



STUDY ON ORGANISING WORKERS THROUGH DIGITAL MEANS

Research Partnership between **National Trades Union Congress (NTUC)** and
Singapore University of Technology and Design (SUTD)

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Executive Summary

The research collaboration between the Lee Kuan Yew Centre for Innovative Cities, Humanities, Arts and Social Science Cluster at the Singapore University of Technology and Design and the National Trades Union Congress explored how workers might be organised through digital means, beyond the traditional ways of organising workers. We termed this as 'Digital Organising'.

This report details our research and recommendations for organisers on how they should transition into digital organising. We conducted a review of global trends in digital organising, reviewed relevant case studies of digital organising (Chapter 2) and held a design workshop to gather and make sense of the individual experiences of organising to inform our recommendations for future digital organising (Chapters 3 and 4).

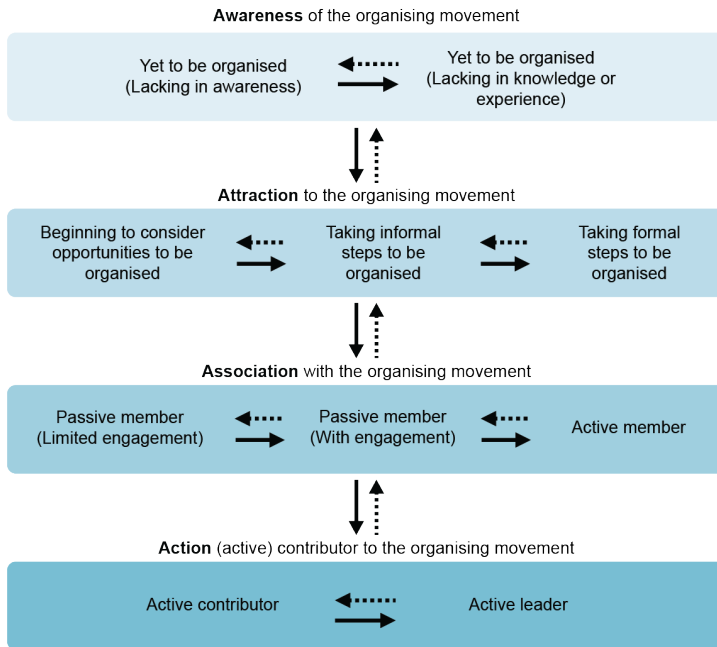
Digital tools are increasingly the norm for organising today. As some unions are experiencing declining membership rates, organisational changes and the rise of the gig economy and precarious work, other unions have managed to thrive and continue to grow by embracing digital technologies in their organising and reinventing themselves to appeal to new groups of workers. Our workshops also revealed a strong preference for the use of digital technologies when being organised.

The proliferation of digital tools also signals an opportunity for rethinking existing organising models. From our case studies, we observed that it has led to groundup, organic organising of workers using social media, especially in emerging industries and jobs such as gig economy work. This is underpinned by the lack of representation and formal organising, coupled with easy access to technology that can galvanise support among unorganised workers with relative ease and speed. Organising outside the purview of more traditional labour movements has also led to more spontaneous organising of collective actions and transnational organising. The efficiency, convenience and reach provided by organising through digital means provide traditional Labour Movements with the opportunity to expand or change the *How* and *Who* they are organising.

Arising from this research, we propose the 4As Approach to Digital Organising that presents digital organising as four distinct stages: Awareness, Attraction, Association and Action. This framework is a tool for organisers to evaluate their existing organising efforts, identify opportunities for incorporating digital tools for digital organising and develop digital organising goals and strategies.

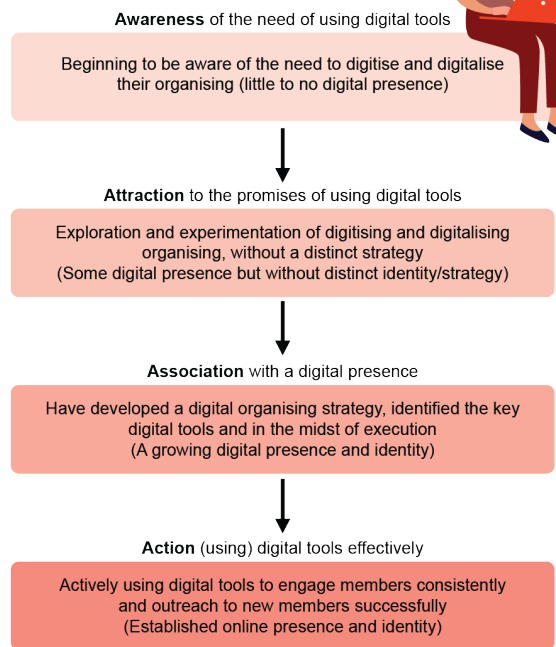


Guide to Individual Organising Journeys



→ Moving forward → Moving backwards

Guide for Organisers



There are two parts to this framework. The first presents the individuals' journey of being organised (Chapter 5). The second presents the organisers' journey of incorporating digital tools into organising (Chapter 6). To augment the 4As Approach to Digital Organising, we developed a digital tool kit that helps organisers quickly identify and assess digital tools that they can adopt and proposed how Labour Movements might create a digital ecosystem to support digital organising.

The report ends with a discussion of the implications and opportunities that digital organising brings to the Labour Movement and puts forward recommendations for digital organising models and practical considerations when organising digitally (Chapter 7). Digital organising has necessitated organisers to embark on digital transformation and acquire the technical expertise and resources to remain current and continue attracting memberships. When doing so, organisers need to be mindful of the limitations and development cycles of technology and should look to continually update the digital tools used to stay relevant.



Chapter 1: Introduction

Workers have long been organised for the pursuit of common goals such as improved working conditions, better wages and benefits, and higher safety standards. Be it via guilds, associations or unions, the organising of workers has played an important role throughout modern history in managing the relationship between employers and employees, and the evolution of the workplace. As we discuss in this report, labour movements continue to play a vital role in organising and responding to new challenges facing workers in the digital age.

Today, the nature of work and employment is rapidly changing due to the rise of digital technologies and the shift towards more knowledge-based economies. These trends have also led to changes in how workers are being organised globally. In particular, there is a need for labour movements to mobilise and engage a broader spectrum of workers, due to an increase in contract-based work, including new forms of work, such as on-demand ‘gig’ and ‘crowd’ work in the platform economy. However, just as digital technology is disrupting traditional forms of labour and employment, the same technology can also provide new solutions for membership engagement and renewal. In response to these issues, this study focuses on understanding how digital technologies are changing the way workers are being organised and identifying opportunities for harnessing digital technologies to ensure the continued meaningful organising of workers.

In Chapter 1 (this chapter), we examine the impact of new technologies on work and employment and discuss implications for the organising of workers. This includes defining organising and factors contributing to success, including the emergence of digital organising.

In Chapter 2, we conduct an international scan of union digitalisation, including the growth of collaborative platforms and digital tools to support organising, alongside case studies on digitalisation within the labour movement.

Chapters 3 and 4 present methods and findings of an empirical study conducted in Singapore, examining perceptions of the labour movement and how digital technologies could be used to support organising. Based on these findings, we present the 4As Approach to Digital Organising.

Chapter 5 presents the first part of the 4As Approach to Digital Organising — a Guide to Individuals — where we detail the journey that individuals experience when being organised.

Chapter 6 presents the second part of the 4As Approach to Digital Organising — a Guide for Organisers — where we discuss how organisers should develop their strategies when embarking on digital organising. To augment the 4As Approach to Digital Organising, we developed a digital tool kit that helps organisers quickly identify and assess digital tools that they can adopt and proposed how Labour Movements might create a digital ecosystem to support digital organising. The implications for the Labour Movement in Singapore are then summarised and discussed at the end of the report in Chapter 7.

Digital Technologies at Work

Current industrial changes termed the Fourth Industrial Revolution (4IR), differ from previous periods due to their size, scale and complexity (Schwab, 2016). Similar to preceding industrial transformations, these forces are changing the role of capital and labour in the process of production. In contrast, the rapid advancement of technology, alongside the need for new forms of human capital to support innovation and economic growth, is leading to increased job polarisation (Brynjolfsson & McAfee, 2014). This means that workers across a range of industries, including long traditional 'blue-collar' industries, such as manufacturing, along with workers in many 'white-collar' professional services and management roles and 'new-collar'¹ technology-rich industries are being impacted by digital and economic disruptions.

