecue area for residents. This was done by reusing a concrete pipe that had been left at the location after sewage work, and they asked an old friend in the area for the material for the grill. One of the property managers pointed out how the barbecue area was not only an innovative way to handle different leftover materials, but it also allowed them to forge a place that was accessible from both the local school and the elderly care-home. The placement would also enable the elderly residents to view children from their windows when they were having barbecues. Another innovative example relates to the COVID-19 pandemic. During the first year of the pandemic, the Swedish government urged citizens to reduce physical contact and elderly care-homes established curfews, meaning that residents could not meet their relatives. However, the employees in the housing company noted that many elderly residents suffered from social isolation, and to make a difference and enable elderly residents and their relatives to meet despite the pandemic, some property managers in a peripheral area constructed a “Corona wall”. The construction was placed outdoors and consisted of a wooden frame on wheels with a plexiglass sheet inside the frame. By allowing the parties to sit on different sides of the plexiglass, the construction provided a new and safe way for the parties to meet, allowing them to avoid being infected.

When renewing places, many property managers emphasised the importance of having relations with the local population by talking about “favours and re-favours”. One property manager also stressed that “it’s important to have an old classmate in every municipal administration” to be able to get things done. These types of informal collaborations were especially common in peripheral areas where property managers regularly acted together with local acquaintances to renew places and associate services for the citizens, such as asking a friend to get a grill for the barbecue. It was also common for the interviewees to exchange favours with other local actors or officials from other organisational domiciles. For example, property managers in one smaller community helped a local entrepreneur with minor practical tasks. In return, they received help with interpreting when meeting tenants who did not speak Swedish, which led to the community becoming more inclusive towards newly arrived residents. Another example of informal collaboration was initiated when a property manager was contacted by a colleague who worked in a nearby community. The colleague informed that they were about to demolish a playground area and asked if there was something the property manager and his team wanted to have and reuse. The property manager appreciated the request since the local playground only had a swing that had to be renewed. When showing the current playground, the property manager pointed out how there was now both a slide and a climbing frame. He also emphasised that “they didn’t look like that when we picked them up” and that the team invested both time and some money to fix them up, but not anywhere near the purchase price.

### Restoring places – struggling with mundane mending or urgent matters

The property managers also described the need to restore places; that is, to rehabilitate places and make them sustainable. In residential areas, restoring measures involved

mundane work tasks or routines such as fixing broken benches and picking up litter on the ground. However, measures to restore places emerged as a more extensive theme among interviewees working in peripheral areas, often depicting innovative actions against different types of adverse development. For instance, the interviewees talked about acting against the depopulation that motivated the housing company to address difficulties to rent out apartments by reducing its operations in peripheral areas. To retain the current population and prevent residents from feeling compelled to move to central town when their needs could no longer be met on site, property managers described how they customised their services by conducting tasks that “don’t really belong to the job”, such as offering assistance to relocate, refurbish apartments, sign TV subscriptions, run errands in central town, or transport waste. Acting outside of their professional roles in this way was often justified as measures that are sensitive to the fact that many tenants were elderly, with relatives who had left the region, enabling them to continue to live at the location. Property managers in peripheral areas were also keen to react immediately to opportunities to regain the number of inhabitants. For instance, during one observation two property managers were trimming grass at the local square when they were approached by a young man who told them that he needed an apartment since he had recently got a job in the area. After some discussion, the property managers told him that they had a suitable apartment to offer. In a follow-up conversation about the situation, one of the property managers stated: “Out here we got to have our own rental service”, indicating that this was the way they have to work. The property managers also emphasised that it was appreciated by the actual renters, who worked at the headquarters in the central town and who found it difficult to rent out apartments outside of central town.

Measures aiming to restore places frequently also addressed unrest or disruptions in the social order characterising the community. For instance, to come to terms with a gang of local teenagers vandalising public places in a peripheral area, property managers had come up with the idea of offering one of the teens a summer job, where he would take care of some of the places that had been hit. One property manager also announced that it had all gone well so far; the problem had diminished, and the teen had started every workday by cleaning up in the area. Another property manager declared that “it probably wasn’t as tempting to go around and sabotage public places in the evenings when he had to take care of it the next day”. The property managers added that they were positive about hiring another teen in that gang the upcoming summer, seeing it as a way to expand measures to restore vandalised places. Disruptive incidents in residential areas often involved mundane damage, e.g. damages to laundry rooms or theft of laundry, that property managers had to handle. Several teams in central town talked about how they handled these kinds of problems by installing digital booking systems or camera surveillance, displaying organisational support and access to resources that could enable them to identify the culprits and take necessary actions to prevent future problems. Access to a more widespread organisational support also occurred in residential areas, such as when the interviewees described how they used to tackle publicly visible unrest in collaboration with the local police. To do so, they were also setting up a work group consisting of property managers, department heads and employees working on

rentals, and social issues related to housing. This work group primarily engaged in discussing both short- and long-term proposals for how to make specific the neighbourhood safe again; for instance, through integration projects or by involving tenants in restorative measures in the area.

## Discussion

This article has investigated a public housing company's daily making and shaping of public places as measures aiming to provide sustainable welfare recognised as legitimate in a rural setting. In this setting, sustainability is considered challenging (Sällström, 2015; Carlow et al., 2016), and legitimacy in the analysis draws on the ability of property managers to justify their daily placemaking in a way that motivates locals to accept them as valid welfare measures. In line with previous studies (Wyckoff, 2014; Matsunobu, 2018; Ellery et al., 2021), the analysis shows how the interviewees' sense of belonging become crucial. To justify their placemaking as legitimate, it is important for them to be familiar with and really know what the places they engage with mean to the local population whenever seeking out sustainable solutions (Baur et al., 2014). Still, there are differences in how the rural peripheral and the rural residential sense of belonging is articulated when the interviewees identify legitimate measures (see Table 1).

**Table 1: Overview of the results based on the thematic analysis**

Property managers innovative states of mind in rural settings	Attaching to places	Renewing places	Restoring places
Organised innovative states of mind in residential areas	A sense of belonging in a stable home, basing actions on a notion of manageability	Making adjustments to improve welfare, having formal support	Acting routinely to preserve welfare, expecting extended formal support when required
Ad-hoc innovative states of mind in peripheral areas	A sense of belonging in a fragile home, basing actions on a notion of urgency	Making changes to compensate for welfare shortcomings on site with informal support from local connections	Acting on local needs to regain welfare and prevent further decay, not expecting formal support

The study shows how the interviewees engage differently with placemaking guided by a desire to either *renew* or *restore* public places. Interviewees working in residential areas expect formal support in terms of resources from their own employer and collaboration with other public organisations when they engage in renewing or restoring public places. Thus, we may conclude that their placemaking is guided by an organised innovative state of mind, whereas those working in peripheral rural areas emphasise their own ability to respond to urgent challenges and independently seek out informal solutions that are valid to the locals. In doing so, they express what we refer to as ad-hoc innovative states of mind. Table 1 reflects how the interviewees' innovative states of mind interplay with local conditions, requiring constant reflections on how to navigate the way they engage in renewal or restorative placemaking (Richardsson & Jensen, 2003; Halford, 2008; Chica, 2021). Contextual factors, such as depopulation in the area, affected how the interviewees think and act (Wilhoit, 2016; Van Renswouw et al., 2022; La Fuente et al., 2022), causing them to apply different cognitive maps as they engaged in placemaking activities (cf. Rapoport, 1990).

An organised innovative state of mind was prominent in residential rural areas where the property managers acted on behalf of the organisation, such as by following routines, and relying on organisational support. In this case, we may talk about a top-down approach where placemaking emerges as a planned ingredient in their daily work practices (cf. Lew, 2017). In the terms of Emirbayer and Mische (1998), the property managers in residential areas draw on routine-based and projective elements of agency, prioritising manageable conditions that are constitutive to placemaking when acting to create sustainable welfare. In peripheral areas, however, the organisational representation was vague and the property managers displayed an innovative state of mind relying on ad hoc actions, constantly blurring and re-shaping professional roles and customising their services as they responded to urgent matters. In contrast with residential areas, placemaking activities in these peripheral areas were unplanned, or decoupled from organisational procedures, and reflect an emphasis on bottom-up responses to local needs (cf. Lew, 2017). The property managers' mindset was then characterised by practical-evaluative elements (Emirbayer & Mische, 1998), justified by a sense of belonging to a fragile periphery, and the importance of balancing different needs, possibilities, and obstacles on-site.

