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Digitalization and employment relations in the retail sector. Examining the role of trade unions in Italy and Spain

This article investigates trade union responses to in-store digitalization in retail in Italy and Spain. It considers critical issues often associated with the digital transformation of work including excessive work flexibility, high levels of monitoring, and skills mismatch. It goes on to discuss two alternative employment relations developments: a 'low road', along which digitalization enhances market regulation and employers' ability to control the workforce unilaterally; or a 'high road', where digitalization allows for better working conditions as well as business productivity. Drawing on documentary analysis, semi-structured interviews with trade union leaders, and content analysis of collective agreements signed at the sector, territorial and company level, findings report how Italian and Spanish trade unions attempt to use in-store digitalization to increase their leverage and aim for the high-road. Overall, this work confirms the challenges of deterring the retail sector from pursuing the low road while highlighting some institutional factors and trade union strategies that can make the difference.

Keywords: Digitalization; Employment Relations; Retail; Trade Unions; Italy; Spain

Introduction

In the last decades, trade unions have lost relevance in most advanced economies, to the point that scholars investigate their degree of resilience and, at best, their chances for renewal in light of challenges on the social, economic and political arenas (Frege and Kelly 2004; Baccaro and Howell 2017; Greer and Umney 2022). Technological change and, specifically, digitalization are challenges that have affected most trade unions (Degryse 2016 and 2017; Howcroft and Rubery 2021). Employer responses to these challenges, and by extension employment relations, have been conceptualised as ‘high road’ vs the ‘low road’ approaches (Osterman 2018). On one hand, digitalization can reinforce a ‘low road’ of employment relations, enhancing employers’ ability to control their workforce in a unilateral manner, subject to market-regulation and cost-minimization pressures (Gill and Meyer 2008; Frey and Osborne 2017). On the other hand, digitalization can create opportunities for a ‘high road’, helping business organizations become more knowledge-based and productivity-oriented by investing in the human capital of their workforce, leading to improved wages and benefits (Brynolfsson and McAfee 2014; Valenduc and Vendramin 2016: 46).

Interestingly, such opposite scenarios and, in particular, the role trade unions play in favouring the ‘high road’, have been considered in sectors like airline, automotive, telecommunication and healthcare (Ross and Bamber 2009; Gittell and Bamber 2010) as well as from (cross-)national perspective (Lévesque et al. 2020; Doellgast and Wagner 2022; Litwin et al. 2022; De Stefano and Doellgast 2023). Less attention has been given to the retail sector, a labour-intensive ‘Cinderella’ industry where skills, conditions and pay are relatively lower and the representation gap is higher than elsewhere (Grugulis and Bozkurt, 2011; Carré and Tilly 2017; Fullin, 2021; Payne, Lloyd and Jose 2023). While acknowledging that these are ideal conditions for an expression of digitalization in line with the ‘low road’, we investigate alternatives by appreciating whether and how trade unions in retail seek to govern the digital transformation of work. The argument we advance posits that innovative and often disruptive features of digitalization affect employment relations practices whereas trade unions, depending on power resources and institutional constraints (Lévesque and Murray 2010; Gumbrell-McCormick and Hyman 2013; Refslund and Arnholtz 2022), affect how digitalization unfolds and the extent to which it is used and diffused.

This article examines trade union responses to in-store digitalization in retail in two relatively similar countries, Italy and Spain (Preworski and Teune 1970), where alternatives to the ‘low road’ in employment relations seem unlikely. In fact, both countries are particularly exposed to the disruptive effects of technological advancements due to chronically weak digital infrastructures and skills (Cedefop 2017). In addition, their employment relations systems, which share features of the so-called Latin model such as ideological trade unions, a strong presence of the state, multiple levels of collective bargaining (Molina 2014; Pulignano et al. 2016), are subject to liberalization and decentralization, two processes that further constrain the role of collective actors (Meardi 2014). In relation to these circumstances, we address the following research questions: how do such responses take shape and to what extent do they deter the retail sector from pursuing the low road? And which strategic goals and focus of intervention are trade unions in Spain and Italy aiming to pursue in doing so? To answer these questions and contribute to the above-mentioned debate, we adopted a mixed-method research design that collects three types of evidence: documentary analysis, semi-structured interviews with trade union leaders, and content analysis of collective agreements signed since 2010 at the sector, territorial and company level.

Digitalization and employment relations

Digitalization is a complex, encompassing concept that refers to a broad set of interdependent technologies whose effects on society are highly disputed, ranging from inexorable turning points, for the better or the worse, to changes that are fundamentally in line with past technological innovations (Howcroft and Rubery 2021). Contrasting positions are also present in the literature relevant for our analysis on the implications of digitalization for the regulation of work and, in particular, the role trade unions play in shaping it (Degryse 2017; De Stefano and Doellgast 2023). According to Frey and Osborne (2017), new digital technologies are used by employers to increase work intensification

to meet pressure for growing performance standards, regardless of the risk to workers' health. In this sense, if policymakers are unable to regulate and shape the phenomenon, digitalization results into job losses, especially for jobs based on simple non-cognitive routine tasks (Autor 2015), and into higher fragmentation in the labour market (De Stefano 2016). In contrast to such challenges, other researchers highlight the opportunities that digitalization creates for a better functioning of labour markets and employment systems (Brynjolfsson and McAfee 2014; Valenduc and Vendramin 2016).

At the core of these debates, for analytical purposes and simplicity, we identify the tension between a 'high road' and a 'low road' to digitalization, a tension already known by scholars in international business, HRM and employment studies (Milberg and Houston 2005; Gill and Meyer 2008; Osterman 2018) and here reframed to bring to the fore employment relations issues (Degryse 2016). In this sense, the 'high road' ties business competitiveness and labour productivity to high wages and social security, training opportunities and skills upgrading. As observed in the airline, automotive, telecommunication and healthcare industries (Ross and Bamber 2009; Gittel and Bamber 2010), the 'high road' also reinforces the involvement of workers in decision-making processes, expressing the potential of 'positive' employment relations and social partnership (Johnstone and Wilkinson 2016). In the case of digitalization, this fits well into existing co-determination practices at the company level (Maschke 2016) and, broadly speaking, the so-called 'smart' approach to employment relations, which expresses the 'potential capability of unions to actively govern and respond to the challenges of digitalization in the regulation and reordering of work and employment', first of all through an expansion and renovation of collective bargaining (Gasparri and Tassinari 2020: 797). In contrast, the 'low road' is linked to higher levels of job insecurity, dissatisfaction and turnover. It occurs when stakeholders base their competitiveness on decreasing labour costs, unilateral managerial decisions and short-term rent-seeking, rather than long-term investments aiming to strengthen labour productivity through higher skills and engagement. The next section further contextualises our investigation on digitalization and employment relations by highlighting the underlying challenges and opportunities for trade unions in the retail sector.