A key feature of recent economic and industrial change is the rise of the platform economy and more precarious forms of work, such as gig-work and crowd work (Behrendt & Nguyen, 2018). While these new forms of employment and job arrangements have provided increased opportunities and access to workers and benefits such as greater flexibility, there are growing concerns about the impact of platform-based work on working conditions and benefits, including weakened rights for workers to organise. Since 2010, there has been a five-fold increase in digital labour platforms worldwide (Rani et al., 2021). While most platform-based growth has been concentrated in the delivery and ride-share market, there is growing activity in online, web-based platforms that specialise in micro-tasking, matching employers with on-demand workers (Pesole et al., 2018). These trends are changing the nature of work and employment, with implications for the organising of workers.

What Is Organising?

Broadly defined, organising refers to the act of "bringing or arranging into working order". The academic literature on what is 'organising' within the context of unions is extensive. 'Organising' broadly encompasses actions developed by trade unions aimed at recruiting, involving and/or mobilising workers with the aim of making workers and new union members more conscious of their rights through awareness-raising, education, advocacy, training, campaigning and networking (Ahn & Ahn, 2012). It is built on the belief that organising workers into a disciplined and unified body allows them to face their employers on equal footing (Jayakody & Balakrishna, 1976).

Hence, the term 'organising' describes an approach to trade unionism that emphasises "membership activism around relevant workplace issues" (Simms & Holgate, 2008, p. 1). The organising model galvanises workers to define and pursue their interests through the medium of a collective organisation (Heery et al., 2000). In doing so, organising also has the potential to "reverse membership decline" in trade unions, a trend that has risen over the years (Cooper, 2004, p. 214).

¹ 'New collar' describes individuals who have developed the technical and soft skills necessary for technology jobs through non-traditional education pathway. The term was coined by IBM CEO Ginni Rometty in 2016.

Why Do Unions Organise?

Trade unions are membership-based organisations, with their membership made up mainly of workers with the stated aims of increasing membership and improving the rate of unionisation to gain a collective voice in workplaces and improve the lives of workers. Thus it is commonly agreed that unions are organising for growth, therefore any form of organising activity must have as its ultimate goal the delivery of sustainable increases in workplace power for unions and workers (Simms & Holgate, 2010). The trade union serves as the infrastructure to protect and advance the interests of its members in the workplace once workers have been organised within its framework. In general, trade unions bargain with employers on behalf of union members through an elected leadership and organisers who negotiate on issues such as wages, fair employment conditions and benefits and occupational health and safety (Poole, 1981). The role of unions varies according to different institutional arrangements (Hall & Soskice, 2001). However, while most trade unions are independent of employers or governments, there is an acknowledgement that close coordination between employers, trade unions and governments is ultimately beneficial for workers and the state, leading to greater social dialogue and partnership (Katz et al., 2004).

Regardless of how unions interact with external actors, membership is essential for the functioning and efficacy of trade unions, which distinguishes unions from other forms of associations (Mundlak, 2020). By organising, the union fosters activism, leadership and coordination among workers, which provides the basis from which recruitment and organisation building can occur (Bronfenbrenner & Juravich, 1998). Organising new units also has the potential of increasing the membership, enhancing their respective influence within the broader labour movement, which ultimately demonstrates its relevance to its members and the public at large (Voos, 1983).

There are four fundamental objectives for union organising: (1) recruiting non-union members; (2) building a union organisation based around a cadre of activists; (3) securing a recognition agreement; (4) establishing a bargaining relationship with the employer (Kelly & Willman, 2004). Unions can also represent their members by navigating major changes such as retrenchment in financial crises, providing legal and financial advice, as well as accompanying and/or representing members in disciplinary or grievance meetings (Bezuidenhout & Wong, 2000; Snell & Gekara, 2020).

What Constitutes Organising?

There is no single definitive account of what constitutes organising. Through an analysis of different cases of successful organising in the United States, United Kingdom and Australia, Burchielli and Bartram (2009) identified three common stages in the process of organising which includes an initial, intermediate and an advanced stage.

The initial stage refers to planning and conducting background research into a particular firm or industry, as well as broadly defining the aims of the organisers (Crosby, 2005; Ellem, 2004). At this initial stage, organisers are present on the ground and often make contact with potential future members by knocking on doors and making house calls (Bronfenbrenner & Juravich, 1998; Ellem, 2004; Peetz, 2006). Jayakody and Balakrishna (1976) also included the setting up of organising committees, research for organising and selection of targets. Thorough groundwork is carried out to obtain basic information about

the type of workers to be organised, their employers, the type of work done, their wages and working conditions.

Information should also be obtained on the existing relationship between workers and management in a particular organisation. Organisers also establish the likely difficulties and the major problems of workers. This information is valuable for showing how a union can assist the workers to overcome their problems, and it would also provide a background for preparing collective bargaining demands. Next, the campaigning begins as goals are set reflecting the union's abilities to win members. Methods of campaigning include informal small group meetings, social gatherings, telephone calls, pamphlets and posters. These are designed to help workers understand the services which the union can provide, such as why they should have a group and not individual bargaining and the existence of grievances committees (Jayakody & Balakrishna, 1976).

The intermediate stage refers to the professional training of workers in terms of recognising rights (Crosby, 2005) and consists of "consciousness-raising and politicising" based on the analysis and interpretation of workers' own experiences (Crosby, 2005; Ellem, 2004; Heery et al., 2000) and is an important means of galvanising workers (Bronfenbrenner & Juravich, 1998). The more advanced stages of organising involve identifying and developing potential new leaders at the local level, maintaining momentum, and institutionalising a culture of organising amongst members (Crosby, 2005).

Factors Contributing to Successful Organising

While the literature on organising suggests a clear and straightforward framework to mobilise workers, the reality of sustaining successful organising is markedly different. Successful organising is highly complex and resource-intensive as each union's circumstances in a particular socio-political context will differ from other examples and as such, there is no single blueprint for a successful labour campaign (Bartram & Burchielli, 2007; Mundlak, 2016).

Creating a Central Purpose and Strategy

Jayakody and Balakrishna (1976) noted that a successful campaign is one where the organisers themselves are passionate torchbearers of the cause. Organisers should have the answers to the central purpose of the union and to have this message-driven home as clearly as possible. While organisers need not necessarily be 'heroes', a certain amount of "courage, hard work and enthusiasm" is necessary to steer the union through tough times. This, however, depends on the eager and active support of the members themselves. As such, they suggest a symbiotic relationship between senior organisers within the union and the workers they represent.

Building Relationships of Trust

In a study by Lepie (2014), organisers saw their priority as building relationships of trust with workers. In doing so, organisers and workers could collectively develop tactics based on each other's subjective experiences. Organising success requires relation-building skills and creativity, thus it is important for unions to hire organisers with high levels of empathy than to employ a given tactical formula.

Union Structures and Policies

The effectiveness of organising is also dependent on internal influences that exist within the union itself, such as union structures and policies (Simms, 2014). The internal structures of unions are important to campaign tactics and outcomes because they “influence the extent to which the union is open to new membership groups” (Dølvik & Waddington, 2004). Union policies also directly influence campaign strategies, and the extent of activities once collective bargaining has been established. Unions differ in their policies regarding employer engagement after establishing a relationship with them. This would impact campaign tactics and messages, and determine how unions seek to secure effective influence over “managerial decision-making in the long term” (Dølvik & Waddington, 2004).

Employer Support and Government Policies

Employer support and Government policies are also important when organising and this needs to be taken into account when organising (Bain, 1970; Gall, 2004; Machin, 2000; Simms, 2014). Unions globally organise differently based on various internal factors. In the United States, for example, trade unions mostly organise their members at an enterprise level to gain a stronger bargaining hand in negotiations. To benefit from any collective agreement, workers will have to become union members first.

In European countries such as Belgium, on the other hand, a Ghent system is enforced where social-economic duties are delegated to trade unions by the government. As such, the unions do not have to invest aggressively in organising new members. Bargaining also occurs at the industry level, beyond any workplace — with workers able to obtain benefits of collective agreement regardless of their union membership status (Mundlak, 2016).

Singapore’s model of tripartism, a “social partnership” between the Government, employers and workers (Katz et al., 2004), have helped ensure that the interests in organising of workers are aligned towards the national objectives of economic and social development while representing and advocating for the broad interests of tripartite partners (Soh, 2012).

The Emergence of Digital Organising in Singapore

Nevertheless, the changing social, economic and political environment has led to the creation of new forms and strategies of organising globally. There is an emerging trend of moving beyond traditional unions — brought about by the growing numbers of alternative worker advocacy platforms. These are worker voice groups that usually function without collective bargaining, and organised to support fellow workers or campaign for workers’ rights. In Singapore, we see examples of this trend in the rise of independent, standalone entities commonly formed by gig workers who are underrepresented currently (e.g. GrabFood Delivery Rider Singapore²) or advocates (e.g. Humanitarian Organisation for Migration Economics [HOME]³ and SG Climate Rally⁴).