## Conclusion

The aim of this study is to increase our understanding of welfare organisations' daily making and shaping of a legitimate sustainable welfare in rural settings. The result suggests that there is a range of different initiatives that are recognised as sustainability measures. By looking at how the property managers conceptualise their own innovative mindset, however, the result indicates that there are variations in how welfare organisations in a rural setting identify opportunities for legitimate placemaking. As we look more closely at the result, our findings show how rural welfare organisations then also reproduce distinctions between centres and peripheries. In doing so, we conclude that activities linked with attempts to forge public places recognised for providing sustainable welfare can reproduce further legitimacy challenges. In

some regards, a less strict governance could, of course, be seen as beneficial for anyone who struggles to identify solutions to demands for a sustainable everyday life in the rural periphery. Loosening the grip and letting the staff address urgent matters on an individual basis could facilitate their attempts to come up with new solutions and accomplish change (cf. Kotter, 2008). However, we cannot ignore that this type of mindset also reproduces the fragility that characterises peripheral areas, either due to restricted resources (cf. Richardsson & Jensen, 2003; Wykoff, 2014; Chica, 2021) or the lack of a long-term perspective constraining attempts to acquire a sustainable development (UN, 2015). People tend to respond differently to placemaking (Pascucci, 2015; Vitello & Willcocks, 2020; Ellery et al., 2021), but the reproduction of distinctions between centres and peripheries may reproduce challenges to a legitimate pathway for welfare, which also reproduces challenges to social sustainability goals addressing inequality (UN, 2015; Lins et al., 2017; Dyck et al., 2019).

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# The Norwegian Cooperation Model as a Framework for Innovation in an Industrial Company

Anne Inga Hilsen and Johan Røed Steen

## Abstract

Based on a case study of a major Norwegian industrial plant, this article explores the role of skilled workers in innovation. We ask what the main organisational conditions are that support the involvement of skilled workers in innovation processes and suggest that the Norwegian model of cooperation at the company level can act as a framework that supports the establishment and strengthening of such organisational characteristics. This form of cooperation between managers and employee representatives, together with broad participation from employees on all levels, can be argued to be important for innovation work, and this case study explores why and how.

The article is based on data material that was also used in Hilsen and colleagues (2022). The case study is based on 6 first-time interviews in spring 2020, and 5 second-time interviews in spring 2021 with managers, union leaders, operators, and apprentices.

Through the interviews, two examples of process innovation were identified and described. Through thematic analysis, it became clear that this form of participation in improvement work and innovation rests on three conditions: A *structure for improvement work* with meeting places and working methods, that the company has developed a *culture for innovation* with trust between the parties and open communication, and that *both formal and informal cooperation on development* has been established.

**Key words:** Norwegian cooperation model, Innovation, Enterprise development, Broad participation, Skilled workers



## Introduction

In a changing working life, innovation is necessary to develop and maintain competitiveness in an increasingly global market. Whereas the organisational conditions for innovation have been the subject of a large body of literature, the role of skilled workers and apprentices in contributing to innovation remains relatively understudied (Hilsen et al 2022, Toner 2010, Backes-Gellner & Lehnert 2021). This case study aims to contribute to the understanding of conditions at the company level that stimulate the use of vocational skills in innovation work and investigates how the Norwegian cooperation model may provide a framework for this.

In Norway, about a quarter of all employed persons have a certificate of apprenticeship, and skilled workers are thus a large and important part of the workforce. Surveys, such as NHO's annual competence barometer, show that there is a great need for more people with a certificate of apprenticeship or vocational school in the companies (see e.g. Rørstad, Børing & Solberg 2021). According to Statistics Norway, Norwegian working life will lack 88 000 skilled workers by 2035 (Cappelen et al. 2020:40). Norwegian working life is also constantly facing new international challenges and demands. This means that Norwegian industry is dependent on a high rate of innovation to maintain its competitiveness.

The industrial plant subject to our case study is one of the largest industrial facilities in Norway. The company's main production is cellulose and a variety of related chemical products. It has a history back to the 1600s and modern industrial activities from the end of the 1800s, and since 1918 the company has been Norwegian-owned. In addition to the development of new products, the company also has a long history of developing new and better forms of production methods to manufacture its products in better, more efficient ways. New products, new work processes and better organisation of work have given the company a central market position. The company considers vocational as well as academic competence to be a prerequisite for such innovation and improvement work, and the company is a significant training institution with around 50 apprentices in training at any given time. This emphasis on competence is also an important prerequisite for full participation in improvement and innovation work.

Studying a company that consistently involves its skilled workers and apprentices in innovation processes, we ask what company-level conditions facilitate this broad involvement in innovation. The Norwegian Cooperation Model is a cornerstone of the organisational culture in our case company, as well as in large parts of Norwegian industry, and we thus investigate what elements of this model that may facilitate and support the involvement of skilled workers in innovation.

In short, the research question addressed here is thus: What are the main organisational conditions that support the involvement of skilled workers in innovation processes, and how can the Norwegian Cooperation Model act as a framework for innovation?

Through the interviews we identified two innovation projects, one implemented and one under implementation. These are described with a focus on how skilled workers, unions and

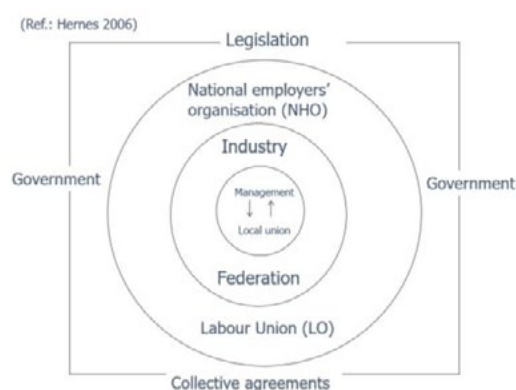
managers were involved. Based on descriptions of these projects, we identified three themes of central importance: *that there is a structure for improvement work* with meeting places and working methods, *that the company has developed a culture for innovation* with trust between the parties and open communication, and that *both formal and informal cooperation on development* has been established. These are analysed and discussed under the heading “What can we learn from this case?”. Lastly, we sum up the discussion and answer the research question in the conclusion.

## The Norwegian cooperation model

The innovation processes in the company we study take place within an institutional framework where the Working Environment Act, the Basic Agreement and norms for formal and informal participation and cooperation form the basis for a corporate culture where employees actively participate in innovation processes.

The Norwegian cooperation model provides both a historical and practical framework for understanding developments in Norwegian working life. Broad employee participation and tripartite cooperation are both democratic goals in themselves and means of cooperation for good and productive jobs. Nilssen and Ravn (2010) make a useful distinction between 1) the Norwegian model, in the sense of the Norwegian welfare state model, 2) the Norwegian working life model, which emphasises labour market regulations, and 3) the Norwegian cooperation model, which emphasises the cooperation between employers and employees, supported by the Government - in practice, primarily at the enterprise level (Nilssen & Ravn 2010: 7). When we describe the Norwegian model as a framework for skilled workers' contribution to innovation, and the institutional prerequisites for cooperation on innovation, it is about all three levels, but especially about the Norwegian cooperation model.

Cooperation at the enterprise level, what Hernes (2006) refers to as the Norwegian micro-model, indicates that local cooperation is framed by cooperative structures at all levels (Hernes 2006: 34):



The Norwegian cooperation model at workplace level is based on the cooperation between employers and employees regarding good and safe workplaces, but also allows for broad participation in development processes, in which not only the organised parties, but all employees participate.

The Norwegian cooperation model can be seen as a consensus process between parties with recognised common interests in developing productive and good jobs (Munkeby, 2003), but it can also be seen as a negotiated balance of power between parties with conflicting interests and power. "Particularly important in this development was the "great compromise" between the social partners and the settlements between the farmers' and workers' parties in the 1930s. This compromise emerged after a turbulent period of conflict, class struggle and crises in the interwar period, and it laid the foundation for the post-war development of the Nordic working life and welfare models." (Dølvik et al. 2014: 17). With the conclusion of the first Basic Agreement in 1935 between the then Workers' Union and the Norwegian Employers' Association, often referred to as the "constitution of working life", the basis for a regulated working life with recognised rules for cooperation was established. A Basic Agreement is an overarching collective agreement that regulates issues of a fundamental nature between the main organisations on the employer and employee sides. It contains the general provisions on bargaining and cooperation relationships between employers and employees. In addition, basic agreements address the employees' right of co-determination. The Basic Agreement of 1935 was superseded by a new Basic Agreement of 1947. Since then, the Agreement has been repeatedly replaced by new ones. Since the 1970s, it's usually happened every four years. (Alsos & Jakhelln n.d.).