Digitalization in retail: key challenges and opportunities for trade unions

Contextual factors contribute to how technological innovations are introduced, diffused and implemented. In the case of retail, despite important differences between sub-sectors and market segments, four characteristics emerge as critical to understand how digitalization unfolds. First, innovations are consumer-centric and are viewed as essential to gain a competitive advantage. Second, innovations concern daily tasks and the routine management of shop-floor employees. Third, innovations also take place in behind-the-scenes processes. Fourth, innovations spread very quickly (Sundström and Reynolds 2014). As a result, the potential for disruption of such innovations is high and likely to affect entire business operations and the underlying work arrangements, as manifested when the pandemic outbreak boosted online retail services, prompting changes to the entire retail supply chains (Stopford and O'Reilly 2022). However, determining whether these innovations contribute to a 'retail apocalypse' or a 'retail renaissance' (Carré and Tilly 2022: 816) goes beyond the scope of our analysis, which focuses on an emerging feature in the current retail landscape - the adoption of the 'omni-channel' distributive strategy, that is an integration between selling both face-to-face and online (Reinartz et al. 2018; Marcolin, 2021). Transition to the 'omni-channel' retail format provokes four possible developments of retail jobs, each offering a new strategic arena for trade unions: the creation of new jobs, the destruction of old jobs, the enhancement or degradation of the existing jobs (Carré and Tilly 2022: 816). We cover briefly the first two and then focus on the last two, where we believe trade unions have a more important role to play.

First, new job positions have become available in retail, largely for ICT and data experts (KPMG 2019). Second, other positions instead risk being replaced by digital devices. Cashier jobs, especially in grocery stores, have been hit hard by the diffusion of self-checkout. Sales assistants are affected too, for instance by robots equipped with touchscreens and a live chat-bot, placed at the store entrance to offer a first point of contact and assistance to customers (Faioli 2021). The third and fourth developments regard the transformation of existing retail jobs following the implementation of digital technologies, informing an emerging debate on the consequences for job quality (Payne et al. 2023) and bringing to the fore some ambiguity and contradictions (Hunt and Rolf 2022). On one hand, the quest for retraining and upskilling is evident. If we focus on sales assistants, we note that

customers expect to receive product information through innovative tools such as electronic bracelets, digitalized restrooms, tablets, and touch screen totems (Marcolin, 2021). On the other hand, digital technologies designed to track goods and customers enable multitasking and streamline business operations while allowing retailers to enforce stricter control and surveillance over their workforce, with negative repercussions for workers in terms of work intensification (Carré and Tilly 2022: 817). Either way, an issue with potentially relevant implications for workers regards the extent to which in-store digitalisation is managed by the retailers themselves, or by consultancy and software designers who might deflect employers' responsibilities for implementing it.

Hence, we acknowledge that new digital technologies in retail translate into a fast-moving business model and ever-evolving company operations that, inexorably, imply substantial changes for workers in retail and, as a consequence, multiple demands for trade unions (Hunt and Rolf 2022). The way these changes and demands are addressed - and whether this follows a 'high road' or a 'low road' of digitalization in employment relations - depends on several factors, amongst which we reiterate the additional challenges deriving from the fact that retail is a relatively weakly organized and labour-intensive 'Cinderella' industry where skills, conditions and pay are comparatively lower than elsewhere (Grugulis and Bozkurt 2011; Carré and Tilly 2017; Fullin 2021; Payne et al. 2023). Furthermore, most retail workers, unsurprisingly, are under-represented and research demonstrates that trade unions have made extra efforts, committed financial and organizational resources, and launched original initiatives to fill, at least partly, this representation gap (Dribbusch 2005; Turner 2009; Gasparri et al. 2019). In the next section, we illustrate the analytical framework we adopted to examine how trade unions respond to the transformations that digitalization provokes to employment relations dynamics for in-store retail workers.

Understanding trade union responses to digitalization

We identify three levels of intervention for trade unions. The first is the political-strategic level, expressing areas of intervention vis-à-vis government, public policy actors, society at large and other peak-level actors. Here the political opportunity structure is determined by institutional factors such as the presence of tripartite policymaking; by the nature of policy fields trade unions seek to intervene in; and by the consolidation of trade unions' power in regulatory, welfare or skills formation. The second refers to the sectoral/industry level where the corresponding political opportunity structure is shaped by the institutions/practices of collective bargaining and by the existence/reach of bipartite initiatives. Finally, the third level of intervention regards workplaces, where the political opportunity structure reflects the type of interactions between workers' representatives and employers, the degree of firms' openness or hostility to trade union activity, the presence or absence of established 'voice' channels, and the diffusion of unilateral managerial practices.

Our emphasis is on trade unions' power resources and strategic capabilities by which trade unions seek to intervene in the above context, possibly altering it according to their aims and goals. At the level of power resources, we follow well established contributions and consider the canonical categories of structural and associational power (Wright 2000), and other conceptualisations such as organizational, institutional, ideational and coalitional power (Gumbrell-McCormick and Hyman 2013: 30-31; Refslund and Arnholtz 2022: 1972). We expect that different composition of trade unions' power resources have an impact on the focus of their strategic action, i.e. recruitment, representation, and mobilization (Gumbrell-McCormick and Hyman 2013: 52). Following Lévesque and Murray (2010: 337, 342), we specify these power resources in terms of *internal solidarity* (cohesive collective identities, deliberative vitality, participation in the life of the union), *network embeddedness* (network diversity and density in links to unions and the community), *narrative resources* (interpretative and action frames that mobilize repertoires of action and a sense of efficacy) and *infrastructural resources* (material, human, organizational processes, policies and programs). We acknowledge that it is key for trade unions to activate such power resources by means of appropriate strategic capabilities such as *framing* (providing a frame of reference, defining a proactive and autonomous agenda), *learning* (ability to learn and to act upon the union's organizational self), *intermediating* (mediating contending interests, fostering collaborative action, activating social networks) and *articulating* (ability to articulate between different levels of action, over time and space).

Overall, this framework of the analysis allows for a wide-ranging account of trade unions' role in the governance of digitalization, offering the appropriate instruments to advance our understanding of multi-level employment relations dynamics in a relatively under-explored industry. It does so without overlooking the challenges that trade unions in retail normally face, beginning with the limited 'structural power' (Wright 2000) retail workers possess, given the limited entry and training requirements of retail jobs (Fullin 2021; Payne et al. 2023). At the same time the opportunities that trade unions explore when seeking to renew their power resources are considered (Lévesque and Murray 2010). In doing so, the analysis accentuates an ever-present, but somewhat undervalued, aspect of power resource theory, that is trade unions' collective ability to attain, maintain, and apply their potential power resources (Refslund and Arnholtz 2022). The potential of a renewed application of power resources theory in employment relations informs recent contributions, on controversial topics, such as precarious work (Keizer et al. 2023) and union revitalization strategies in Central Eastern Europe (Bernaciak and Trif 2023). The next section illustrates the cases we selected for this research, the rationale behind their comparison and the methods we used to collect the relevant data.

Case selection and research methods

The comparison between Italy and Spain is interesting for several reasons (Preworski and Teune 1970). First, both countries demonstrate scarce levels of digitalization in their economy and display comparable challenges regarding digital infrastructures. Both have skill gaps, exposure to the threat of automation and considerable regional and sectoral heterogeneity in terms of technological innovation and competitive strategies (Cedefop 2017; Eurostat 2021). In terms of employment relations, Italy and Spain are commonly classified together as part of the Latin or Mediterranean model, characterised by multiple trade union confederations differentiated along ideological lines (more evident in Italy) and a relatively strong role of the state (more pronounced in Spain) (Baccaro and Pulignano 2016; Köhler and Calleja Jiménez 2018). Trade union density is higher in Italy (31.6%) than in Spain (18.9%) but, in both countries, lower and more similar in the retail sector, at 12.5% in Italy and 13% in Spain (Visser 2019). Specifically, the main trade union confederations in Italy are CGIL, CISL and UIL, and their industrial federations are the most diffused in retail, with FILCAMS-CGIL, FISASCAT-CISL and UILTUCS-UIL accounting for, respectively, 52.7%, 31.5% and 15.8% of unionized retail workers (Rinolfi 2011). In Spain, the two largest trade union confederations at the national level are CCOO and UGT but their industrial federations in retail, FECOHT-CCOO and FIA-UGT, have slightly less members than two other independent organizations, FETICO and FASGA (Sanz de Miguel 2011).