A notable characteristic of this emerging trend of organising is the use of digital technologies for mobilising. Online platforms are easily used to connect workers with similar interests or professions without the need to observe the bureaucracy of organising practised by

² <https://www.facebook.com/groups/618879181797741/>

³ <https://www.home.org.sg/>

⁴ <https://www.sgclimaterally.com/>

traditional labour movements. Such platforms, especially the established ones, are transnational and are being used by individuals in Singapore to organise locally.

Co-worker.org is a prime example of such a digital organising platform. Its website allows workers to understand their rights, connect with colleagues, and launch or join online petitions that advocate for change at work. However, these groups are often short-lived and dissolve after a network of employees has been established for an online campaign. Change.org is another example of a digital organising platform used locally for both worker and non-worker related organising and calls for action. More details will be shared in Chapter 2.

Motivation for This Study

Today, not only are unions around the world losing relevance and facing declining membership, but they also find themselves challenged by the changing workforce composition. While Singapore has not experienced a decline in the share of workers in permanent employment, with approximately 200,000 freelancers and self-employed, workers may gradually shift away from the traditional model of employment. The proliferation of digital platforms has also fostered the growth of freelancing and self-employment including private hire driving and food delivery in the gig economy. Hence, the formation of worker voice groups or alternative worker advocacy platforms should not be disregarded.

These new forms of employment make it more difficult to forge a collective consciousness and hence, mobilise collective action. Trade unions are required to take a proactive approach in organising and recruiting a diverse range of workers. Key developments such as the fragmentation of workplaces, increasing outsourcing and subcontracting, and the expansion of the gig economy makes it even more critical for unions to extend their scope beyond the workplace as the sole location for recruitment (Bonner & Spooner, 2011). The emergence of such alternative worker advocacy platforms has demonstrated how organising is manifesting in a new way — digitally. Coupled with the changing workforce composition, we are interested to explore how workers might be organised through digital means, beyond the traditional ways of organising workers.



Chapter 2: International Scan of Union Digitalisation

This chapter reviews international literature and case studies on digital unions, online platforms, and social media tools to support worker organising. The review aims to identify how economic restructuring and digital technologies are changing how unions operate, including the growth of international collaborations and campaign-style platforms, alongside increased use of social media to support organising in the digital age.

In terms of scope, this chapter will focus on international examples with like-economies to Singapore and strong labour movements, such as in the United States and Canada, Europe and Asia-Pacific. Guided by the research questions below, we adopted a case study approach by identifying interesting and innovative examples of how traditional unions are digitalising, alongside an increase in new platforms, collectives and campaigns to support the organising of workers:

1. What changes in the organisational structures are carried out in traditional unions, including international and transnational collaborations, platforms and partnerships?
2. How is digital technology changing how traditional unions operate, including organising workers through digital means?
3. How are unions adapting to include representation towards platform, gig and crowd workers?

While we did not aim to be exhaustive, we attempted to provide case studies and examples of initiatives across a range of industries, worker and union profiles within the regions identified above that were identified during our search of selected online websites, news sites and social media platforms, along with grey literature reports and academic studies.

The remaining of this chapter is structured to answer the questions above and illustrative case studies are presented where possible.

International and Transnational Collaborations for Organising

The role of unions is changing. To remain relevant in the digital age, unions need to shift their membership base and organising models. Over the last few decades, many unions have faced problems of declining membership and diminished appeal to workers of particular profiles, such as young people and freelance workers (Visser, 2019). This has been attributed to several factors such as increasing globalisation, modernisation as well as weakening of labour union representation and membership (Carneiro & Costa, 2022). As discussed below, the rapid rise in more precarious forms of platform-based work is also leading to new ways of organising workers (Degryse, 2016; Vandaele, 2018).

In response to these changes, several new models for unions and organising workers are now emerging (Ford & Gillian, 2015; Schramm, 2005; Vandaele, 2018). In particular, there has been an expansion of international federations, known as the Global Union Federations (GUFs), which represent national trade unions across different industry sectors or occupational groups. As shown in Table 1, some GUFs are increasing their collective power through merging former global federations and affiliating across different sectors and industries. The growth of GUFs reflects shifts in the global economy, such as the growth of multinational companies and the rise of platform-based work. Some global confederations, such as IndustriALL Global Union and UNI Global Union (presented as case studies below),




































are becoming increasingly successful in promoting and seeking resources for building transnational union networks (Ford & Gillian, 2015).

Digitalisation is also changing the way workers are organised, with many GUFs using social media to improve their visibility and expand beyond national borders. As shown in Table 1, GUFs are using a variety of social media platforms, predominantly Facebook and Twitter, to advocate and campaign on issues affecting workers worldwide. As discussed further below, GUFs, along with trade unions generally, are increasing their engagement with a wider variety of workers, including 'white-collar' and 'new-collar' workers in the digital economy (Dubb, 2019).

To highlight the growth of transnational collaborations for organising, we present two case studies of GUFs below, IndustriALL Global Union (Case Study 1) and UNI Global Union (Case Study 2).



Table 1. Summary of Selected Sectoral Global Union Federations and Their Use of Social Media Platforms

Name	Founded	Affiliations	Sector	Membership	Social media use*
IndustriALL Global Union	2012	A merger of three former global union federations. Affiliates in over 100 countries	Mining, engineering and manufacturing sectors	50 million	 23,180  2,139  17,300  713
Building and Wood Workers' International (BWI Global Union)	2005	350 member organisations in 135 countries	Building, building materials, wood, forestry and allied industries	12 million	 10,887  451  2,627
Education International	1992	401 member organisations in 172 countries	Teachers	30 million	 35,745  456  16,500  1,030
FIFPRO	1965	63 national players' associations	Professional Footballers	65,000	 502,127  17,300  146,179  4,650
International Federation of Journalists	1926	190 affiliated unions in 140 countries	Journalism	600,000	 17,633  1,050  45,482  209
International Transport Workers' Federation	1896	677 affiliated unions	Transport Workers	19.7 million	 49,570  2,652  11,953  2,386
International Union of Food, Agricultural, Hotel, Restaurant, Catering, Tobacco and Allied Workers' Associations	1920 (1889)	422 member organisations in 127 countries (as of 2019)	Primarily food processing	12 million	 22,300  680  7,161  201
Public Services International	1907	700 affiliated trade unions from 154 countries (as of 2019)	Public services	30 million	 13,855  648  6,799  844
UNI Global Union	2000	900 affiliated unions in 140 countries	Services sectors	20 million	 56,766  1,006  20,400  2,048

*Number of followers (as of 20 March 2021).

Case Study 1: IndustriALL Global Union⁵

IndustriALL Global Union represents 50 million workers in 140 countries. Founded in 2012, IndustriALL Global Union brings together affiliates of three former global union federations: the International Metalworkers' Federation (IMF), the International Federation of Chemical, Energy, Mine and General Workers' Unions (ICEM) and the International Textile, Garment and Leather Workers' Federation (ITGLWF). Based in Geneva, IndustriALL Global Union also has offices in Africa, Asia, the Commonwealth of Independent States (CIS), Latin America and the Caribbean and the Middle East.

Purpose/key activities

IndustriALL Global Union aims to achieve its purpose through five key goals:

1. Defend workers' rights
2. Build union power
3. Confront global capital
4. Fight precarious work
5. Promote sustainable industrial policy

They engage in advocacy and research, coordination and facilitation of cross-border organising and bargaining campaigns, and strengthening affiliated unions through information, education and training.

Industry and membership structure

IndustriALL Global Union represents workers in the mining, engineering and manufacturing sectors and affiliated trade unions in over 100 countries. Both white-collar and blue-collar workers in the mining, engineering and manufacturing sectors are represented. All affiliated trade unions have to pay an annual affiliation fee.

How they organise transnationally

IndustriALL supports unions and joins with its affiliates in fighting for laws that support organising. This includes strengthening union capacity to respond to labour rights violations and building networks and campaigns at the national, regional and global level. It has its head office in Geneva and has regional offices in Johannesburg (South Africa), Kuala Lumpur (Malaysia), New Delhi (India), Moscow (Russia), and Montevideo (Uruguay).