The Basic Agreement simultaneously emphasises company development and safe and good workplaces and can thus be viewed both as a democratic project and as an effective instrument for business development. In the 1960s and -70s, this systematic cooperation was further developed in the Industrial Democracy Programme (IDP), a cooperation between the Norwegian Confederation of Trade Unions (LO) and the Norwegian Employers' Confederation (NAF). The IDP involved four key companies (Christiania Spigerverk, Nobø factories, Norsk Hydro's fertilizer plant and Hunsfos factories), and concerned cooperation on good and productive jobs, based on common interests. The goal was the democratisation of working life through cooperation and development work at the enterprise level (Gustavsen & Hunnius, Gustavsen 1981). Although the experiments themselves were limited and did not spread to the rest of working life, as had been hoped, they had great significance in other ways. One result that emerged from the IDP was the formulation of the psychological job requirements. This is an identification of six conditions that must be present to safeguard the development of good and productive jobs. The conditions include both organisational conditions and individual needs. The psychological job requirements (Emery and Thorsrud, 1969) are:

- "The need for the content of the job to be reasonably demanding (challenging) in terms other than sheer endurance, and yet providing some variety (not necessarily novelty).
- The need for being able to learn on the job, and go on learning (which imply known and appropriate standards, and knowledge of results). Again it is a question of neither too much nor too little.
- The need for some area of decision-making that the individual can call his own.

- The need for some minimal degree of helpfulness and recognition in the workplace.
- The need to be able to relate what he does and what he produces to his social life.
- The need to feel that the job leads to some sort of desirable future.”

(Gustavsen & Hunnius 1981:43)

The experiences from the IDP were laid down in the Working Environment Act of 1977. §12 in particular described requirements that directly reflect the psychological job requirements. This has been retained in §4-3 of the current Working Environment Act.

The Norwegian cooperation model thus provides structural guidelines for innovation in the company we are studying; The internal company processes take place within the structural framework of this model, which sets crucial conditions for the development work.

### How do we understand innovation?

Innovation is often primarily seen as research and development-driven processes, so-called scientific and technology-based innovation (STI) where internal and external R&D environments are central, although the understanding of innovation has gradually been expanded to include innovation based on learning and experience-based knowledge that the individual employee develops, based on learning-by-doing, by using, and by interacting (DUI) (Jensen, Johnson, Lorenz & Lundvall 2007). The latter mode of innovation seems particularly relevant to understanding what OECD has called “the Norwegian puzzle”, referring to the fact that Norway has low investments in R&D in comparison to other advanced economies, yet boasts very high productivity levels and standard of living. Aside from the role of the petroleum sector, a highly educated workforce, and the role of learning work organisations, dominant in Norwegian manufacturing, has been suggested as key explanatory factors (Asheim 2012). We also note that innovation is not just radical or disruptive new creation based on investments in R&D, but often incremental and based on learning through practice and experience, resulting in smaller, but continuous changes. This is typically what coordinated market economies such as the Nordics are efficient at, through knowledge diffusion and learning organisations, with large absorptive capacity (Hall and Soskice, 2001). It is the prominent form of innovation in firms with a synthetic knowledge base, typical for Nordic manufacturing companies, where the innovation takes place mainly through the application of existing or new combinations of knowledge, often with reliance on tacit knowledge due to more concrete know-how, craft and practical skill (Asheim & Coenen 2005).

In innovation research, surprisingly scant attention has been paid to the involvement of skilled workers in innovation activities. However, a high proportion of skilled workers in Norwegian manufacturing companies state that they have been involved in development work, particularly in processes that involve new or improved organisation of work (Solem et al. 2016). This can happen both through the skilled workers themselves taking the initiative for improvements based on their competence and experience, and by being actively involved in

improvement processes initiated by management, such as the introduction of new technology. While the latter can be described as planned innovation that originates from “above”, i.e., from managements, R&D etc., the former will be more unplanned and contingent on limited power distance (Hofstede 2001) as well as expectations of and rights to employee participation. The participation of skilled workers in such processes hinges on their competence as well as an understanding that workers should be able not only to conduct work processes, but to participate in improving them.

Even though skilled workers participate in improvements of products and processes in Norwegian companies, our knowledge of the importance of skilled workers for innovation work in Norwegian business and industry is limited (Steen et al. 2018). Moreover, vocational education and training is rarely a topic for innovation research or innovation policy. We therefore wanted to take a closer look at how skilled workers participated in development work and what this meant for the company's ability to innovate.

## Method

This article is based on data material that was also used in Hilsen and colleagues (2022), where the company was included as one of 6 cases. In this article we have chosen to take a closer look at one case that particularly shows the importance of local cooperation in development and innovation work. The case was chosen as it is known to be working within the framework of the Norwegian cooperation model, and in this way can contribute to our knowledge of how this model supports or enables broad participation in innovation.

This article is based on 6 first-time interviews in spring 2020, and 5 second-time interviews in spring 2021. We interviewed managers at several levels, union leaders, operators and apprentices, a total of 11 interviews. The interviews lasted approximately 45 – 60 minutes each. The first round was conducted physically at the factory, while the second round was conducted digitally. The interviews were recorded on tape and notes taken along the way. The taped interviews were subsequently transcribed, and it is this material that forms the basis for the analyses.

The focus of the interviews was thus how participation in development work had taken place, with questions about which projects or processes the company had conducted to improve/develop a product, service, or work processes during the last few years. Where did the idea originate and how was it implemented? The skilled workers, the operators who carried out the work in the factory, were also asked whether their education (certificate of apprenticeship) had provided any advantages or expertise that has been useful to the company in the process. Regardless of the level and function of the company, we also asked if there were times when they saw opportunities for improvement in the company, either in the work process, the way they work (organisation, working methods, equipment, collaboration, etc.), or in the product or services the company provides. We were also concerned with whether management expected employees to look for and suggest improvements, and whether there were any routines in the company for handling

improvement proposals. These questions were posed to both managers and employees at all levels. In addition, we interviewed the main employees' representatives (previous and current club leader and youth union representative) about the trade union's role in development work.

To analyse the data, we used thematic analysis, defined as "a method for identifying, analysing and reporting patterns (themes) within data" (Braun & Clarke 2006: 6). The steps of thematic analysis are: 1. Familiarising yourself with the data, 2. Generating initial codes, 3. Searching for themes, 4. Reviewing themes, 5. Defining and naming themes, and 6. Producing the report. (Braun & Clarke 2006: 16-23).

In the first interview with the manager in charge of continuous improvement and training, we asked about innovation projects and identified one that was finished (Project 4 Consoles) and one that was running (Project Maintenance Plan) and still being implemented. In the following interviews we asked about the projects, and who had been involved and how. In addition, we asked about cooperation and innovation, with a particular emphasis on forms of cooperation and the involvement of skilled workers.

After transcribing the interviews, we developed descriptions of the two projects, with a focus on cooperation and the role of managers, union representatives and skilled workers. After coding the different types of cooperation and examples of how innovation work was organized, we searched for themes, and identified three themes: A structure for innovation; A culture for innovation; and Formal/informal cooperation. These three themes will be presented and discussed below under the heading "What can we learn from this case".

The practical and societal relevance of the research is to contribute to knowledge of how the Norwegian cooperation model supports innovation and development work at the enterprise level. The scientific contribution is linked to three points. First, the case was selected, in cooperation with the social partners, as an example of a tradition that goes back to the Industrial Cooperation Programme in the 60s and 70s and thus allows us to see how this type of cooperation contributes to modern innovation and enterprise development. Second, the questions asked aimed at discovering the importance of the type of cooperation at the workplace, and particularly the role of skilled workers. Third, we want to demonstrate the importance of systematically interviewing both managers and union representatives, as well as ordinary skilled workers, to discover how the Norwegian cooperation model is important to innovation. By ensuring that both management and the union is involved, we can explore the importance of the cooperation model and what it means at the enterprise level.

## Results and discussion

Both apprentices and skilled workers participated in development work and were encouraged to contribute with their experiences and suggestions for improvement in improvement project groups. Participation from employees on all levels of the company is described as central to the development of process improvements. Cooperation and is

facilitated both through organizational structure and company culture. As one apprentice described it, "I feel like it's a mind-set that we have at [name of company], finding solutions to things." Both managers and union representatives talked about two major projects that illustrate how they work with process innovation through broad participation. One example is the introduction of a common operations centre for the entire factory, a project they call Project 4 consoles. The second project is a restructuring of the maintenance plan on a new coordinated, technological basis. The description of these two projects is taken from Hilsen et al. 2022: 69-74.