Focusing on recent developments in the two national systems of employment relations, the literature highlights how the dimension of macro-political exchange with the state has, historically, been an important sphere of intervention for Spanish and, to a lesser extent, Italian unions (Molina 2014). However, both Italy and Spain have suffered a marked deterioration in the quality of tripartite social dialogue in the aftermath of the 2008 global financial crisis, largely as a result of exogenous pressures for structural reforms arising from the EU, with evident repercussions for the reproduction of trade union power resources (Meardi 2014). Also, collective bargaining underwent some substantial transformations. Whilst the central role has historically been played in both countries by industry-level agreements (nationally in Italy, provincially in Spain), labour market reforms implemented since 2010 have pursued the decentralization of collective bargaining (organized in Italy, disorganized in Spain) and a greater role for company-level agreements (López-Andreu 2019; Leonardi et al. 2018). The coverage of collective agreements remains, however, high, at 98% in Italy and 94% in Spain, with similar levels in retail (Rinolfi 2011; Sanz de Miguel 2011). Finally, the Italian and Spanish forms of workplace representation share some substantial similarities despite being formally different and weaker in Spain, where union power largely depends on the results of work councils' election, than in Italy, where union capacity to recruit and mobilize members is prominent (Baccaro and Pulignano 2016; Köhler and Calleja Jiménez 2018).

To substantiate this comparative research, we adopted a mixed-method approach composed of documentary analysis, interviews and content analysis. Documentary analysis referred to material

directly produced by key employment relations actors with responsibilities on or an established expertise in areas related to digitalization and work (Bowen 2009). Such actors are, first of all, trade unions themselves - along with the organizations they might have collaborated with such as think-tanks, consultancy and academia - but also state agencies and employers' organizations were considered. This material informed the first part of our empirical analysis on trade union responses to digitalization and consisted of 85 documentary sources and grey literature (i.e., policy-related reports and publications), collected using systematic key word searches reviewed by the authors. Amongst these sources, 14 key documents - 7 for the Italian and 7 for the Spanish case - are included in the References. Then semi-structured interviews with eleven trade union leaders (national secretaries and high-level functionaries) and two representatives of employers' organizations (senior executives), all with key responsibilities for digitalization at the national level or in the retail sector in general integrated these secondary sources. Questions they were asked regarded their organization's approach to digitalization and how this translates into the broader trade union strategies and collective bargaining agenda. The seven interviews for the Italian case were conducted in person in 2019, whereas the six interviews for the Spanish case occurred in 2020, partly in person and partly remotely due to restrictions following the outbreak of Covid-19. Interviews lasted 45 minutes to 75 minutes and, whenever possible, interviewees were given the opportunity to comment on relevant documents, especially if produced either by the organization that they are part of (Bowen, 2009). For the content analysis we analysed 163 collective agreements valid for the retail sector, signed since 2008 at the national and territorial level, as well as in strategically selected large retailers. For the Italian case we analysed 58 agreements, with 4 negotiated at the national level, 24 at the territorial and 30 with selected companies. For the Spanish case we analysed 105 agreements, 3 for the sectoral level, 62 the territorial and 40 at company level. The analysis of these agreements was based on an inductive content analysis method that quantifies concepts otherwise hard to measure and allows for their comparability. This required us to codify each quasi-sentence through the Atlas.ti8 software (Mayring 2014) drawing on an established codebook (Tijdens et al. 2018) of digitalization and four exhaustive and mutually exclusive sub-categories (e-commerce, device, robots and I4.0 technologies). Overall, the adoption of the mixed-method approach is instrumental to collect richer, multi-level data and widen the scope for their triangulation (Bowen 2009). Specifically, interviews with and documents by key employment relations actors are the most common data collection methods for this kind of research and we primarily rely on them. Content analysis of collective agreements provides a basis and direction for more detailed qualitative analysis. Besides, it constitutes an approach that, despite the challenges and gaps which we will illustrate in the next section, leads to a better understanding of the actual provisions pertaining to technological change that the same employment relations actors negotiate and sign. In fact, with the recent exception of a study on collective agreements in the Canadian healthcare and manufacturing sectors (Montreuil and Foucher 2023: 21), little has been said about these provisions.

Retail trade unions and digitalization in Italy and Spain

The case of Italy

The documentary analysis allowed us to observe the main initiatives that Italian trade unions explicitly undertook to deal with the challenges brought about by digitalization. What emerges from this material is a comprehensive approach to digitalization that, in line with our analytical framework (Lévesque and Murray 2010), we reconstruct as follows: it started from the activation of framing and learning capabilities, then included initiatives relying on intermediating and articulating capabilities, eventually leading to positive repercussions for other power dimensions such as narrative resources and network embeddedness. All three union confederations, in fact, committed organizational resources to create new departments or research centres, tasked with analysing the impact of digitalization on employment relations dynamics. They worked in collaboration with actors, typically universities and thinktanks, involved in knowledge production and dissemination across the country and with various interlocutors, from policymakers to practitioners (Gramolati and Sateriale 2019; Bordogna 2021). Albeit such efforts focused originally on manufacturing industries – evident in relation to the implementation and monitoring of the Industry 4.0 policy plan (Gasparri and Tassinari

2020: 804) – union federations in retail benefitted as well. The confederal level of trade unions, in other terms, paved the way for responses by industrial federations and local sections by leading original initiatives, setting up collaborations and providing resources. Such dynamics, substantiated in the next paragraph, confirms the degree of resilience, especially in terms of infrastructural resources and internal solidarity, that Italian trade unionism demonstrates despite the challenging circumstances for the reproduction of employment relations that they currently face (Leonardi and Pedersini 2023).

FILCAMS-CGIL, for instance, took great advantage from initiatives promoted by CGIL, the union confederation that, historically, offered its federations firm political guidance (Gramolati and Sateriale 2019). As regards digitalization, an example comes from *Idea Diffusa* (Mancini 2018), an online platform that the Work 4.0 division of CGIL created in 2017 to connect union federations with experts and practitioners – inspired by the progressive values that moves CGIL - and where to share documents and practices regarding digital challenges and opportunities at work. The aim is to create a ‘collective intelligence’ informing better trade union strategies to govern the impact of digitalization at work. FILCAMS-CGIL, from leadership to shopfloor delegates, contributed to this endeavour, illustrating that trade unions can organize around digitalization in the service industry as much as in manufacture, with evidence often drawn from recent developments in large retailing companies. This further demonstrates the growing dynamism of employment relations in retail vis-à-vis other industrial sectors that are traditionally more active as far as technological developments are concerned. Our interviews with trade union executives at both CGIL and FILCAMS-CGIL corroborate this point.