Key campaigns

IndustriALL has several active campaigns, and has an increasingly digital campaign presence:

- Future of Work and Industry 4.0
- Climate change
- Industry campaigns (e.g. Action on textile and garment industry; Clean up shipbreaking, Stop Precarious Work)
- Engaging specific worker profiles (e.g. Women, youth and white-collar workers)

Use of digital media and improving member affiliates' digital capabilities

IndustriALL Global Union is a web-based platform, with content regularly updated, including information on campaigns and tailored reporting on specific issues, including providing through leadership through articles related to its active campaigns in English, Spanish and French on its website. The organisation is highly active on most social media platforms including Facebook (23,180 followers) Twitter (17,300 followers), Instagram (2,139 followers) and LinkedIn (713 followers) as of March 2021.

According to IndustriALL, the recent COVID-19 pandemic has forced workers globally to find new methods to communicate, engage and develop digital solutions⁶. IndustriALL has been working to improve affiliates' digital capabilities. A survey conducted by IndustriALL in 2020 revealed that 117 of its affiliated unions had significant difficulties participating in organising activities due to a lack of digital capabilities. Since then, IndustriALL has donated laptops, tablets, smart phones, multi-media projectors, cameras, printers/scanners, broadband/internet connections, Zoom licenses and training to affiliates as part of their membership package.

⁵ <http://www.industrialall-union.org>

⁶ <http://www.industrialall-union.org/strengthening-the-digital-capacity-of-industrialall-affiliates>

Case Study 2: UNI Global Union⁷

UNI Global Union is a global union representing 20 million workers in skills and services — the fastest growing sectors in the world of work. Headquartered in Switzerland, UNI Global Union operates in four regions: Africa, Americas, Asia-Pacific and Europe. Founded in 2000, UNI Global Union brought together four global union organisations: FIET (International Federation of Employees, Technicians and Managers), MEI (Media and Entertainment International), IGF (International Graphical Federation) and CI (Communications International).

Purpose/key activities

UNI's mission aims to build a collective voice for working people in service sectors worldwide, from sectors and industries such as services (cleaning, security, hair and beauty, tourism), commerce and finance, IT, media and platform and agency workers, among others. Key activities include curated news content for each sector and group; national seminars, working group meetings; global conferences, and research and publications.

Industry and membership structure

UNI Global Union represents workers in the Cleaning and Security, Finance, Gaming, Graphical and Packaging, Hair and Beauty, Information, Communication, Technology and Service Industry (ICTS), Media, Entertainment and Arts, Post and Logistics, Private Care and Social Insurance, Sport Temp and Agency workers, Tourism, Professionals and Managers, Women and Youth. UNI Global Union has more than 900 affiliated unions in 140 countries.

How they organise transnationally

UNI Global Union has ratified over 50 Global Agreements with multinational companies to set fair standards and conditions for workers across the globe.

Key campaigns

UNI Global Union campaigns on a number of global issues, including the impact of the current COVID-19 pandemic on workers. The union also has the following issue based groups based on membership profiles:

- UNI Equal Opportunities works towards a more equal and fair society and against discrimination due to race, gender, religion, and/or sexual orientation.
- UNI Professionals/Managers and Managers represents highly skilled or educated professionals and managers.
- UNI SCORE (Strategic Campaigns, Organising, Research and Education) supports UNI campaigns and organising around the world.
- UNI Youth supports young members in the Global Union for skills and services.

Use of digital media and improving member affiliates' digital capabilities

UNI Global Union is a web-based platform, with regular content and reporting on specific issues and campaigns as well as research studies and report. The organisation is highly active on most social media platforms including Facebook (56,766 followers), Twitter (20,400 followers), Instagram (1,006 followers) and LinkedIn (2,048 followers). It also has a YouTube channel where they post videos about their campaign and for advocacy. Other recent digital initiatives include the Young Workers' Lab, which is a new pop-up research centre in the Future World of Work division of UNI Global Union. The research lab aims to test how digital technologies and data can be used to strengthen collective action and engages with young workers, large and small trade unions, technologists, government, civil society, business, academics and activists.

⁷ <https://www.uniglobalunion.org/>

How Unions Are Embracing Digital Technologies and Innovation

The rise of digital technologies is providing new opportunities and challenges for unions to engage with their membership base. Studies have shown that traditional unions are attempting to adapt to new technologies, at varying degrees of success (Maffie, 2020; Pinnock, 2005). There is evidence, however, that unions are increasing their use of innovative technology and social media, which is creating new opportunities for membership engagement and enhanced labour organising (Kerr & Waddington, 2014; Maffie, 2020).

For example, a recent survey of 149 unions affiliated with UNI Global Union indicated that the respondents on average agree that social media platforms bring benefits to unions, such as attracting new members, conveying the unions' positions and engaging younger workers (Panagiotopoulos & Barnett, 2015). Moreover, 70 per cent of union affiliates use Facebook as a means to engage members, showing that some social media platforms may be more useful than others in engaging members, including those from different socio-demographic backgrounds.

Another study of 553 union members and non-members in the education sector in Australia showed that most unions (84 per cent) are using social media, with Facebook and Twitter among the most popular platforms used by unions (Barnes et al., 2019). According to Barnes et al. (2019), Twitter and Facebook allow greater interactivity and transparency, such as allowing members to hold unions and union leadership accountable and have a say in union affairs, as well as publicly criticising employers specifically about wages and conditions (Barnes et al 2019). Web-based platforms also provide an important way for unions to transform, enabling new forms of engagement and renewal (Kerr and Waddington, 2014) and the ability to reach a wider diversity of audiences other than just union members, including employers and government entities (Panagiotopoulos & Barnett, 2015; Pinnock, 2005).

On the whole, social media can serve as a powerful organising tool for individuals to voice grievances and organise based on shared experiences at work. In particular, digital technologies are providing new opportunities for online organising, alongside offline actions (Dencik & Wilkin, 2015; Pasquier & Wood 2018; Theocharis, 2012). Nonetheless, the extent to which unions can adopt new technologies may depend on resources, and the ability of unions to revitalise their organisational structures, including increasing their representation across a wider representation of workers, such as white-collar and new-collar workers, as discussed further below.

Here, we present three case studies of how national trade unions are utilising technology and social media to engage with their members, TUC Digital, an initiative by the Trades Union Congress (TUC) in the United Kingdom (UK) (Case Study 3), and HKLab, by the National Union of Commercial and Clerical Employees in Denmark (Case Study 4) and UnionBase, a new and highly-innovative social networking platform developed for the labour movement in the US (Case Study 5).

Case Study 3: TUC Digital Lab⁸

TUC Digital is an initiative by TUC in the UK. TUC is a national trade union federation representing 48 affiliated unions in England and Wales, with a total membership of approximately 5.5 million members.

Purpose/key activities

TUC Digital aims to support unions to transform in the digital age. Key activities include working with unions on digital transformation, including leveraging e-platforms (social media/mobile/websites) to engage members and workers. TUC Digital provides an international networking space, conducts research and holds events on innovation and digital organising and profiles best-practice examples in other countries.

Digital toolkits, resources and campaigns

TUC's Digital Lab has developed a range of resources and toolkits to support unions in digitalisation and digital transformation. Some key initiatives include:

- TUC's Digital Health Check — a simple tool to help unions to establish where they stand on digital maturity. The toolkit provides an interactive spreadsheet assessing seven aspects of digital maturity — strategic approach, digital organisation, membership, communications, web presence, data, IT and systems.
- Megaphone UK — a campaign-based platform, which works in collaboration with TUC's 48 member unions and approximately 5.5 million union members in the UK. Megaphone supports unions to start and run campaigns, such as petitions and rallies and works in partnership with the Australian iteration of Megaphone.org.au hosted by the Victorian Trades Hall Council.

New digital tactics following COVID-19 — due to lockdown restrictions in the UK, existing organising and campaign methods such as rallies, in-person meetings and door knocking became unsafe, so organisers and campaigns needed to pivot to online methods. A key organising strategy included online pressure meetings with Members of Parliament through a structured and public Zoom meeting. Unlike, traditional meetings, where the agenda was already set, this format allowed participants to express their concerns on key issues affecting workers during the pandemic.

Case Study 4: HKLab

HKLab (founded by HK Denmark) is the innovation arm of one of Denmark's largest unions and was created by the National Union of Commercial and Clerical Employees (also known as HK Denmark). HK Denmark, founded in 1900, is Denmark's second-largest union, with approximately 180,000 members in the clerical, retail and other service industries in Denmark.

Purpose/key activities

HK Denmark mainly services white-collar workers in administrative professions, however the union recently rebranded to include innovative ventures such as HKLab to better suit its professional membership base, who lacked strong union identification⁹. Additionally, HKLab was established in response to new tech-enabled business models in the gig economy and shifting social views among young people, HKLab was founded to innovate the union's offering to its members, including among contract workers and young people.