## Project 4 consoles

The project involves the co-location of 15 former control rooms into a centralised operations centre with a common control room, with four consoles. From here, all control data is communicated to all the plants on site (approximately 20 plants) and monitored from four stations. The entire plant is currently operated from this control room, which is served by skilled workers. The management and the trade union (LO, which mainly organises most of the people who work in production) have been central to the process from the start. As the main union leader described the process around 4 consoles:

*In 2007, the first discussions [between management and the union] started and then it was a little loose around the edges when it started. But then we had a lot of meetings to discuss the project, and we also used the supervisory board of the union, because that includes all parts of the production apparatus. And then we had a very open and good dialogue. We ended up deciding that we wanted to go all in on that change and that we combined control rooms in an operations centre.*

The work was organised with a working group in which the technical operators [skilled workers] participated. The argument we heard from both management and employee representatives was that the skilled workers were closest to the production and had experience of what worked and what didn't. As one manager said about involving skilled workers in all forms of improvement work:

*You run the plant every day, and you always experience things. They [operators] always have ideas about: can't we cut it out or redo it or take it away or reprogram it; Something, I think, comes up every day.*

The working group met regularly throughout the process from the start of work on the project until the new control room with the four consoles was in regular operation. In relation to change processes over the years, a meeting structure and a way of working emerged that is suitable for promoting employee-driven innovation. In connection with moving into new premises, systematic meetings were started between those involved, including managers, employee representatives and affected employees. Although these regular meetings were



intended as a way to carry out the actual relocation process in the best possible way, they were found to be useful as a more permanent structure for dialogue on improvement work even after the relocation project had been completed. Thus, it was decided to hold such informal collaborative meetings beyond the specific project.

*It was basically meant for the project, but we ended up with a new work process that we've never had before.*

The meetings also had a targeted professional content, and the relevant professionals, both engineers and skilled workers, participated. These meetings would have different participants depending on the departments and production areas involved, as in the case of Project 4 consoles.

In addition, they had previously introduced a weekly more informal meeting between management and the union where they addressed large and small issues based on needs. These meetings came about in connection with a major restructuring process, where management felt the need for a more informal channel for dialogue with the union beyond the regulated orientation/discussion/negotiation meetings. Because it was an informal type of meeting, they could range from professional matters such as upcoming changes in the factory, the introduction of new technology or announcements, to employees asking for information about internal matters, or just small talk. As one said, "And then we talk a little bit of football once in a while, get a little loose." The purpose of these meetings was to provide a meeting place for more informal contact, where they could identify issues before they become large and must be handled in other more formalized forums.

Project 4 consoles was completed and in regular operation when we first visited the company in 2020.

## Project Maintenance Plan

The maintenance work is carried out by skilled workers in the maintenance department. They perform requested or scheduled maintenance and report after the work is done, previously on paper-based forms. This meant that maintenance workers could be ordered to carry out a repair somewhere in the factory, and not until they came into the office and looked at the order forms, did they see that another problem had arisen in the same area, which could have been rectified immediately if they had known about it. This was both cumbersome and ineffective. Management had visited another company and seen their system, which was digital and seemed to better meet the needs of those who planned, ordered, and performed maintenance work. They brought it back and discussed it with the union representatives and agreed to develop a similar system, adapted to their own business. Initially, it was defined as Project Maintenance Plan, and a steering committee was set up with factory management and union representative, and a working group was established from the part of production

where the project began, in which local managers, union representatives and skilled workers participated (Hilsen et al. 2022: 71).

The maintenance plan is about the introduction of continuous maintenance schedule that is updated digitally, so that every time changes are made to the underlying system, this is shown on a big screen out in each factory area. The intention is for all affected parties to be always familiar with the maintenance plan. Information about maintenance tasks and their status is entered continuously via an app on the phone so that everybody can see whether the job is ongoing or completed. The intention is that operations always should know what the maintenance plan is, i.e., what maintenance should be done where, at any time.

The starting point for the project was a need to be able to plan the maintenance work daily, not just weekly planning as before. As mentioned, a lack of overview of upcoming maintenance tasks created frustration both among those who had to plan and perform maintenance and those who needed the maintenance done. This was a shared experience among management and employees, and the steering committee and working group ensured broad support and participation from everyone involved. In addition, they wanted a digital solution so that maintenance workers could continuously monitor, and report performed maintenance. With more detailed and ongoing plans, it was easier to follow up, plan and prepare the work from day to day.

The new maintenance plan ensures equal, up-to-date information to all departments through the digital system. Thus, maintenance needs that the operators (skilled workers), but also department managers, discover out in the factory can be reported on an app on the phone, as text or with a picture, and enter the system as the required maintenance task. The company wanted to involve all employees in reporting maintenance needs, while the system ensures that maintenance plans are shared and updated. Such a system makes the individual skilled worker responsible for notifying when they discover a maintenance need, but it also gives them a direct line to the maintenance department through the app, so that they do not have to go through their line managers to report the problem. This underlines the company's message that everyone is needed and wanted in improvement work. To repeat the quote from an apprentice we interviewed: "I feel like it's a mind-set that we have at [the company], finding solutions to things."

The company started the project Maintenance Plan locally in one part of the factory, before the concept was implemented in the other areas. In the interviews, differences emerged in the reactions where the employees had been involved in developing the solution and where they had it introduced afterwards. Ownership and anchoring underpinned positive attitudes to the maintenance plan in the areas that had helped develop the plan and an understanding of why the solution looked the way it did. From other areas, we were told about some resistance and lack of understanding of why they needed the chosen solution. The use of the maintenance plan on mobile phones also opened discussions about what kind of mobile phone agreement one had at the company and whether everyone needed a smartphone

with this app. Although we were told that there was great agreement on the need for a better way of planning the maintenance work, the chosen solution was received with some scepticism by those who had not participated directly in the actual development of it.

The advantage of developing it in one area first was both to ensure broad participation in the development and testing there, which would have been difficult if one tried to involve all employees in all the factory areas (local plants) at the same time. Because the area that had helped develop the solution was satisfied with what they had come up with, they also functioned as "internal ambassadors" who could convey why they were satisfied with the chosen solution. Although the expressed scepticism we were told about did not sound like a major problem, it shows the difference between solutions one has helped develop and ready-made solutions one is presented with from the outside.

### What can we learn from this case?

Both projects stem from perceived frustrations over aspects of the production process that did not work optimally. Through the systematic involvement of employees on all levels of the company, better solutions were developed, which were then implemented in the organisation. Crucially, this did not only involve all the different departments, management, R&D personnel and engineers, but also consistently maintenance and production operators (i.e., skilled workers) and union representatives.

Through the interviews, it became clear that the company's successful inclusion of skilled workers in improvement work and innovation rests on three prerequisites: *that there is a structure for improvement work* with meeting places and working methods, *that the company has developed a culture for innovation* with trust between the parties and open communication, and that *both formal and informal cooperation on development* has been established.

### A structure for improvement work

Based on our analyses, we identified the importance of a *structure for systematic dialogue and cooperation*, both in formal working groups in the major development projects, and in more informal forms in the daily improvement work. Both employees at different levels (apprentices, skilled workers and engineers) and management emphasised the value of having an open dialogue and an ongoing focus on improvements, and channels for this cooperation.

Both the employees and management pointed out that working groups appointed for individual projects, formal and informal meetings and daily meeting places were all important. All employees were used to get together to talk about development and possible improvements of work processes, and they had meeting places to do so. In organisational development literature, there are several concepts to describe such forums for improvement

work. Pålshaugen describes this as a *development organisation*, a parallel structure to the production system and the negotiation system (Pålshaugen 1999). By defining such a structure, he argues that organisational development needs the same systematic approach and structure as are already in place for production and negotiation. Zand (1974 in Lebesby, Finnestrand & Vie 2023:81) introduced the concept of a parallel organisation (PO) as a supplement to the operating organisation for problem-solving that need cooperation in a more flexible way. Lebesby, Finnestrand and Vie (2023) describes the function of the Parallel Organisation as a “dancefloor” where the social partners can dance, that is jointly explore possibilities in cooperation, rather than boxing, as negotiation can be likened to. These concepts of a structure for improvement work underlines the cooperative, flexible and non-hierarchical relationship between participants, be they managers, unions or ordinary workers, - or in our case, skilled workers.

As previously described, the company introduced a weekly, informal meeting between management and the union. This was started during a period of major reorganisation and change, where management realised that they needed to have an ongoing dialogue with the union throughout the process, in addition to the statutory orientations, discussions and negotiation meetings set down in the Basic Agreement. Because these meetings did not have an agenda, one had the opportunity to bring up what was relevant at any given time, or just small talk loosely if there was not much going on. This meeting structure worked satisfactorily for both the union and management, so these weekly meetings were retained. The importance of having a fixed structure with flexible content was highlighted as important. Both parties could keep each other informed about matters that might be under way or matters that did not fit into the formalised channels for cooperation pursuant to the Basic Agreement. This meeting structure was also important to catch development and improvement ideas that had not yet been adopted or had received a working group or similar.