Our organization sees itself as the one that can jam the digital gearwheel, the one that affects how digitalization unfolds through a new process of preventive bargaining (INT4, CGIL)

Our priority is to change from the inside by assigning roles of responsibility to young officials, so to update our union to the challenges, also the digital ones, we currently face (INT5, FILCAMS-CGIL)

The importance of infrastructural resources and internal solidarity was also demonstrated in FISASCAT-CISL, who gained the assistance of the central confederation, CISL, before addressing directly work-related issues raised by digitalization. CISL’s original initiatives, in fact, aimed to help its industrial federations frame the multifaceted aspects of digitalization, their repercussions on employment relations dynamics and, eventually, learn how to devise their own most effective responses. In so doing, however, we noted that FISASCAT-CISL faced two obstacles. First, CISL’s early approach to digitalization, as manifest in the project Laboratory Industry 4.0 (with Politecnico University) (Bordogna 2021: 352), was markedly tailored to manufacturing, resulting in a limited space for intervention by union federations in services such as FISASCAT-CISL. Second, CISL has traditionally aimed to promote workers’ interests by means of collective bargaining, even when this is decentralized to the company or territorial level, rather than the political arena. However, in the retail sector, trade unions’ leverage on the bargaining table is rather low (Ambra 2019) and the representatives of FISASCAT-CISL that we interviewed acknowledged such difficulties and underlined that digitalization further reduced their power for two reasons: the risks of job losses due to the growing popularity of online shopping and the deterioration of working conditions produced by recent labour market reforms (López-Andreu 2019). Instead, UILTUCS-UIL has not been particularly proactive in framing the impact of digitalization on employment relations in retail. UIL is the smallest of the three main union confederations and UILTUCS-UIL is by far the least diffused in retail. It provides representation to workers in the entire service sector, meaning that there are no specific infrastructural resources for retail. Conversely, signs of internal solidarity across industries are present; UILTUCS-UIL stands out for the creation, in 2011, of a ‘virtual’ union structure (‘*Sindacato networkers*’) whose aim is to represent all workers affected by digitalization (UILTUCS 2014). Originally, this structure covered workers in the ICT sector and, in the last five years, others tied to digital platforms.

When in 2011 the Monti government granted a complete liberalization of retail hours, employers’ quest for further flexibility became the priority, no matter whether workers are involved or not in the process, nor what trade unions do. This now applies also when new digital technologies are introduced and their impact on working conditions is

unknown: employers inform trade unions when things are already happening, without notice, and they do not discuss the possible implications (INT1, FISASCAT-CISL)
With the spread of e-commerce, also brick-and-mortar shops are introducing online selling. Some tasks in these workplaces would change. For instance, the introduction of automatic cashier or the automation of shelves will create new jobs and destroy others. Trade unions have traditional tools such as collective bargaining to protect rights and if it does not fill the legislative gap currently present, digital workers such as platform-related riders might end up to find representation in minor, eventually not powerful, organizations (INT2, UILTUCS)

The diffusion of an omni-channel retail format, with its integration between selling both face-to-face and online (Reinartz et al. 2018; Marcolin, 2021), is perceived as a challenge and an opportunity for employment relations in retail, not just by all three union confederations, but also by employers and their representatives. In this regard, we asked an executive from a leading employers' organization in retail (Confcommercio) to clarify what digitalisation concretely means and why it might be critical to business.

Digitalisation is a multi-faceted trend that, in essence, means creating a website and list it on key search engines; creating a profile on main social networks; sell online; adopting innovative store technologies to enhance customer relationship management, including webcams monitoring products and shop areas that attract most attention; digitizing warehouse and fulfilment operations (INT7, Confcommercio)
Italian retailers should not simply mimic what purely virtual retails do but use digitalisation to better manage customer relationships. It's not enough to equip your stores with a virtual fitting room if there is no shop assistant to support how customers use it and to engage with them while they use it. Staff should acquire the appropriate level of digital skills to do so. Unfortunately, there is only limited investment in training, accepting that low pay corresponds to low commitment. A breakthrough for the retail sector implies better routes for career progression, linking higher skills with better performances and pay (INT7, Confcommercio)

To meet such opportunity, all three trade union confederations agree that companies need to equip workers with adequate digital skills and add that this can be done more effectively if trade unions are involved in the design and implementation of appropriate training activities (UniGlobal Union 2019; Dazzi 2020). Collective bargaining, as quickly pointed out in all interviews we carried out with Italian trade unionists, is the key instrument to accomplish this goal and, broadly speaking, the main route that a 'high road' to digitalization in employment relations can take. This does not conceal the differences – either in terms of standards or expectations – that each trade union places on such prospect. In other terms, the relative resilience of collective bargaining in Italy (Leonardi and Pedersini 2023) constitutes an institutional form of power resources that all main trade unions try to activate, so to demonstrate – in various ways - strategic capabilities that go beyond framing and learning to cover articulating as well (Lévesque and Murray 2010: 342).

The growing popularity of online channels changes the skill set companies require and, for instance, creates professional roles working on website design, high-technology tools, and robotized and automatic cash tills [...] Digitalization can be seen as an opportunity to open a conversation with employers, so to align collective bargaining with the functioning of specific digital innovations, partly using what is agreed at the national level and partly adapting terms and conditions to each specific situation. However, the key challenges before a good agreement can be found are likely to remain the same: working less hours on Sundays, receive adequate notice of working scheduling, make sure there is respect for workers' dignity (INT5, FILCAMS-CGIL)

The consequences of the spread of digitalization are handled by employers and managers. Trade unions intervene only within the room of manoeuvre set by the legislation, that is quite tight and essentially regards employee surveillance, privacy and data ownership. On most cases, employers share information with trade unions without being obliged to bargain over it (INT1, FISASCAT-CISL)

Trade unions have the power to shape the implications of digitalization, providing that they stay at the forefront of emerging controversies (INT2, UILTUCS-UIL)

A key topic consists of training and lifelong learning, which all the three union confederations considered to be crucial, both for employees whose skills risk becoming obsolete after technological advancement, as well as for trade unions that, by playing a role in workforce upskilling and business productivity, can demonstrate their positive effects on the economy. At the same time, we identify some differences between the two largest organizations, FILCAMS-CGIL and FISASCAT-CISL (Gramolati and Sateriale 2019; Bordogna 2021). Specifically, FILCAMS-CGIL believes that training should be jointly designed and provided by trade unions and employers. FISASCAT-CISL instead reiterates that training is crucial for trade unions but tends to emphasise that it is mostly the responsibility of employers, noting that the actual content of training has shifted towards soft skills, such as how to create a trust relationship with customers. Either way, upskilling retail work is critical to business too, as confirmed in interviews conducted with representatives of the two main employers' organizations in retail (Confcommercio and Federdistribuzione), which both aim to make retail workers confident in using tablet and other digital tools, as well as able to coordinate marketing initiatives in person and remotely. Such goals, employers acknowledge, will take some time before being achieved, not least because training an ageing workforce on technological innovations requires considerable time and efforts. Even this would not prevent retail job losses. Federdistribuzione suggests 30% of shopfloor positions will be at risk in the next 15-20 years, calculating that one web designer or one software developer can replace three shop assistants and a window dresser.