Digital Innovation Lab

A key driving force for HKLab was to change the perception of joining a union and innovate the union's offerings to its members, including in response to tech-enabled business models in the gig economy (Lockey & Wallace-Stephens, 2020). This includes experimenting with applying virtual reality for learning and chatbot for providing information and handling enquiries and advice about rights at work (Kirk, 2018).

⁸ <https://www.hk.dk/aktuelt/nyheder/2017/10/25/hk-faar-fremtidslaboratorium>

⁹ <https://www.thersa.org/blog/2019/10/future-work-denmark>

Case Study 5: UnionBase¹⁰

UnionBase was established in 2017 in the US. UnionBase is a highly innovative web-based platform and the largest digital platform and social networking platform for workers and unions. The platform has a secure members area that links to verified unions through a cutting-edge verification system and user-friendly platform based on crafted from union and non-union. Since its development in 2017, more than 30,000 local and international unions have joined UnionBase.

Purpose/key activities

UnionBase was founded by a prominent US based organiser, Larry Williams Jr., who was frustrated by lack of innovation in the labour movement and wanted to create new tools for union organising, including increased social network for union members.

Digital platform features and resources for digital organising

UnionBase has recently been described as the Facebook for Unions¹¹. While non-union workers can also join UnionBase, union members can be verified by their union and send messages to other union members, receive membership updates and learn more about their unions. Unions can verify their profiles on UnionBase and once verified, can create both public and private posts to memberships. While joining UnionBase is free for workers, the platform includes a Premium Dashboard for verified unions. Another recent initiative is Workplace Leader, which is digital publication developed by UnionBase to assist union representatives and other workplace leaders. Content is crafted from union representatives, members and leaders and includes diverse content in terms of gender, age and background.

The Growing Importance of Unions in Platform-Based Economies and the Rise of Campaign-Based Organising

Another salient trend is the growth in platform-based work and the on-demand economy proliferated by online platforms, such as Upwork and Mechanical Turk, which break jobs into tasks (Bobkov & Herrmann, 2019). Crowd work refers to work delivered or managed through a digital service (website, app, or “platform”) that functions as a matchmaker or intermediary to complete such tasks (Fair Crowd Work, n.d.). With the emergence of the gig economy and crowd-work, as well as “new-collar” employment in the tech and digital industries, unions have to adapt even more to serve an increasing number of employees who do not fit into conventional organising structures.

In understanding how to best represent platform, gig or crowd workers, unions can draw from previous models of engaging agency or contract workers. Contract-based roles are becoming more prevalent in a range of sectors, with a growing proportion of agency workers such as in the manufacturing, retail and automobile industries. These workers found themselves not represented by the traditional unions. This became an opportunity for unions to increase representation, by pivoting their organising strategies towards including agency workers¹².

According to Benassi and Dorigatti (2015), labour unions have traditionally not been able to represent these contract workers. In the case of IG Metall, the largest metal and automobile union in Germany (Case Study 6), this created an opportunity for unions to extend their membership by expanding their representation and focusing their organising efforts to include agency/contract workers, women, young people (e.g. students) and white-collar

¹⁰ <https://unionbase.org/>

¹¹ <https://www.fastcompany.com/40461691/meet-the-millennial-whos-trying-to-save-the-labor-movement-with-a-facebook-for-unions>

¹² Agency workers are workers who have an agreement with an agency to work for another person or organisation.

workers. Successfully doing so helped IG Metall to grow its membership base. In particular, IG Metall managed pressures from its core employees by making agency work a centrepiece in its bargaining agenda (Benassi & Dorigatti, 2015)¹³. In the United Kingdom, the Transport and General Workers' Union (T&G) and the Association of Teachers and Lecturers (ATL) also saw success by providing inclusion and acceptance of agency workers. This was done by working closely with private recruitment suppliers such as the Manpower and Education Lecturing Services (ELS) to improve the terms and conditions of such workers. However, more can be done by having unions partner with associations of employers, associations of agencies and lobby at the national or multinational levels (Heery, 2004).

¹³ Traditionally, unions such as IG Metall were reliant on hierarchy-based models that protects union leadership, helping them to maintain power through bureaucratic systems. However, due to changes in the structure of labour relations, existing challenge for unions to break the “iron law of oligarchy” (Voss and Sherman, 2000, p. 304). By integrating the experiences of local entities into top-down nationwide initiatives, unions have experienced successful union renewal (Schmalz, 2017). This effort towards ensuring democratic power echoes the ILO’s calls for greater democracy in the structure of unions themselves before being able to successfully challenge democracy in employment (Hyman, 1999).

Case Study 6: IG Metall

IG Metall was founded in 1949 and is the largest trade union in Germany, with approximately 2.3 million members in the iron, steel, craft, wood and plastic, metal, electrical and textile service industries (IG Metall, n.d.).

Purpose/key activities

IG Metall aims to promote effective international regulation of corporate activity based on international labour standards, such as those set by the ILO. Accordingly, the labour union aims to ensure that minimum social standards apply for all workers through principles of justice, equality, solidarity, freedom, dignity, recognition and respect and general social and economic conditions ensure fair working and living arrangements for workers¹⁴.

Transforming IG Metall's organisation and membership structure

Originally focused on automobile sector and traditional blue-collar workers, IG Metall saw a great decline in its membership in the past decades before successfully raising it since 2015 despite the generally declining union memberships in Germany. This was largely attributable to its efforts to pivot the category of workers that it represented to be more inclusive for agency/contract workers. Such efforts were prompted by core employees to make agency work a centrepiece in its bargaining agenda (Benassi & Dorigatti, 2015). This strategic shift by IG Metall was supported by the use of the media to increase the focus regarding agency/contract workers to recruit and mobilise them. The case of IG Metall also represents the need for unions to transform their own organisational structures and organising models, before being able to renew their membership structures.

Key campaigns and achievements

Historically, IG Metall has achieved major success in the German labour market, such as advocating for reduced working days and hours, paid vacation time and sick leave. More recently, IG Metall negotiated deals to increase pay for employees in the metal industry, and reduce working hours enable workers to care for children or other relatives. Other key campaigns activities include crisis support for workers during periods of economic downturn and campaigning for agency/contract workers.

Use of digital technology and digital campaigning

IG Metall is increasingly using digital media and providing opportunities for its member affiliates to digitalise. IG Metall is active on Twitter (17,000 followers), Facebook (71,559 followers), Instagram (12,900 followers) and LinkedIn (2,300 followers). IG Metall is also partnering with other unions to create a digital platform for fairer crowd work (Case Study 7) and has supported FairTube global union to unionise. Although not directly related to digitalisation, amid the COVID-19 pandemic in Germany, IG Metall recommended negotiating for a four-day workweek to help protect jobs from the coronavirus crisis and structural change in the automobile industry¹⁵.

IG Metall app

IG Metall has also recently developed a mobile app, which provides members and interested parties with the latest information and resources on demand. Specific features include:

- News, advice and information about the COVID-19 pandemic
- Current information on collective bargaining in the ticker
- Overview of the current tariff charges
- Interesting facts and advice about the world of work
- Strike money calculator and application
- Contact details of all IG Metall branches, district managements and training centres
- Membership questions and answers
- Access to other online services

¹⁴ <https://www.igmetall.de/>

¹⁵ <https://www.reuters.com/article/us-germany-labour/german-union-ig-metall-backs-four-day-week-to-save-jobs-idUSKCN25B0FG?il=0>

Platform Cooperative Movements

Unions are also increasingly involved in the platform cooperative movement (Conaty et al., 2018). These include more traditional unions such as mainstream, long-standing unions and labour market intermediaries and alternative forms including union-affiliated guilds and worker-led platform cooperatives (Johnston & Land-Kazlauskas, 2018).

While worker or union-led cooperatives in the platform economy are less well established at present, there are signs that such traditional-alternative partnerships can serve the collective interests of the platform workers (Vandaele, 2018). The shift to the platform economy has therefore created the need for new forms of collective representation and voice to mitigate the risks faced by platform workers, including weakened worker rights and benefits (Vandaele, 2018). This has led to some unions within Europe spearheading the organising of gig and platform workers. As shown in Case Study 7 below, IG Metall worked with three other established unions in Europe, the Austrian Chamber of Labour, the Austrian Trade Union Confederation, and the Swedish white-collar union Unionen to develop a new review-based platform called FairCrowd.work to gather data and feedback from gig and platform workers on their experience of using specific platforms, such as Amazon Turk, Upwork, Prolific, among others.