## A culture for innovation

It is not enough to have meeting places if the company does not have a culture of innovation with open communication and trust between management and employees that proposals will be positively received. This was the second theme identified in the interviews. As union representatives said:

*I think we're relatively good and in line with the LO [Labour Union] tradition, about productivity and thinking about that, that we all want to contribute now. It's not just getting paid and be happy with it but having discussions around profitability and necessity of improvements.*

Both innovation projects, 4 Consoles and Maintenance Plan, demonstrate broad participation, where all levels, from apprentices, skilled workers and engineers through senior management, participated and contributed from their different points of view and experiences. Because the projects concerned the organisation of daily work in the factories,

it was seen as self-evident that the operators who performed the tasks should participate in the development work. This also demonstrates the importance of involving employees from the time they are apprentices, so that the foundation for participation is laid and an understanding developed that participation is expected from all employees regardless of position. Those working at the shop floor level are also the closest to being annoyed by things that don't work well or seeing opportunities to do things differently and better. Thus, it must also have been made clear to everyone that input for improvement is welcomed and will be assessed and possibly realised.

This culture of employee participation is part of the Norwegian cooperation model, as discussed in the introduction, where we recognise both the learning dimension from the psychological job demands (Emery & Thorsrud 1969; Gustavsen 1981) and as expressed in the current Working Environment Act:

*Section 4-2. Requirements regarding arrangement, participation and development*

*(2) The design of each employee's working situation shall pay regard to the following:*

- a. arrangements shall be made to enable the employee's professional and personal development through his or her work,*
- b. the work shall be organised and arranged concerning the individual employee's capacity for work, proficiency, age and other conditions,*
- c. emphasis shall be placed on giving employees the opportunity for self-determination, influence and professional responsibility,*
- d. employees shall as far as possible be given the opportunity for variation and for awareness of the relationships between individual assignments,*
- e. adequate information and training shall be provided so that employees can perform the work when changes occur that affect their working situation.*

Our case exemplifies a company where professional responsibility is strong, employees are encouraged to participate actively in learning and development work, are provided opportunity to influence their own work situation, and are involved in development work and changes that affect their own work situation. In practice, this is enabled through a meeting structure that invites this and a culture where participation in development work is both desired and expected.

Participation in innovation is also about building trust between management and employees and developing an expectation that proposals are received in a constructive manner. Although not all proposals can be realised, it is important that employees know that proposals are taken seriously and considered. This trust is built up over time and is strengthened every time someone brings something up and experience being listened to.

For skilled workers to contribute to innovation, they must also have the necessary expertise. Competence is developed first through vocational training, but as importantly, through subsequent work as a skilled worker and on-the-job training. Again, we recognize the knowledge from the Industrial Democracy Programme through the psychological

requirement defined as: “Need to be able to learn at work” (Emery & Thorsrud 1969; Gustavsen 1981). The workplace becomes an important place of learning, and ‘if skilled workers have work tasks that require learning and provides opportunities for learning, they are also better able to contribute to innovation than if, for example, they have narrow tasks and little independent space to decide how to do the work’ (Hilsen et al. 2022: 12). The case company attaches great importance to active participation in development tasks and a wide scope for pointing out areas for improvement, both for the individual employee and for their representatives through the social dialogue.

### Formal and informal cooperation

The third theme to emerge was forms of cooperation. Cooperation, both formally through the social dialogue and informally through broad participation, is central to the Norwegian cooperation model. Our case study illustrates well the importance of both these types of cooperation for innovation work. Both projects used the structures of collaboration and innovation through working groups with a broad composition, anchoring the process with the trade union and management. Since process innovation is intended to improve work processes for the benefit of both the employees' work and the company's results, it fits into the Norwegian cooperation model, where both parties have more to gain from working together than from assuming the role of adversaries with conflicting interests.

Cooperation on development and innovation also requires the employees to have a certain degree of autonomy in their work, so that skilled workers have room to assess whether the work operations they carry out could have been done in other ways. The need for the work to have substance in the form of requirements for different activities and the need to be able to make decisions (psychological job requirements), deals with aspects of autonomy. Both the fact that the work is varied and allows the workers an understanding of the work tasks in a broader way, and that the employees have the job latitude to influence their own work situation, help to provide control. Research on control at work states that control deals with several aspects of work: control over work pace, autonomy, predictability and decision-making (Aronsson 1989). As we can see, these are aspects of a concept that make the workplace a place for both learning and influencing. Amundsen and colleagues (2011) point out that “autonomy is regarded as important when it comes to enabling innovation, but it is emphasized that it may be of particular importance for the idea generation phases, i.e. the early phases of the innovation process” (Amundsen et al. 2011: 216). American innovation literature also emphasizes autonomy and employee participation in innovation (Miles et al. 2005), and points to Scandinavian working life as less hierarchical and more egalitarian, and thus easier to make use of the knowledge of all employees in innovation work (pp. 47-48, 116).

Our case demonstrates the importance of skilled workers' contribution to innovation, and the company seems to be clear that this climate for commitment and broad participation is

valuable for innovation. Leadership is an important factor in enabling this form of innovation. Management must encourage participation in improvement work and the use of the job latitude (autonomy) employees have in their work to look for improvement. As Amundsen and colleagues summarise: "The most important management strategies here were to give employees a high degree of freedom to make their own decisions and at the same time be readily available for discussion and consultation. This must be linked to management expressing clear expectations of employees that they are constantly searching for new solutions in addition to performing their defined tasks" (Gjelsvik 2007 in Amundsen et al. 2011: 215). As our case demonstrates, both informal and formal participation is important, i.e., both the daily interaction between employees and managers and the formalised cooperation between management and the trade union. "While emphasising the importance of direct participation, it is also emphasised that trade union representatives have an important role in building relationships and good working relationships between managers and employees" (Amundsen et al. 2011: 215). As previously described, the trade union representatives in the company we examined also highlights a long tradition of cooperation on development and refers to the Norwegian cooperation model.

## Conclusion

There is little research on the role of skilled workers in innovation and enterprise development (Steen et al. 2018), and our study aims at closing this gap.

The case that forms the basis for this article is an example of innovation through broad participation and cooperation in a major Norwegian industrial plant. It demonstrates the importance of involving skilled workers and apprentices in development work, where they can contribute their experience and knowledge. It also shows how the Norwegian cooperation model provides a framework for understanding this type of development work and the assumptions on which it is based.

The Norwegian cooperation model is based on established cooperation at the company level and trade unions that handle the role of both opponent and partner vis-à-vis management. This form of cooperation, together with broad participation from all levels of employees, has proven to be important for innovation work, especially when it comes to process improvements. Our case shows a company that actively uses the expertise and commitment of skilled workers in development and innovation work, and where the employees' knowledge, experience and ideas is used to develop new and improved work processes in the company.

Based on the descriptions of innovation projects in our case company, we can identify three conditions that must be in place to succeed:

The first condition is about systematising improvement work through structures and meeting places, where one meets across levels, departmental and professional boundaries around improvement tasks. This is reflected at all levels, from regular meetings between management and employee representatives (beyond the formal meetings for discussions and negotiations) to working groups involving those relevant to the topic being discussed and the type of



development area concerned. Development work also requires organisation, and in the same way that operational tasks are organised and systems and meeting places for negotiations are established, there must be organised spaces for development work.

The second condition is that there is a culture for innovation, that there is a clearly communicated expectation from management that it is desirable for all employees, from the apprentice to the engineer, to speak up if they see tasks and processes that could be improved, and for them to be confident that input will be welcomed by management. Not all proposals and suggestions can be realised, but one should at least be sure that the proposal will be well received. This was highlighted by all our informants, both from management, trade unions, skilled workers and apprentices.

The third key condition is about participation in formal and informal cooperation and the competence to do so. For apprentices and skilled workers in production to participate in improvement work and identify areas for improvement, they must have real access to formal or informal forums for cooperation, but also the necessary expertise. Competence to perform one's work, but also competence to see one's work in the context of the work of others. This is precisely about the kind of broader understanding of the work discussed in the first two psychological job requirements, i.e., Need for the work to have a content in the form of requirements for different activities and need to be able to learn at work (Emery and Thorsrud, 1969). The insight behind the psychological job demands describes the path from manager-controlled work with narrow task profiles and little competence beyond just one's own work tasks. In order to participate in development work, the workers must both meet a wide range of tasks and be encouraged to familiarise themselves with new tasks. In our case, the company is concerned that the apprentices meet a wide range of tasks, and through the training of the apprentices they also secure their recruitment base of competent skilled workers. The company mainly recruits apprentices they have trained themselves, and thus they have had the opportunity to both ensure good training and communicate expectations for commitment and participation in improvement work from all employees. Competence is necessary to fully participate in both formal and informal cooperation and is the third cornerstone of innovation in the company.