According to our interviewees, the retail jobs mostly affected by in-store digitalisation are shopfloor workers, rather than sales managers and middle managers. Specifically, trade unions' and employers' representatives alike mentioned frequently the extent to which the role of cashier is changing following the diffusion of digital technologies, especially in grocery chains. Our interviews noted that cashiers' tasks are shifting towards the monitoring of automatic cash tills, a task that management can easily monitor. As the executives of Federdistribuzione pointed out, cashiers work less from a fixed workstation and more on the front-line, where customers tend to bring complaints. Another job that digitalisation has transformed is shelf filling. Before the introduction of e-labels, shelf fillers used to spend considerable time in changing paper price labels; with e-labels, it takes instead just a click to do so, allowing for quick sale promotions at last notice. In other terms, what was a time-consuming and repetitive duty, it is now subject to stricter time constraints and pressure. The scale of transformations affecting these retail jobs, on some occasions, has been paralleled to those associated with the digital platform economy.

Cashiers are the workers mostly affected by the introduction of new technologies, changing their tasks as well as their responsibilities (INT1- FISASCAT-CISL).

The automatization of checkout is one of the crucial changes that is occurring in the retail sector, though the biggest change [driven by digitalization] remains the diffusion of riders, couriers and drivers working for food delivery apps (INT2- UILTUCS-UIL)

Our evidence on Italian trade union responses to digitalization in retail concludes with an analysis of the content of collective bargaining agreements signed between 2008 and 2019, either centrally, that is at the national level, or locally, at decentralised levels such as the province and the firm. Specifically, the national negotiations produce contracts which are valid for the main components the retail sector is composed of. Amongst these agreements, however, we examine only those which encompasses the majority of large private retail businesses (technically, '*Contratto Terziario, Distribuzione e Servizi*'), signed – and to be renewed every three years - by the largest interest organizations in retail – the three main unions FILCAMS-CGIL, FISASCAT-CISL and UILTUCS-UIL vis-à-vis the three largest employers' organizations (Confcommercio, Federdistribuzione, and Confesercenti). This implies the exclusion of, for instance, collective agreements valid for retail cooperatives, which constitutes an important segment of Italian food retail and where trade unions are traditionally strong (Ambra 2019), as well as the so-called 'pirate' agreements, signed by minor, non-representative organizations and instrumental to lower existing standards (Leonardi et al. 2018). In total, we consulted the public authority's official database (run by CNEL) and analysed four renewals of the national collective agreement valid for retail, respectively signed in 2008, 2015, 2018 (only with Federdistribuzione) and in 2019 (only with Confcommercio).

As regards digitalization, the 2008 agreement does not explicitly address digitalization but only mentions that technological advancements shape changes in consumers' demands, without

drawing implications on how retail work is performed. The 2015 agreement, by comparison, carries novel elements, beginning with the first, specific provisions about Information and Communication Technology (ICT). Such provisions offer a classification of ICT tasks and their corresponding contractual level. In addition, this contract states that, in principle, ICT innovations should serve as many stakeholders as possible, and that workers play a key role in the transformation that retail is undergoing. However, the contract does not cover how, in practice, the implementation of such role can be related to any of the substantial issues for retail workers, such as working time, training and monitoring. The 2018 agreement refers to the digital challenges that the retail sector faces because of 'new forms of retail', such as the e-commerce. There is also a point on the importance of first framing and then negotiating how technological innovations prompt retail to adapt, but no concrete measures are suggested, not even in terms of specific training or calls for organizational change. Finally, the 2019 agreement covers digitalization in four ways: as a topic for consultation with national government; as an opportunity to reinforce joint regulation with employers, especially through joint committees; as an increasingly relevant content of workplace training; and as the rationale behind the creation of new professional profiles and their formal classification.

At the decentralised level, we examined the content of collective agreements applicable to retailing companies or small geographical areas such as provinces. As for the former, we searched in the database on decentralised bargaining created by FISASCAT-CISL and strategically identified 30 contracts, representative of four sub-categories in retail (fashion, food, electronic, other forms of distribution such as door-to-door sales). Then, through the functionality of Atlas.ti8, we found that the most frequently mentioned topic related to digitalization is 'innovation technology' (n=35), followed by 'digital devices' (the majority represented by pc and to a less extent bracelets and tablets) (n=7), 'Industry 4.0' (n=6) and 'e-commerce' (n=4). The term training was connected to digitalization 24 times: in 21 cases, it was linked to technological innovations in general; in the remaining 3, the links were found, respectively, to more specific aspects such as online sales, robots and social media. However, from the content analysis of these collective agreements, it is not possible to draw relevant information regarding how training is carried out, who is going to pay for its provision, and which categories of workers are expected to receive such training opportunities. As for the collective agreements signed at the province level, we searched again in the database run by FISASCAT and found 24 territorial agreements, largely referred to provinces in North and Central Italy (n= 20). These agreements mostly cover special provisions about working time flexibility and temporary measures to address economic uncertainty that retail workers experienced after the financial crisis of 2008, whereas references to digitalization and their implications on work and employment relations are missing.

Finally, the provisions on digitalization available in the collective agreements, albeit far from rich in details, prompted us to consider two aspects relevant to the diffusion of digitalization in retail: first, digitalization unfolds differently in each sub-categories within retail; second, digitalization follows distinctive developments even within the same retail sub-sector, depending on key company features such as organizational dimension. Both are of critical importance to understand opportunities and constraints for trade union responses and, as such, we explored them further to corroborate our other sources. As for the former, each retail sub-category places different emphasis on the four key topics related to digitalization which we detected in collective agreements. In food retail, innovation technology has deep implications for how shops are organized, with the spread of blockchain technologies providing consumers with information about products, or robotization allowing for automated shelf filling. Fashion retail, instead, focuses on augmented reality and wearable tools, instruments that help shop assistants engage with customers, providing them with timely information and advice (Faioli 2021). In electronic and DIY retail, as reported by FISASCAT-CISL, sales assistants are often asked to provide post-sale customer care by phone, with an expectation that this might occur even outside of work hours. As for the latter, we gathered evidence that company size is critical to the unfolding of digitalization in retail and how trade unions can play a role in it. In fact, there are pioneering cases of large companies leading the way in the introduction of digital technology at work. Amongst them, some of our sources (FISASCAT-CISL; Federdistribuzione) and existing research (Faioli 2021) mentioned a big supermarket chain like Esselunga, the first to use robots to sort shelves, and a multinational like Ikea, the first to offer customers a virtual reality experience, in which they furnish a room they are virtually in with Ikea items. However, smaller companies can be

digitally-savvy too, albeit in less explicit terms. Documents and interviews, in particular to executives of Confcommercio and Federdistribuzione, report that small companies have little capacity for accommodating in-house digital expertise, but they team up to hire consultants on digital solutions, with a key intermediary role played by employers' organizations.

The case of Spain

Spanish trade unions have been involved in policy discussion on technological innovations and their regulation, albeit in a rather occasional manner. This occurred, for instance, in 2017, when the government accepted social actors' requests and agreed to include within the national employment strategy a specific goal regarding workers' adaptation to digitalization, especially for older workers who largely suffer from severe digital skills gaps (Gasparri and Tassinari 2017). In December 2018, Spanish trade unions also won the 'right to disconnect' - 'a worker's right to be able to disengage from work and refrain from engaging in work-related electronic communications, such as emails or other messages, during non-work hours' (Eurofound 2021) – a result achieved thanks to the role CCOO and UGT played (CCOO 2017b; UGT 2021a), alongside employers' organizations, in the Commission established to address the regulatory challenges brought about digitalization (Lerouge and Trujillo Pons, 2022). We will discuss the links between the right to disconnect and in-store digitalization in the final paragraphs of this section, where collective agreements in retail will be examined. At the same time, the cooperation between the two main trade union confederations and the government translated into their involvement, alongside employers' organizations, in policy roundtables and consultations (UGT 2019; CCOO 2020a). In the retail sector, both FECOHT-CCOO and FIA-UGT advocated for a more cooperative approach from the state, arguing that interest organizations deserve to be systematically included in policy discussions about key topics for retail workers and companies such as the regulation of working hours, fair business practices and market competition, and employee training. FECOHT-CCOO, in particular, stressed that trade unions have a crucial role to play in the political arena, whereas FIA-UGT affirmed that trade unions are essential to steer the Spanish economy and society towards a fair and sustainable transition.