Case Study 7: Fair Crowd Work

Fair Crowd Work is a global platform that collects data about crowd, platform and app-based work from the perspectives of workers. Fair Crowd Work was founded in 2016 by IG Metall, the Austrian Chamber of Labor, the Austrian Trade Union Confederation, and the Swedish white-collar union Unionen.

Purpose/key activities

Fair Crowd Work collects information about crowd work, app-based work, and other "platform-based work" from the perspectives of workers and unions. Focuses on platform reviews from verified crowd/platform users through surveys (E.g. Amazon Turk, Upwork, Prolific) and provides union information and advice for workers, including a free union hotline.

Use of digital technology

FairCrowd work is primarily a web-based review platform, however, it has a large following on Facebook (56,766 followers), Twitter (20,400 followers), Instagram (1,006 followers) and LinkedIn (2,048 followers).

Appeal

Fair Crowd Work is unique as they collect information about crowd work, app-based work, and other "platform-based work" from the perspective of workers and unions. The platform empowers crowd workers by allowing them to rate the working conditions of the online labour platforms they have worked on. This data is freely available to the public. It is also transnational and provides important information to crowd workers on their rights to fair pay, contract law and self-employment, and direct them to local unions that can represent them.



Campaign-Based Organising

Alongside these initiatives, another key shift in organising that has been enabled by digital technology and the Internet is the rise of campaign-based organising. As shown in Table 2, some of these platforms do not operate as formal unions but instead focus on providing tools and visibility for individuals or organisations to embark on a campaign-based organisation.

While many such organisations are based in the US, this model of organising has global relevance and the potential to transcend national boundaries. Key initiatives include the development of resources and how-to guides are also provided to organisers to lead to more successful campaign-based organising, as well as the use of digital technologies and social media to create visibility on certain issues.

Table 2. Examples of Campaign-Based Digital Organising Platforms

Name	Country	Founded	Affiliations	Sector	How they organise	Social media use*	
Coworker.org	US	2013	Non-union campaign platform	Retail, hospitality, health care, rideshare	Campaigns, E-newsletters, Mobile app	9,580 7,565	1,096 173
Campaign to Organize Digital Workers (CODE-CWA)	US	2020	Non-union campaign platform affiliated with CWA	Technology, gaming and digital	Campaigns, E-newsletters	6,460	
Alphabet Workers Union	US	2021	Campaign to Organize Digital Workers (CODE-CWA). Solidarity union	Technology	Web-based	311 33,500	1,900
Medium Workers Union	US	2021	Campaign to Organize Digital Workers (CODE-CWA). Unionised with CWA	Digital, editorial, journalists, writers	Web-based	921	
Gig Workers Rising	US	2018	Not yet unionised	Rideshare gig workers	Web-based, Mobile App	5,067 14,300	5,081 2,724
Rideshare Drivers United	US	2017	Not yet unionised	Rideshare gig workers	Web-based, YouTube	7,505 4,771	618
Digital Union (Generator)	UK	2015	Generator European Union	Digital and Tech Sector	Web-based	365 7,266	958 671
UnionBase	US	2014	Progressive Workers' Union. Links to 30,000 Union Profiles	Labour movement social networking platform	Web-based, Interactive digital platform	1,646 696	1,119 74
FairTube (YouTubers Union)	Germany	2017	IG Metall, YouTubers Union	YouTube content creators	Web-based, YouTube	27,906 2,798	507 30
FairCrowd Work	Europe	2016	IG Metall, Austrian Chamber of Labour, Austrian Trade Union Confederation, Unionen	Online/crowd platform workers	Web-based		

*Number of followers (as of 20 March 2021)

Finally, we present two case studies of campaign-based organising platforms, the Campaign to Organize Digital Workers (CODE-CWA) and CoWorker.org. Both are based in the US and are having rapid success in organising workers.

Case Study 8: Campaign to Organize Digital Workers (CODE-CWA)

The Campaign to Organize Digital Employees (CODE-CWA) is a network of worker-organisers working to build a collective voice in the technology, gaming and digital industries in the United States and Canada. Launched in 2020 by the Communication Workers of America (CWA), CODE-CWA is a new initiative to support worker organisation.

Purpose/key activities

CODE-CWA provides resources and support to assist workers with organising. This includes a regular digital newsletter and other resources, support, events on training to help support workers with organising.

"We use our collective strength to improve conditions for temp, vendor, and contractor workers; to fight against the unethical use of our labour; to end hiring, wage, and retention discrimination; and to ensure that our work is a benefit to our society, not a burden"

Key campaigns

Since its establishment in 2020, CODE-CWA has had a significant impact on organising workers from different technology and digital industries within a very short time frame. For example, CODE-CWA has had success in organising Glitch staff to unionise with CWA in early 2020. In January 2021, CODE-CWA also supported the organising of Alphabet workers (the parent company of Google) with a solidarity union. Alphabet Workers union has grown rapidly, with more than 800 members to date and a large social media following. The union aims to push for change, without traditional collective bargaining rights by promoting worker participation, conditions, rights and solidarity.

Appeal

The campaign educates and advocates on the rights to organise, and provides digital resources, training and access to experienced organisers to help new organising efforts. Successful organising is also showcased and marketed on the platform, with newsletters also being published fortnightly to galvanise support for new organising efforts. The campaign is also appealing because it is targeting underrepresented workers in the tech, game and digital industries in the United States and Canada.

Case Study 9: Coworker.org

Coworker.org is a global peer-based digital organising platform for engaging in workplace advocacy. Founded in 2013, Coworker.org is a non-profit sponsored by the New Venture Fund. While operating globally, Coworker.org is predominantly based in the US.

Purpose/key activities

Individual workers can start a petition from any industry, although key sectors currently represented include Retail, Hospitality, Health care workers, Gig workers (e.g. rideshare platforms) and Technology.

How they work

Coworker.org is a campaign-based organisation that provides a platform for individuals or groups of employees to launch and join campaigns to improve their workplace. Along with helping to start a campaign, Coworker.org also supports workers through education and training, strategic support, research, data analysis, and advocacy tools.

Key campaigns

- Hosting and promoting workplace petition campaigns.
- Prototyping ideas for creating influence in companies and industries.
- Research and advocacy/campaigns on working conditions (e.g. Rehire before New Hires! and Data analysis of Shipt (grocery app) “Black-Box” algorithm).

Use of digital media

Coworker.org is a web-based platform, however, the organisation is highly active on most social media platforms including Facebook (9,581 followers) Twitter (7,565 followers), Instagram (1,096 followers) and LinkedIn (173 followers).

Appeal

The strongest appeal of the platform is its provision of training and support for workers who would like to organise and take action in their workplace or industry. The platform provides access to advocacy experts and experienced organisers who support the organising effort with advisory on strategy, training, research, data analysis and a range of advocacy tools. The campaigns created on the platform is also globally accessible and open to members of the public who are not directly affiliated with the workplace or industry involved.

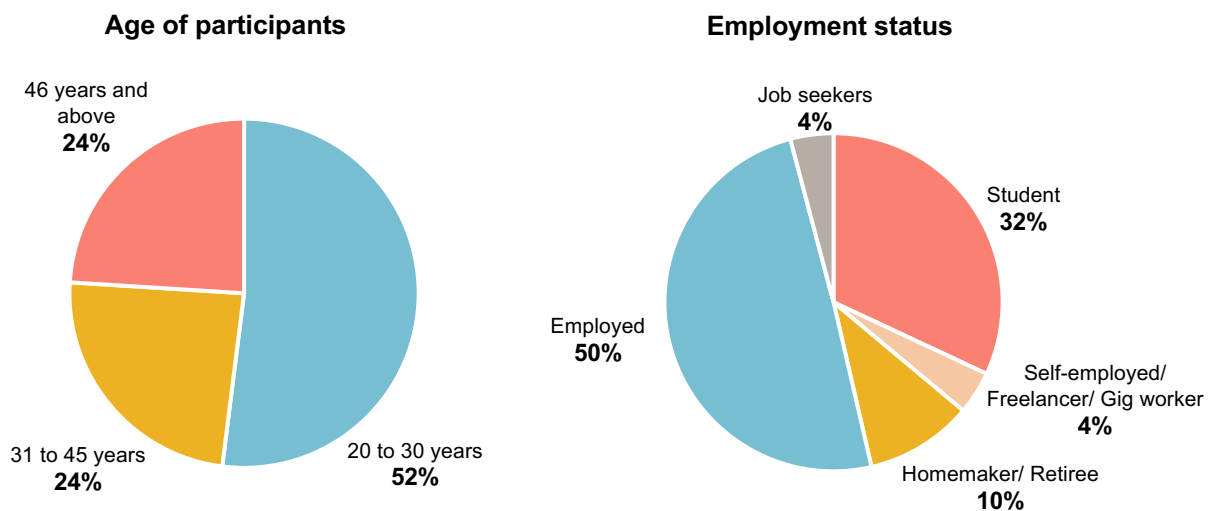


Chapter 3: Workshop Methodology

Participants

48 participants participated in two in-person workshop sessions conducted in November 2020 at SUTD. The profiles of the participants represented a diversity of life stages and experience. We had a 42% female representation of participants and a mean age of 38. Employed individuals formed the majority (48%) of our participants followed by students (31%).