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## Discussion Forum

# How trade unions can influence the adoption of new technologies

**Peter Totterdill**

In June 2023, Bridges 5.0 partner **Valeria Cirillo** and her colleagues at the University of Bari (Italy) published an article<sup>1</sup> on trade union responses to the adoption of new technologies. Peter Totterdill talked to her about the article and its implications for Industry 5.0.



**Peter:** Please introduce yourself and your role in the BRIDGES 5.0 project.

**Valeria:** I am Associate Professor in Economics at the Department of Political Sciences of the University of Bari 'Aldo Moro'. Additionally, I am affiliated with the Institute of Economics of the Sant'Anna – School of Advanced Studies (Pisa, Italy) and serve as a board member of the PhD school in Economics at Sapienza University of Rome. Within BRIDGES 5.0, I serve as the scientific coordinator of the UNIBA team. Our specific contribution lies in Work Package 2, where we aim to assess the nature of job transformations in the context of the so-called 4th industrial 'paradigm', with a focus on the adoption and use of 'Industry 4.0' technologies related to digitisation, automation and interconnection. We aim to examine the consequences related to task restructuring, emerging occupations, skill needs, shortages, and gaps. To delve into these aspects, we contribute to regional-level analyses and conduct firm-level statistical elaborations relying on Italian employer-employee data.

**Peter:** When and why did you become interested in trade unions' role in Industry 4.0?

**Valeria:** Over the years my research has concerned labour market dynamics with respect to technological change. In this respect, institutional factors play central role in defining the paths of technological change and in shaping its impacts on occupations, jobs and the reconfiguration of tasks. 'Institutions' mean analysing the role of the State – through industrial and active labour market policies – but also dissecting collective bargaining between social actors and exploring divergences in terms of interests and power relations. Technologies, but more generally choices about which technologies to develop and adopt, are not neutral. It follows that the consequences for the world of work are not neutral either. From this perspective the effects of technological change tend to unfold asymmetrically between employment and the remuneration of labour and capital, between social groups, firms,

geographical areas. This is because the adoption of a specific technology within firms depends, among others, on two important factors: the complex interplay between knowledge and firm capabilities and the distribution of power between capital and labour.

The latter means that technological change reflects existing power relations, contributes to their evolution and has major consequences for the distribution of income. It is therefore not a deterministic and neutral process, but has a social and political dimension. From this perspective, analysing how and to which extent trade unions are involved in the current wave of adoption of digital and automation technologies – defined as Industry 4.0 – is of paramount importance.

**Peter:** What are the principal questions you are seeking to answer in this study?

**Valeria:** Our paper, titled 'Trade Unions' Responses to Industry 4.0 Amid Corporatism and Resistance' published in PSL Quarterly Review - is grounded in intensive fieldwork conducted from 2016 to 2018 in a selection of Italian metal companies. The study involved semi-structured interviews with workers, managers, IT specialists, and trade union delegates. The primary objective was to enhance understanding of the role played by trade unions in the process of technological change. We specifically distinguished between the 'design phase' of technologies and the 'implementation phase'.

To address these questions comprehensively, we examined the extent to which trade unions were involved in the organisation of work and assessed their attitudes toward the ongoing transformation. The selection of these areas of analysis stemmed from our keen interest in the effective role of trade unions when confronted with technological and organisational transformations. Additionally, we aimed to explore emerging dichotomies, such as participatory versus conflictual practices and the actual role of union delegates when 'bargaining over technologies' (whether serving as a transmission channel for managerial decisions or advocating for collective workers' claims).

**Peter:** In the article, you discuss “managerial corporatism” and how it can undermine the capacity of organised labour to pursue its own interests against those of the employers. Some researchers such as Tony Huzzard discuss the potential co-existence of “[Boxing and Dancing](#)”. Do you think there are conditions under which unions can negotiate ‘win-win’ outcomes without undermining their essential focus on workers’ interests?

**Valeria:** Yes, in theory if trade unions were involved in the development/design of the technologies and if they were used to improve working conditions in a broad sense, it would be possible to have a win-win outcome. Our analysis showed that TU's negotiating role was significant during the phase of technological implementation (e.g. by opposing the introduction of intrusive forms of workers' surveillance) and related organisational change. However, in all cases studied, we detected some important limits to the underlying bargaining process (e.g. in the absence of negotiation over internal working times and saturation) and a

lack of the involvement of TUs in the design phase of I4.0 artefacts, regardless of the degree of digitalisation and robotisation in progress. In the research we have identified two alternative responses by TUs to the introduction of Industry 4.0 technologies, either reactive/conflict-oriented or proactive/corporatist-oriented. Interestingly, the higher the level of technological innovation already present, the higher the degree of union participation in the deployment of such technologies.

A proactive/corporatist-oriented attitude applies in particular to Ducati and Lamborghini. At Lamborghini, the role of TUs is considered fundamental, even by white-collar workers, when introducing technological innovations. Indeed, this circumstance may have been inherited by their shared parent company, Audi, which is known to introduce a “workers chart” defining the standard of work organisation in all its subsidiaries. However, this is coupled with the pre-existing system of industrial relations typical of the Bologna area. This led one of the interviewees (Technologist, Lamborghini) to say that, “Without support from the trade union, nothing can happen here. Neither organisational, nor technological change”. On the other hand, a more reactive/conflict-oriented attitude was discovered at Cesab-Toyota and Bonfiglioli, where TUs displayed a lower degree of participation in managing the process of technological adoption.

**Peter:** You say that “I4.0 represents a chance to rejuvenate a sterile bargaining system, creating a new role for TUs as transmission channels of managerial decisions and as facilitators for digitalising the work process at the plant level”. How does this work in practice?

**Valeria:** This is part of the so-called ‘functionalist approach’, a current branch of studies highlighting that Industry4.0 represents a major chance for Trade Unions to gain a new position in the system of industrial relations. For instance, this may happen through decentralised collective bargaining and second-level agreements regulating many aspects of the organisation of employment contracts (working hours, internal and external working times, specific leaves for education or parental care issues). In the case of Germany, a recent study by Haipeter focussing on the relationship between I4.0 and work councils in the manufacturing sector foresaw a series of new actions on behalf of TUs based on the activation of work councils and on cooperation between employers and delegates. Given that the founding pillars of I4.0 may pose serious challenges for unions in terms of employment stability, work organisation, deskilling processes, and working conditions, it has been recognised that conciliatory and collaborative practices are indeed required. This project, dubbed “Work2020” envisages a new strategic role for work councils, ranging from consulting with the company (identifying dissemination and new forms of digitisation), to strategy, defining problems and domains of analysis and marketing, as well as promoting plant level agreements.

**Peter:** If, as you say in the article, “the complete transformation of TUs is envisaged”, do unions need to build new competencies to deliver this role? What lessons can be drawn from the “Work2020” programme in Germany?

**Valeria:** As said before the Work2020 project outlines a significant level of involvement from workers' delegates concerning the organisation of work and degrees of power and hierarchies at the plant level, technological adoption and implementation, occupational training and working conditions. Overall, the workplace significantly increases its importance as a locus of negotiation in Germany. Similar efforts were made in Italy to shift collective bargaining from the national/sectoral level towards individual firms. This requires a 'proactive' approach from work councils toward digital transformation as well as an institutional level of worker participation through the implementation of practices devoted to training workers' representatives.

**Peter:** Why is the 'Italian Motor-Valley' of specific interest in relation to Industry 4.0?

**Valeria:** We chose companies in this area because it constitutes a distinctive technological district situated in the outskirts of Bologna, specialising in the engineering and automotive industry. The rate of adoption of digital and automation technologies in this region is notably higher compared to other areas of the country.

**Peter:** Please describe the context of the 'Italian Motor-Valley' in terms of industrial relations.

**Valeria:** This geographical region has been historically crossed by a twist of conflictual and participatory practices which led, in the early 1990s, to the formalisation of technical bilateral commissions on work organisation which are still present. Overall, however, the Italian system of industrial relations was characterised by the absence of bargaining over the organisation of the work process and technological innovations. In this respect the 'Italian Motor-Valley' was quite an exception.

Although three out of four establishments belong to non-Italian parent companies, strong trade union organisation was present well before the change in ownership, as testified by the history of industrial relations in the Emilia-Romagna region (where Bologna is located). FIOM has been quite strong here since the 1960s, the period of Italy's "Hot Autumn" of industrial relations. In addition, all the firms studied are characterised by second-level bargaining, developed under comparable negotiation agreements undertaken by the local FIOM-Bologna.