Trade unions should be placed at the centre of the change [in the retail industry], they play a key role in upgrading workers' skills and can do so in dialogue with companies (INT6, FIA-UGT).

Trade unions are the link between employers' associations and government and, as such, they are the ones in the right position to push for better working conditions (INT3, FECOHT-CCOO)

Nevertheless, trade unions' initiatives and their inclusion in policymaking did not lead to an overall strengthening of collective bargaining within the Spanish system of employment relations (Byhovskaya 2018). It is however important to note that, somewhat surprisingly, Spanish trade unions demonstrated the ability to gain some assertiveness in retail. An example comes from the sector agreement renewed in 2017, which increased the financial reward for overtime work and introduced new rules to make working time flexibility more employee-friendly, for instance by reducing the proportion – from 70% to 34% - of the Sundays and public holidays per year in which a retail worker can be called to work, with a minimum further reduced from nine to seven a year. From all our interviews and the analysis of documents produced by Spanish interest organizations, we report that this agreement is broadly considered a milestone for employment relations in retail because most representative trade unions were involved in its extensive negotiation (Isusi and Muñoz-Baroja 2017). Themes related to digitalization, however, were largely left off this negotiation round, proving some limitations in terms of articulating and intermediating strategic capabilities of trade unions (Levesque and Murray 2010). This point emerged in the interviews with trade unionists belonging to FASGA and FECOHT-CCOO and in charge of negotiations with two major supermarket chains. For them, a key obstacle – and implicitly, also a limitation - to bargaining on digitalization within Spanish supermarkets is that digitalization constitutes an emerging phenomenon and it is, as yet, unclear how established, relatively rigid and slow procedures underpinning collective negotiations can handle its implications on work regulation. Amongst these implications, Spanish retail unions have so far stressed the risk of job losses, with the CCOO secretary noting that such risk is hard to estimate because of the high level of staff turnover in retail. Looking ahead, however, they admitted that it is

time to step up to the challenge because employers have already taken the lead in the implementation of digitalization within workplaces.

Employers take decisions regarding all these aspects related to digitalization. Trade unions just follow. It is very hard to have effective collective negotiations on digitalization also because digitalization is not yet so widely spread, especially in some parts of the retail sector (INT2, FECOHT-CCOO)

The power of trade unions vis-à-vis employers' organizations is extremely weak because collective agreements are renewed only every four years. Wider room of manoeuvre is however possible at the company level, where discussions might occur to address also small organizational changes [due to digitalization] (INT5, FASGA)

To compensate for such limitations and enhance their role in the regulation of digitalization on work-related matters, Spanish trade unions – first at the national level and then with a focus on retail - launched unilateral initiatives that expressed their capacity to activate learning and framing strategic capabilities. CCOO developed expertise on pressing issues related to digitalization, outlining the contributions that trade unions might play in their solution (CCOO 2017a; CCOO 2020a and 2020b). The other major Spanish trade union confederation, UGT, also demonstrated initiative in this regard, confirming that, despite ideological divisions, trade union confederations in Spain tend to follow rather similar patterns of action (UGT 2021b). What also emerges from these documents is the importance that both CCOO and UGT place on training. This point has been reiterated, albeit with some differences, in the interviews we conducted with representatives of the retail federation, FECOHT-CCOO, who affirmed it more as a matter of principle, and of the UGT itself, whose secretary framed it around the concept of ‘employability’. We also considered FASGA and FETICO and noted the absence of similar efforts produced by these trade unions, possibly reflecting – as an interview with the former points to - a more pragmatic, bottom-up orientation to tackle the impact of digitalization on employment relations.

The spread of digitalization is not yet so intense in the retail sector and, as a consequence, the areas for trade union intervention are so far rather limited. Essentially, when we speak about digitalization, now we mean training (INT2, FECOHT-CCOO)

Training means workers' upskilling and improves their working lives. We need lifelong training as a right regulated by collective bargaining (INT3, FECOHT-CCOO)

Trade unions are aware of the actual changes [related to digitalization] and have a plan to include in collective agreements their consequences in terms of training, employment conditions and number of workers. To do so, our current priority is to train union delegates (INT6, UGT)

Digitalization does not have only negative consequences. Trade unions can benefit from following management decisions and collaborating with companies in order to find the best possible solutions for workers (INT5, FASGA)

The UGT representative we interviewed stressed that policymakers should explore new ways to fund training activities within companies, for instance by offering attractive financial aids and tax reduction schemes to all the employers willing to develop workers' digital skills during working time. This original framing resonates in policy discussions trade unions engage with at the EU level (Degryse 2017: 8-9). Specifically, the FIA-UGT representative suggests that higher taxation for digital platform providers should fund such tax incentives. FECOHT-CCOO also stressed the importance of training for enhancing the prospects of retail jobs. However, unlike FIA-UGT and its emphasis on how to fund training activities, FECOHT-CCOO representatives were mostly concerned about the side-effects that the acquisition of digital skills might provoke, largely consisting of the increased opportunities for employers to control digitally-equipped and digitally-enabled employees. FIA-UGT shared this concern and a representative we interviewed linked it with the fact that digitalization allows management to utilize data that workers generate. By comparison, FASGA did not mention the risk of excessive controlling and monitoring of retail employees by managers, stressing instead that the introduction of digital tools that allow for a real-time information flow between shops and warehouses is essential to enhance workers' productivity and achieve high levels of consumer satisfaction. However, the controversies underlying issues of ‘digital surveillance’ along with the associated risk of degradation of retail jobs, are a recurrent theme across the documentary

and empirical evidence we gathered and analysed, confirming trade unions' awareness of the challenges brought by digitalization and extensively reported by the literature (Wood 2020).

Our main goal is to steer the attention towards how we organize working time and how we manage taxes, which can be utilized for financing training (INT6, FIA-UGT)

It is necessary that trade unions focus on the provision of training including the issue of monitoring and control. Trade unions need to protect workers and assure them that the rights acquired so far won't be dismissed only because the way through which tasks are performed has changed (INT4, FECOHT-CCOO)

Trade unions should be in a constant fight against 'digitalized Taylorism' (INT6, FIA-UGT)

As regards collective bargaining, we observed that all Spanish trade unions, despite acknowledging its current limitations and weaknesses, consider it a key instrument to address emerging issues in the retail industry. They therefore advocate for its strengthening, which is seen as essential to aim for the 'high road' of digitalization in employment relations. At the same time, we also noted that each trade union maintains a specific idea on the rationale behind this goal (e.g., as expression of industrial democracy, as a win-win solution that accommodates the business case), how it should be translated into practice (e.g., by promoting centralised or decentralised bargaining) as well as about the preferred route to achieve it (e.g., by launching media campaigns, by lobbying to influence policy, by adopting a cooperative approach with employers).