Figure 1. Age and Employment Status of Participants



Our participants also included a larger proportion of individuals with no prior experience of being organised in the work context to facilitate the ideation process in the research. Thus, three in four participants were not union members. Participants who were union members were on average older (mean age = 46) than those who were non-union members (mean age = 35).

As the research focuses on the potential use of digital technologies for organising workers, we measured the level of technology affinity among our participants. The mean score on the technology affinity scale was 4.06 (sd = 0.76) on a six-point Likert scale suggesting moderate to high levels of technology affinity¹⁶ among our participants. There were no significant differences in the levels of technology affinity across age groups.

We asked participants about their usage of common categories of digital tools and found that nearly all participants used messaging apps (e.g. WhatsApp, WeChat, Telegram) and social media and networking digital tools (e.g. Facebook, Instagram, Twitter, YouTube). Professional networking tools (e.g. LinkedIn) were more commonly used by those aged 45 and younger but job search websites (e.g. MyCareersFuture, JobStreet, Glassdoor) were used by half our participants, across all age groups.

¹⁶ Technology affinity is one's personal resource for coping with technology and measured by one's tendency to actively engage in intensive technology interactions (Franke, Attig & Wessel, 2019).

Table 3. Digital Technologies Used by Participants

	By age			
	Total (n = 48)	21-30 years (n = 22)	31-45 years (n = 13)	46 years and above (n = 13)
Messaging apps (e.g. WhatsApp, WeChat, Telegram)	98%	100%	100%	92%
Social media and networking (e.g. Facebook, Instagram, Twitter, YouTube)	98%	100%	100%	92%
Professional networking tools (e.g. LinkedIn)	60%	82%	54%	31%
Reward programmes and apps (e.g. CapitaStar, Landlease Plus)	38%	19%	69%	39%
Online shopping platforms (e.g. Shopee, Lazada, Amazon)	81%	96%	85%	54%
Online forums (e.g. HardwareZone)	27%	27%	46%	8%
Job search websites (e.g. MyCareersFuture, JobStreet, Glassdoor)	50%	50%	54%	46%

Note: Full results available in Appendix A as Table A.1.

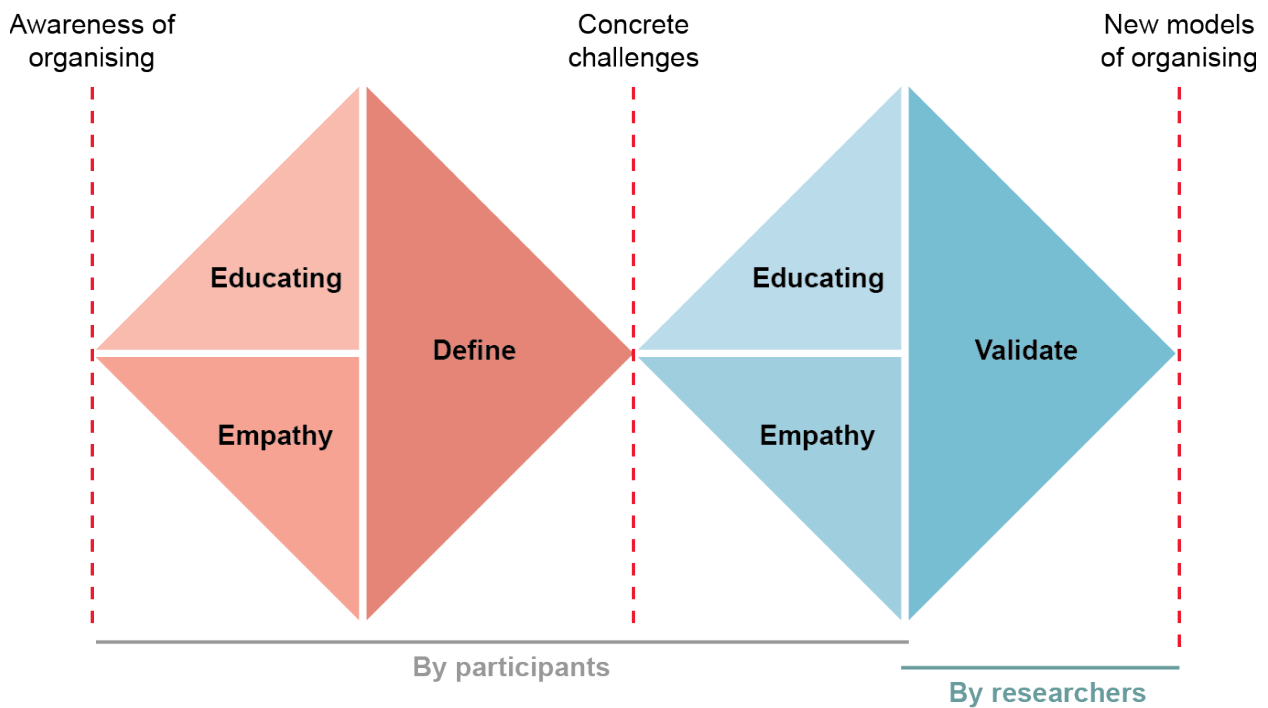
Design Thinking Workshop

In line with prevailing COVID-19 measures for the safe conduct of in-person research, participants completed these workshops in groups of three to four participants.

We used the five-stage Design Thinking model proposed by Hasso-Plattner Institute of Design at Stanford (Leifer et al., 2014) to inform the methodology used in the Design Hackathon. Design Thinking was chosen as it has a low implementation cost, a low barrier to entry requiring minimal training and, in the context of the COVID-19 pandemic, the ability to manage the risks associated with in-person research methodologies.

Additionally, it is a collaborative methodology, which allows us to bring together individuals with different backgrounds and life experiences to work on a common challenge. This approach offers a flexible model which focuses on empathising, defining, ideating, prototyping, and testing. For this research, the main aim was to harness citizen participation in defining the challenges of organising and the ideation of using digital tools for organising, the model was adapted as in Figure 2.

Figure 2. Design Thinking Double Diamond Scheme Applied to Understanding Opportunities for Using Digital Tools in Organising.



Educating

As the concept of organising may not be familiar to participants, the design thinking process began with educating, specifically sharing what organising means and examples of organising in the local and overseas contexts. Participants were also given a brief overview of the Labour Movement and how workers are currently being organised in Singapore to afford them a better appreciation of the status quo of organising in Singapore.

Empathising

Next, in their groups of three or four, participants interviewed one another to empathise with their group mates' personal experience of being organised and their expectations when being organised for work-related purposes. This step calls for participants to empathise with their group mates and aims to remove personal assumptions to allow participants to observe the challenge of organising through the perspectives of other (future) workers. Each participant took personal notes for each interview to aid them in the next stage of the workshop.

Defining

Based on the interviews, participants were given time to reflect and consolidate what they had discovered about the challenges of organising workers for work-related purposes shared by their group mates. They then proceeded to define and articulate opportunities that they identified for organising workers better. To guide participants in this process, a series of reflective questions were asked, and the crafting of opportunity statements was scaffolded in the form of 'How might we (verb) (noun)?' statements.

Ideating

Participants then proceeded to ideate on how their identified opportunities can be addressed, focusing on the potential use of digital technologies. In this first part of this ideation phase, participants were given the space and liberty to brainstorm. Towards the end of this phase, they would then reflect on the potential impact and uniqueness of their ideas in preparation for the next phase.

Prototyping

With the information obtained during the empathising, defining and ideating phases, it was possible to view the challenge of organising workers from alternative perspectives and to design new and appropriate solutions. Thus, participants came together as a group to learn about one another's ideas and thereafter, design a solution for better organising of workers with the use of digital technologies. The group would then scribe or detail their solutions with explanations of how they envision them leading to better organising of workers. The conclusion of the prototyping phase marked the end of the workshop for participants.

Validation

In this final phase in the Design Thinking process, we validated the solutions proposed by participants for better organising of workers with the use of digital technologies. The findings are reported in the next two chapters.