**Peter:** How would you summarise the role of trade unions in shaping work organisation in the four companies?

**Valeria:** In terms of organisational change, our research material points to the role of four relevant domains of analysis with respect to work organisation: training activities, general high-performance work practices (HPWPs), career paths, and evaluation procedures. In all contractual agreements, TUs have obtained the formal recognition of educational



achievements, such as diplomas, bachelor's and master's degrees. This recognition consists both of monetary awards and time off to attend class.

With respect to informal, on-the-job training, at Cesab-Toyota and Bonfiglioli, no mention appears in the contract, while at the two 'Audi' firms – Ducati and Lamborghini – specific internal training programs and even dedicated places on the factory floor have been created. Additionally, in the latter firms, TUs have been active in launching and promoting internship programs aimed at young students. Many interns complete a training period and are later hired by the company. This initiative, known as DESI (Dual Education System Italy) is the result of the typical German vocational training system as well as regional and state initiatives promoting active educational programs. This is indeed good practice.



#### *Ducati*

The deployment of HPWPs – namely job-rotation schemes and participatory practices such as suggestions for improvement, team meetings, teamwork, and kaizens – varies across firms, from widespread and generally formalised to informal and scattered activities. In general, organisational practices stand at the core of TU negotiations when drafting the content of the contractual agreement, as demonstrated by the existence of a technical bilateral commission on “work organisation”. For instance, TUs at Ducati are pushing to obtain transparent and formalised criteria when acknowledging operators’ versatility and multifunctionality, which arise when operators are able to execute tasks at different phases of manufacturing. Continuous improvement systems are established at Lamborghini, while lean practices such as *asaichi* and *andon* are present in Cesab-Toyota.

When HPWPs are less formalised or still in development, as is the case of Bonfiglioli, TUs seem to lack the ability to intervene, and their influence is limited. For instance, job-rotation practices have been acknowledged as important by managers at Bonfiglioli, but their implementation has not been shared with workers. It appears that the negotiation phase can start only after the organisational decision has already been taken. The negotiation of assessment procedures and career paths is characterised by a more passive role of TUs at Cesab-Toyota and Bonfiglioli, while a more active role characterises TUs in the two German cases. One distinctive element is the introduction of the Audi workers chart, which is helpful in formalising the latter's schemes, at least in the contractual agreement.

All case studies show a generalised intensification of working time. Takt-time and dead time have been generally reduced. This is the result of the introduction of the just in time principle of production and of the general tendency to keep the production flow 'tense'. Although there is no explicit mention of the issue of saturation of working time in the contractual agreement, at Bonfiglioli there is a process of information sharing between the timekeeping department and assembly line workers: times and methods of execution, when introduced for the first time, are formally explained to the workers involved in a given assembly line, with the presence of TU delegates.



*Lamborghini factory, Sant'Agata Bolognese, Italy*

**Peter:** What is constraining the ability of unions to influence the organisation of work?

**Valeria:** Overall, TUs have demonstrated some ability to negotiate on technological implementation. Indeed, TUs acknowledge the underlining threats of deskilling related to the introduction of I4.0 technologies. The introduction of new technological systems has implications for the organisation of labour, especially when it comes to increasing production

saturation. The goal is something akin to the “Elementary Technological Unit” of FIAT (an Italian automotive manufacturer), the latter being characterised by the proceduralisation and fragmentation of complex activities into simple tasks, therefore exposing workers to the possibility of substitution. In the of an interviewee ‘As a TU, we lag in the analysis of organisational flexibility and the consequences on contractual practices. From the point of view of the effects, we have tried to limit the social control of the worker, from surveillance to performance evaluation, without objecting to the introduction of technology’ (TU delegate).

**Peter:** How involved have unions been in the introduction of I4.0 technologies, and with what consequences?

**Valeria:** When we focus on the recent wave of technological change, the number of empirical contributions is smaller due to the lack of adequate quantitative data and the specificities of I4.0 adoption within a few large companies. In a recent work – based on Italian micro data - we have highlighted the overall scattered adoption of I4.0 technologies. The presence of company-level agreements is positively associated with investments in I4.0, mainly in manufacturing and SMEs. However, the data does not provide information on the role of TUs in the bargaining process of new technologies, nor does it provide details on the content of second-level bargaining. Therefore, we came up with the idea of a qualitative research analysis.

Concerning our cases, in terms of TU’s role in influencing the process of technological change in the design phase, we observed that TUs demonstrate a general acceptance of the ongoing process of transformation. They seem to play little role in the design phase overall (e.g. no interaction with the R&D department) and tend to consider technology as a given. One might ask whether it is legitimate to require TUs to intervene in the phase of technological design which, arguably, should be firmly in the hands of the management. Nonetheless, TUs have rather been pivotal in influencing the process of technological adoption at the macro scale. Indeed, they exert a crucial role in promoting huge investment plans involving complete technological upgrading, together with the development of new products. This seems to have occurred in all our firms except Cesab-Toyota. At Lamborghini, TUs have been able to obtain an investment plan of 50 million euros to locally manufacture a brand-new SUV model (known as URUS) instead of at an Audi plant in Bratislava, Slovakia.

TUs have also played a major role in promoting investment in innovation and new product lines at Ducati. Overall, whenever technology assumes its labour-augmenting nature, say, whenever it entails expansionary investments, construction of new productive capacity, elimination of old vintages and new product lines, TUs have manifested a clear proactive role in the firms under study.

Their role in the implementation phase is even more pronounced. In fact, TUs recognise the importance of participating in this process, as demonstrated by the presence of technical bilateral commissions called “New Products and New Processes”. These commissions are a



typical, long-lasting trait of trade union organisation in Emilia Romagna. Within all firms, technical bilateral commissions are either established to oversee work organisation and technology or explicitly mentioned in contractual agreements to be activated later on. By means of the active role exercised within these commissions, TUs have explicitly reacted to the adoption of I4.0 technologies. For example, at Bonfiglioli, a contractual agreement explicitly set limits on the use of MES (Manufacturing Enterprise System) software, ruling out the possibility of collecting data on individual rhythms of production and individual performance, and their use for disciplinary purposes.

**Peter:** Can you summarise 'good practice' in union strategies as they negotiate around I4.0?

**Valeria:** Our study reveals that even in the absence of a strong corporatist culture, trade unions can improve working conditions and direct technical change towards more inclusive and less predatory methods of implementation. Indeed, trade unions should not forget their institutional macroeconomic role in counterbalancing inequality and hierarchies, and in guaranteeing not only workers' rights, but also social rights as a whole. The implementation of the DESI (Dual Education System Italy) program that I mentioned before, is good practice in negotiation. The reaction of TUs in Bonfiglioli of ruling out the collection of data on individual rhythms of production and individual performance, and their use for disciplinary purposes, represents another good example.

**Peter:** Are there wider lessons as we move to Industry 5.0?

**Valeria:** It would be desirable to observe the enhanced participation of trade unions in shaping technological choices, extending beyond their typical involvement solely in the implementation phase (as our research highlighted). Moreover, a more active role from public actors in establishing dedicated infrastructures for collecting the vast amount of data generated by new technological artifacts would be beneficial. It is crucial to ensure that this data does not solely flow into additional private platforms controlled by major tech companies, upon which many firms often depend.

**Peter:** Thank you for these very valuable insights, Valeria.

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<sup>2</sup>The study of these companies was part of a larger research programme promoted by the Claudio Sabattini Foundation, commissioned by FIOM-CGIL (one of the leading Italian TUs) and involving researchers from several universities and research institutes. The main purpose was to understand characteristic trends concerning the organisation of work and working conditions occurred in recent years alongside the introduction of technological practices related to I4.0.

Discussion Forum

## Conference Call

“The Future of Workplace Innovation: International Conference” at the University of the Basque Country (UPV/EHU). San Sebastian (Spain) October 1<sup>st</sup> -3<sup>rd</sup>, 2024.

**Egoitz Pomares**

**University of the Basque Country (UPV/EHU)**

As we navigate transformative changes in our workplaces, spurred by rapid technological advances and shifting societal values, the role of workplace innovation has never been more crucial. The upcoming European Workplace Innovation Network (EUWIN) conference hosted by the University of the Basque Country in San Sebastián (Spain) is not merely an event; it is a timely conclave to reflect on how we can harmonize productivity and well-being at work with human-centric work practices.