Collective bargaining is strengthened when it is more than an instrument to inform workers about the digital innovations that companies already adopt. This is so when it becomes a place where trade unions challenge companies. This also means that trade unions should be strong and try to take the lead in the negotiation of topics such as digitalization (INT3, FECOHT-CCOO)

We should talk to employers and convince them that their companies' productivity is tied to their workers' training. Simply put, we as trade unions are here to say that workers do really matter to companies [...] Even if the 2012 labour market reform promoted a decentralization of collective bargaining and, since then, agreements in the sector have become more fragmented and working conditions differ from one company to another, collective bargaining still is the vehicle through which new tasks and new professions are regulated (INT6, FIA-UGT)

Trade unions follow the decisions by management regarding work organization. If these decisions have bad consequences for workers, then these workers will contact the labour inspectorate and, in that case, our trade union intervenes to protect workers' interests (INT5, FASGA)

Finally, the analysis covers the content of 105 collective agreements signed in retail since 2008 at the central level (3 national sector agreements) or at a decentralised level, with large retailers integrating the sector agreement with their own company agreement on one side (we selected 40 agreements of this kind), and small retailers relying instead on contracts occasionally found at the sub-national, territorial level, the province (62 agreements). Looking at the national agreements, we note that each of the three under examination reflects a peculiar phase of the digitalization process. Specifically, the first agreement, signed only by FETICO and FASGA, does not include any mention of digitalization, but it focuses on how to recover after the financial crisis. FECOHT-CCOO and FIA-UGT heavily criticised it for conceding an increase of working time, a reduction in real wages and a general worsening of working conditions, including the extension of atypical forms of employment available to large retailers (Molina et al. 2020). The second agreement deals with trade unions' right to be informed and with the workers' right to disconnect (Eurofound 2021). The right to be informed requires companies to inform trade unions of any decisions that relate to digital transformation that alters substantially terms and conditions of work within the company itself. The right to disconnect applies to any work-related communications, with an emphasis on the use of digital devices and social media, which workers might be expected to engage with out-of-hours. In retail, as widely acknowledged in interviews, this typically occurs to discuss scheduling changes, also at short notice, but also, as seen in the Italian case, to offer post-sale customer care service. The third national agreement instead refers directly to digitalization and establishes a 'Sectoral Observatory', to be used by social partners to exchange information and discuss strategies about how to jointly address the digital challenges arising in workplaces, beginning with those related to workers' health and safety.

We then examined 60 territorial agreements, largely present in provinces in North and South Spain. These agreements are mostly focused on the right to disconnect and the right to inform trade unions about technological changes that companies decide to implement. Other references to digitalization are generic and used as background information to illustrate the emerging context in which retail operates. As for company level agreements (n=40), we found that the most mentioned topics that relate to digitalization as ‘innovation technology’ (n=32), followed by ‘smart tools and robots’ (n=17). There are no references at all to e-commerce, but a few generic references to the need for trade unions to understand and adapt flexibly to managerial decisions regarding the introduction and diffusion of digital innovations in workplaces. An emphasis on the link between digitalization and training also clearly emerges, to the point that, in 32 out of the 40 company agreements taken into consideration, the provision of adequate training and lifelong learning opportunities is reported as critical for workers to preserve their jobs within the organization. Another item in the company bargaining agenda is monitoring, which we found – despite what emerged in the interviews and documentary analysis - only in one case. This was in relation to the use of video-surveillance instruments, whose use by employers is allowed for efficiency’s purposes and providing that it does not interfere with workers’ right to privacy. Safety and security concerns are found in all contracts, signed either centrally or locally, establishing that digitalization should not increase the level of hazards in workplaces. The extent to which the level of hazards goes beyond physical health risks (e.g., back pain for incorrect posture, sight issues from excessive exposure to screens) to include mental health risks remains unclear, despite the increase of stress, anxiety and fatigue of employees are symptoms often related to excessive monitoring and surveillance.

Overall, the analysis of retail collective agreements in Spain echoed differences between retail sub-categories and within them, largely due to company size, that we observed for the Italian case. We explored both further with the help of the interviews and documents. During interviews, it was common to hear a mention of the Inditex Group as the organization pioneering digital innovations across Spain, therefore placing the fashion industry as a digital trend-setter. Scholars noted it too, for instance reporting that the Inditex Group piloted the introduction of 3D changing rooms from its flagship store in Barcelona, with implications for retail workers who have been tasked to manage them (Faoli 2021). The Inditex Group was also the first to roll out the click-and-collect option in stores, an innovation whose implications are instead more ambivalent. On one hand, the risk of job losses is evident, as for other forms of e-commerce. On the other hand, however, the click-and-collect offers an opportunity for retailers – in particular, their workers - to engage with customers in person, expressing the potential of the omni-channel format (Reinartz et al. 2018; Carré and Tilly 2022). Food retail is another sub-category where interviewees from CCOO and UGT noted that digitalization has so far been pushed by big supermarket chains, especially Mercadona, whose digital presence expanded remarkably in the last years. In this regard, the emphasis is not on technological innovation per se, but on the risks it carries for retail workers, beginning with the one of work intensification: when shops are less busy, trade unions realise, the bags of online shoppers still need to be filled. At the same time, smaller companies do not inexorably fall short in the digitalisation process and, as for the Italian case, we recorded initiatives by which they joined forces together to equip their businesses with the digital know-how that, individually, they would find hard to afford and integrate into their operations. These efforts, however, have so far produced different results in the two countries. In Italy, the emphasis is on the managerial side of digitalization, that is how to handle its consequences for workplace dynamics, possibly because small retailers rely heavily on employers’ organizations. In Spain, small employers’ joint efforts seem mostly based on commercial interests and have led, for instance, to the creation of a common digital platform for online selling.

Comparing trade union responses to digitalization in Italian and Spanish retail

Our evidence illustrates how Italian and Spanish trade unions in retail responded to the diffusion of digitalization within the industry. The discussion of such responses revolves around three key points. The first regards the analysis of trade unions’ initiatives inspired by learning and framing strategic capabilities (Lévesque and Murray 2010). This meant reviewing and assessing how trade unions contributed to debates on the impact of digitalization on employment relations, in general and

in relation to the retail industry (Howcroft and Rubery 2021; Carré and Tilly 2022). In this regard, we highlighted similarities across the two countries, with trade unions in both Italy and Spain exploring how to enlarge the scope for their action by producing knowledge and building an expertise on digitalization – through research, policy analysis and media campaigns – and, more practically, by pointing at the connections between digitalization and areas such as training, checks on employers' monitoring, workers' involvement in the decision-making process and, in the case of Spain, even taxation. Trade unions in retail, in other terms, know what a 'high road' to digitalization in employment relations look like. These efforts relied on certain power resources, especially in terms of infrastructural resources, that Italian and Spanish trade unions still possess. Their organizational structure, in fact, functioned in virtue of mechanisms of internal solidarity, an important factor for ideological trade unionism typical of the so-called Latin model, that found expression in the central confederal level supporting industrial federations and local sections. Such support even drew inspiration from framing and learning efforts by trade unions at the EU level (Degryse 2017), as evident in Spain, where retail issues have been linked to broader demands like the right to disconnect and fiscal reforms. Furthermore, union infrastructure fed into the remaining source of trade union power in Lévesque and Murray's framework (2010), that is narrative resources. In this regard, the extent to which trade unions invest in discursive power depends on two factors, well known to the comparative employment relations literature (Frege and Kelly 2004; Lévesque, et al. 2020; Doellgast and Wagner 2022). The first is the type of trade unionism present in both countries, which confirms the relevance of employment relations institutions in setting the preferred routes of actions for trade unions, particularly when they face new challenges such as digitalization. The second reflects organizational features and strategic orientations specific to each trade union. Here we noted, in both countries, intra-union differences, with trade union confederations appreciating more opportunities than challenges underlying the digital transformation of work whilst industrial union federations in retail place the emphasis on the challenges rather than the opportunities.