Workplace innovation, as chronicled by EUWIN and highlighted through various European policies and programmes, transcends conventional organizational changes. It integrates the participation at work, work organization, and supportive technologies, aiming for good jobs. This multifaceted approach has been pivotal in Europe in the last decades.

The narrative of workplace innovation in Europe has evolved significantly since EUWIN's inception in 2013. With its foundation firmly rooted in European socio-technical traditions and democratic dialogue, workplace innovation has emerged as a response to Europe's economic and social challenges. It promotes a systemic view that sees technological advancements not as replacements for human work but as enablers.

The upcoming conference aims to showcase different approaches across Europe. These discussions are crucial as they provide actionable insights that can help bridge the gap and increase diffusion.

Moreover, as the EU continues to push forward its agenda on digital and green transitions, workplace innovation stands out as a strategic lever to achieve these goals. It ensures that the shift towards a more digital and sustainable economy is not only

productive but also socially inclusive. The principles discussed at this conference will likely influence policy formulations aimed at nurturing a resilient and adaptable European workforce.

This international conference calls upon researchers, policymakers, and practitioners to engage in a dialogue. As we discuss, debate, and learn from each other's experiences, the conference will underscore the imperative of participation and learning, ensuring that workplace innovation remains central to Europe's competitive edge.

For those interested in contributing to or attending this discussion, registration and call for abstracts are now open. Please visit [The Future of Workplace Innovation](#) for registration details and [Call for Papers](#) to submit your abstracts.

**Join us as we shape the future of work in Europe.**

Discussion Forum

# Review Article: Quality and Workplace Innovation

**Richard Ennals**

To date the literatures on Quality and Workplace Innovation have been largely separate. David Hutchins is an International Quality Academician, and his trilogy of books since 2006 provides a valuable contribution to debates on Workplace Innovation. His focus is on empowering workers, who are seen as the leading experts in their jobs. He sees Quality Circles as central to empowerment. They have been less popular in the U.K. than in Japan but should be seen as self-managing workgroups.

Recently Workplace Innovation has become a fashionable paradigm in the field of enterprise development (see *European Journal of Workplace Innovation* from 2015). Research and publications have brought together shared accounts of concepts and practices (Oeij et al 2017, 2023). I suggest that several earlier related perspectives have achieved popularity over the decades, which could be seen as paving the way for Workplace Innovation but using alternative vocabulary and concepts (Johnsen et al 2015).

One of these perspectives has been Quality, and in particular Total Quality Management. It has provided a paradigm, with well developed literatures in the USA and Japan, dating from the American occupation of Japan following the Second World War. Quality has had a relatively reduced following in Europe, and in particular in the UK. In the UK, Quality has been seen in terms of compliance with standards. There have been ongoing problems regarding productivity, and a culture of external inspection rather than improvement, owned by the workforce.

David Hutchins is a young 87 year-old, who has been working in the field of Quality for many decades, including with the late Dr Juran (USA) and the late Prof Ishikawa (Japan). He has published many books, including the trilogy (Hutchins 2008, 2019, 2023) which we consider here. He writes with long experience of the workplace, where he had worked as a mechanical and electrical engineer, before moving into consultancy and founding David Hutchins International Quality College (DHIQC). Writing from within the culture of continuous improvement, he addresses practitioners. He is sceptical about academics in the field, who he sees as generally writing at a distance from practice. In "Self-Managing Workgroups" (Hutchins 2023) he provides an extensive bibliography covering the field until 1985. There is



a strong case for updating the bibliography! This could be a suitable assignment for a PhD student.

Hutchins has worked as an independent consultant for many years, introducing improvement processes, and empowering people to take them forward. He operates as an individual rather than selling predefined packaged solutions. He has a distinctive writing style, in which his personal voice is clear, as he draws lessons from workplace cases.

“Hoshin Kanri” (Hutchins 2008) presents a strategic approach to continuous improvement, providing a context for elements such as Six Sigma or Lean Manufacturing. It was taken as a practical guide by managers in transformative changes at Gatwick Airport.

“Quality Beyond Borders” (Hutchins 2019) draws on experience in Japan and presents Quality as a seamless companywide matrix of interactive concepts. He does not favour the development of large Quality departments. Quality is regarded as everybody’s responsibility, from the chief executive downwards. Workers are seen as the experts in their own jobs, and a key resource for the organisation. They deserve to be protected from top-down Taylorist management.

“Self-Managing Workgroups” (Hutchins 2023), completes the trilogy. Building on his previous books on Quality Circles since 1985, the focus is on the role of Quality Circles as a key to participative management. My own experience of Students’ Quality Circles, Staff Quality Circles and Senior Quality Circles at Kingston University taught me a great deal about pragmatic issues of facilitation and organisational change in Higher Education. Circles can take on a life of their own, and lead to the formation of successor Circles. Hutchins and I have worked with partners in South Asia, where there is a lively culture of Quality Circles in India, Pakistan, Sri Lanka, Bangladesh and Nepal, with potentially transformative outcomes (Chapagain 2022).

I know from experience that the cultures of Quality and Workplace Innovation can be linked. Peter Totterdill of Workplace Innovation Europe has been a leading contributor to conferences organised by DHIQC. In Nepal, the national success of Students’ Quality Circles in education could lead to transformation in the workplace. This is a focus of current PhD research by Tina Saud at Kathmandu University, where she has worked with both Students’ Quality Circles and Quality initiatives in the coffee sector. Using Zoom technology, Tina participated in the “Quality Coffee Shop”, hosted by David Hutchins, which explored practical issues around Quality from spring 2020.

Hutchins’ work could be of considerable practical value to EUWIN projects such as Bridges 5.0, in which participants explore developments in innovation beyond the current norm of Industry 4.0. He reminds us that many of the current debates are not entirely new. His accounts of facilitation and process improvement are accessible to practitioners and could be a useful addition to resource banks.

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Discussion Forum

## Book Review

# Science meets Philosophy: What makes Science divided but still significant?

**Av Hans Christian Garmann Johnsen**  
**Routledge, Abingdon 2023**

Hans Christian Garmann Johnsen is Professor of Working Life and Innovation, a field which draws on several traditions of scientific research and engagement with practitioners. In this ambitious and well-referenced book, the author sets out to map the choice of routes through the forest of knowledge, presenting an historical context from the ancient Greeks to the present day. He emphasises three distinct routes, based on realism, idealism and scepticism, and supports his account with detailed study of key publications in the history of social and political thought.

The history and philosophy of science is not typically given prominence in current business education. The focus can instead be on the application domain of business, with implicit assumptions that the philosophical underpinnings are unproblematic. The book suggests otherwise, and it introduces the reader to a rich literature, drawing particularly on European traditions. It could be read as part of a university course, supported by a series of tutorial videos, or regarded as an illuminating free-standing text. It follows his earlier book on knowledge: "The New Natural Resource: Knowledge Development, Society and Economics" (Gower 2014).

My suggestion is that the book offers a useful "intellectual underground map" of the development of science, and in particular social science. The individual reflective researcher could use it as a "virtual Satnav system", demystifying complexity, and helping the researcher to navigate, using known landmarks. As in many of his previous books, Johnsen presents schematic choices, illustrating alternative approaches to epistemology.

Some readers may wish that the arguments were supported by more practical examples and "war stories" from current research. It has been planned that a second volume would take and apply the explanatory frameworks, exploring "Sustainable Scientific Knowledge". This could involve some of the same contributors as the earlier "Higher Education in a Sustainable Society: a Case for Mutual Competence Building", (eds. Johnsen, Torjesen and Ennals; Springer 2015), but with a stronger central argument derived from this first volume.

Such an ambitious book must inevitably have some omissions. I can identify three in particular:

The book does not address the author's distinctive specialist field of Working Life Research and Innovation, where the researcher is often closely engaged and committed to the subject matter, bringing about change rather than remaining clinically detached. How can this account of scientific traditions be applied to the current context of separate traditions which have converged in recent years with "Industry 4.0", but may soon diverge, with variants of "Industry 5.0"?

There is little mention of Action Research, which has been a strong tradition especially in Scandinavia. Action Research can be seen as constituting action, with consequences. Has Action Research acquired the rigour to enable rival varieties to be compared and contrasted?

We might have expected more discussion of Artificial Intelligence, to which social scientists have made some notable contributions. What is the role of scientific explanation in the age of Machine Learning?

In other words, there is much more to be done, but this book has opened the door to a new set of debates, which are relevant both to academic researchers and practitioners. In this book Johnsen presented a traditional account of "great thinkers". A second volume may put the analysis to the test of practice.

We had hoped to publish a review of this book by Olav Eikeland, who brought a distinctive perspective derived from ancient philosophy and Action Research. His sudden death on 1<sup>st</sup> September left an immediate gap.