Second, we noted the intermediating and articulating strategic capabilities that trade unions activated to turn the challenges brought about digitalization into opportunities (Lévesque and Murray 2010). Two key challenges to trade union action in retail, widely shared in Italy and Spain, stand largely in the background of this analysis. One is the diffusion of e-commerce (Eurostat 2021), which destroyed jobs in bricks-and-mortar stores while creating jobs in logistics, a sector that largely falls into the constituency of trade unions in transport (Gasparri and Tassinari 2020). The other consists of labour market reforms introduced since 2010 (Meardi 2014; López-Andreu 2019), which pushed for a creeping liberalization of labour markets, with strong repercussions for work conditions in the lower end of the service sector (Hunt and Rolf 2022). Our research focuses on trade union responses to such challenges and find that digitalization does include opportunities for trade unions in both Italy and Spain. Digital skills, for instance, constitute an asset for retailers and how to equip workers with such skills is a matter about which trade unions can have a meaningful say. Besides, by examining how trade unions deliberate on digitalization along with employers and policymakers, we note remarkable country differences, with trade unions in Italy particularly active in incorporating digitalization within the remit of sector and company collective bargaining while, trade unions in Spain opt for the inclusion of digitalization within the social dialogue agenda. Further differences between trade union responses emerge within the two countries (Molina et al. 2020; Leonardi and Pedersini 2023), either between trade union confederations as in Italy or between trade union confederations and independent unions exclusively focused on retail as in Spain. Such union differences refer to the typical level of intervention (national or local), the preferred interlocutors (in the political or in the market arena and, specifically, the size of retailers).

Third, we analysed the content of collective agreements applied in the retail sector and verified that the most important and tangible topic these agreements cover in relation to digitalization is training and lifelong learning, in both countries at all levels of negotiation. The rationale behind it is that both Italian and Spanish trade unions interpret the provision of training activities as a strategy for protecting workers and increasing their leverage on the bargaining table (Gasparri and Tassinari 2017; Ambra 2019; Lerouge and Trujillo Pons, 2022). Beyond that, the collective agreements that can be related to digitalization in the two countries differ in terms of the priority given to certain themes, the articulation and hierarchy between bargaining levels, and the way digitalization is formally included in the contracts. In terms of priority, in the Italian case, the main theme interest organizations focused

on was working time whilst in the Spanish case, their emphasis was on the right to disconnect and, broadly speaking, health and safety (Eurofound 2021). The different emphasis on health and safety that we noted in collective agreements is partly related to the strong role of legal regulation plays in Italy, and that part of the fieldwork for the Spanish case was conducted after the Covid-19 outbreak, when the diffusion of remote work required considerable attention to its health implications. On the articulation and hierarchy between bargaining levels, in both countries the trade unions' first option is the sector level, followed by the company level in Italy and the province level in Spain. Finally, the ways in which digitalization is formally included within the content of collective agreements vary according to the country: in Italy, digitalization is present in ad-hoc paragraphs tailored to the specific case and circumstances the agreements refer to; in Spain, references to digitalization are similar to each other, de facto reproducing a formula that is fixed at the sector level and rarely altered at the company or territorial level.

Conclusion

This article contributes to our understanding of the relative importance of trade union responses to digitalization in two countries – Italy and Spain – where technological innovations are seen as only partially used and unevenly widespread across workplaces (Eurostat, 2021). Such reluctance and/or inability to change in light of external pressures, albeit related to broader social, economic and political factors, might have severe implications on the stability and reproduction of employment relations institutions and practices which in the last decades have already been subject to more or less explicit attacks and process of erosion, steadily replaced by market regulation or direct state interventions (Frege and Kelly 2004; Baccaro and Howell 2017; López-Andreu 2019; Greer and Umney 2022). For trade unions, it is therefore essential to understand their role in shaping the form digitalization takes at work and the consequences it brings to working conditions and employee wellbeing. This article investigates the topic and examines how and to what extent trade unions facilitate the emergence of a 'high road' to digitalization in employment relations – that is, ideally, a win-win solution based on well trained and productive workers, good working conditions and joint regulation in which trade unions engage with business perspective (Millberg and Houston 2005; Degryse 2017; Osterman 2018). It does so by focusing on the retail sector, a sector that displays structural weaknesses and long-standing issues in terms of working conditions and workers' representation (Grugulis and Bozkurt 2011; Carré and Tilly 2017; Gasparri et al. 2019), circumstances that would normally favour the 'low' road of digitalization in employment relations, based on cost minimization business strategy and adversarial relations that aims to exclude trade unions and downplay employee voice. To look at these issues, we adopted a comparative research design following the logic of 'most similar systems' comparison (Preworski and Teune 1970), collecting evidence through documentary analysis, qualitative semi-structured interviews with representatives of trade unions (conducted in 2019 and 2020) and a content analysis of collective agreements applicable in retail and signed since 2010 at the national, territorial and company level. While we recognize that, due to the extensive breadth of the topic, the evidence is not exhaustive but rather illustrative, the article brings a useful contribution to debates on employment relations and digitalization, trade union strategies as well as institutional factors underlying similarities and differences in country developments (Valenduc and Vendramin 2016; Howcroft and Rubery 2021; Doellgast and Wagner 2022).

Our analysis illustrates that in the retail sector of both Italy and Spain trade unions are capable of using digitalization to redefine their role and embark on new initiatives that steer employers towards 'high road' outcomes. Similarities are evident in the areas of knowledge production and training, whilst some notable differences are apparent in the preferred mode of deliberation, with trade unions in Italy attempting to bargain on digitalization directly with employers, and trade unions in Spain seeking instead to involve the State in such negotiation, bringing it within the remit of social dialogue. We acknowledge that is not enough to alter the power balance in the sector – employers maintain the upper-hand and trade unions' leverage remains relatively isolated to certain topic areas and company/territorial circumstances. However, our data indicate that digitalization in retail is a critical employment relations issue, with trade unions but also, albeit less explored here, employers'

organizations – becoming more involved. These findings also suggest that the employment relations toolkit contains versatile instruments for trade unions willing to confront the challenges of digitalization, even in a ‘Cinderella’ sector as retail (Fullin 2021; Hunt and Rolf 2022; Payne et al. 2023). In line with mainstream comparative employment relations research (Lévesque et al. 2020; Doellgast and Wagner 2022), we argue that digitalization does not prevent social actors from pursuing their own strategies, which remain rooted in their goals and power resources and are, in turn, influenced by complex multi-level political, legal, and institutional contexts, as well as ideological stances and labour market situations (Gumbrell-McCormick and Hyman 2013; Gasparri and Tassinari 2020; De Stefano and Doellgast 2023). In short, the role that trade unions play in steering employment relations developments towards the ‘high road’ of digitalization proves to be delicate and hard to assess, with a decisive factor consisting of how trade unions approach digitalization in light of institutional circumstances and in virtue of their strategic capability to activate their power resources.

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