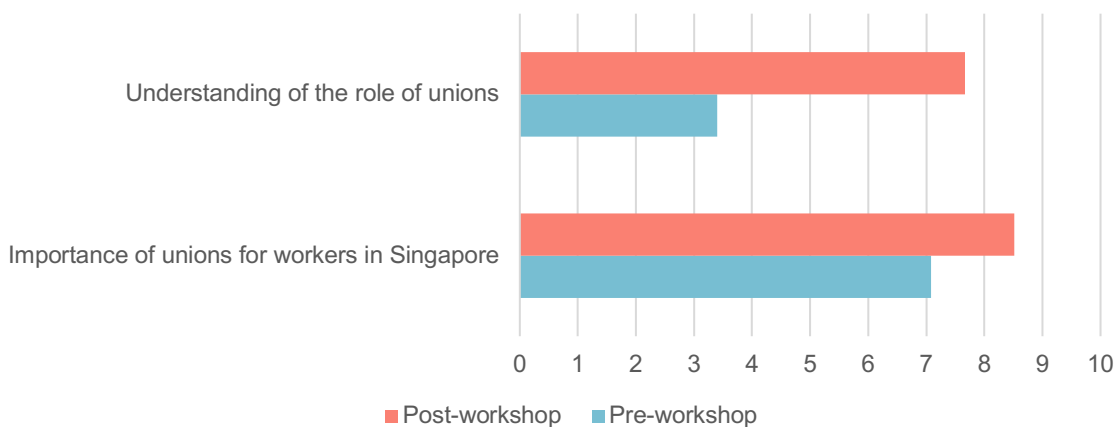
Chapter 4: Workshop Findings

Understanding and Perceptions of Unions in Singapore

Across age groups, we found that the understanding of unions was significantly higher among those older than 45 years old. The level of understanding of unions and the importance placed on unions for workers in Singapore increased at the end of the workshop.

Additionally, we found that full-time employees and students reported significantly higher levels of perceived importance of unions while job-seekers and self-employed participants reported significantly lower levels of perceived importance of unions. The key results for this section are presented in Figure 3.

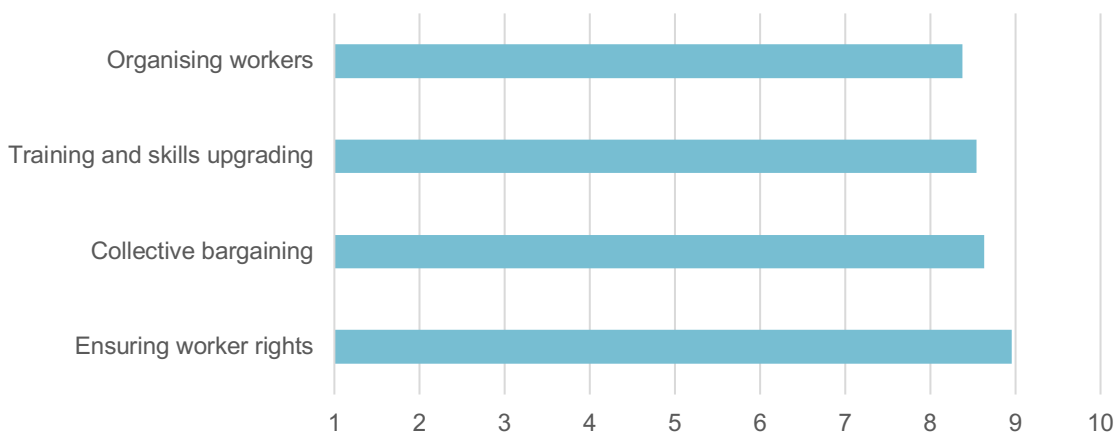
Figure 3. Understanding and Perception of Unions.



Note: Responses were on a 11-point Likert scale ranging from 0 'Do not understand/Not important' to 10 'Very good understanding/Very important'.

We explored the four key roles of unions in Singapore and solicited our participants' opinions on their perceived importance of unions in these areas. In general, all participants placed high importance on all four areas: 1) organising workers, 2) training and skills upgrading, 3) collective bargaining, and 4) ensuring workers' rights. The key results here are presented in Figure 4 with the full results in Table A.3 in Appendix A.

Figure 4. Reported Importance of the Different Roles of Unions in Singapore.



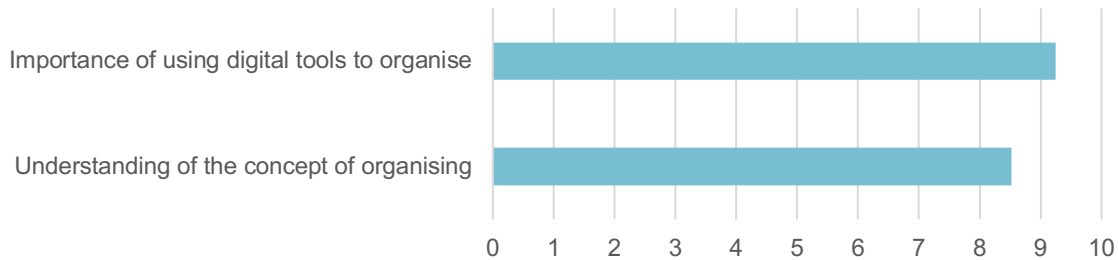
Note: Responses were on a 10-point Likert scale ranging from 1 'Not important' to 10 'Very important'.

Understanding and Opinions of Organising of Workers

After the workshop, the level of understanding of what organising workers mean improved and was high across all groups of participants.

Further, following their involvement in the workshop and understanding the challenges and needs of their group mates in terms of organising, they shared that it was very important to use digital tools to organise workers. This was observed across all groups. The key results here are presented in Figure 5 with the full results in Table A.4 in Appendix A.

Figure 5. Understanding of Organising of Workers after the Workshop.



Note: Responses were on a 11-point Likert scale ranging from 0 'Not important/Do not understand' to 10 'Very important/Very good understanding'.

Finally, participants shared what they thought were opportunities for organising workers better. In Table 4, we present the opportunities shared as well as the ideas proposed for meeting these opportunities. These opportunities and ideas shared by participants during the workshop were used to inform the next phase of the research where propose approaches and recommendations for digital organising by the Labour Movement.

Table 4. Opportunities and Ideas for Organising Workers Better Shared During the Workshop

Opportunities	Ideas
Enhance workers' awareness of and participation in unions, find ways to expand outreach and advertise	<ul style="list-style-type: none"> • Enhance social awareness of available unions/groups • Make use of new technologies to connect and advertise — e.g. More roadshows for advertisements through digital platforms (e.g. Zoom)
Improve the diversity of member profiles, expand the scope of inclusion, attend to the needs of targeted groups of participants	<ul style="list-style-type: none"> • Increase motivation for joining unions/groups • Attract like-minded people, allow people to congregate with a common goal • Encourage each other to get organised • Improve the diversity of member profiles — encourage the participation of different interest groups, reach out to specific groups of target audiences • Create access to different age group, especially the older generation • Provide ways to sign up for groups who do not have digital access • Support workers who feel left out — e.g. for retiree/elderly, create learning opportunities to pick up digital skills, close the generation gap • Increase protection for freelancers
Promote interactivity and sharing when organising	<ul style="list-style-type: none"> • Come up with more and better activities for the organisation and disseminate information about these initiatives/activities/programmes • Share relevant and timely information with workers, provide timely assistance • Collect and respond to feedback from participants • Incentivise knowledge sharing - allow members to learn from each other, share innovative ideas and suggestions, encourage diversity of thought, encourage selfless contributions and prevent individualism • Improve the methods of communication and reduce conflicts in interactions
Enhance the use of existing digital technologies/platforms for organising	<ul style="list-style-type: none"> • Move activities online and attract potential members through digitally advertising on online platforms (e.g. Facebook, Zoom) • Use social media platforms (e.g. Facebook, Instagram) for organising — sharing and gathering information, communicate effectively with workers, creating company presence, address work-related issues
Design more intuitive and accessible technologies/platforms for organising	<ul style="list-style-type: none"> • Design a platform with easy to locate information/help/functions • Design a platform that can share and receive information easily • Design a platform accessible for all, including non-tech-savvy • Improve platform migration

Opportunities	Ideas
Enhance advantages/benefits/welfare of being organised/joining unions	<ul style="list-style-type: none"> • More welfare involvement — e.g. enable people to shop with ease on digital platforms • Increase worker's autonomy in unions • Provide timely assistance to workers, help create new ideas and solve problems • Improve openness to management • Support workers who feel left out — e.g. for retiree/elderly, create learning opportunities to pick up digital skills, close up the generation gap • Increase protection for freelancers
Cultivate group culture, commitment and identity	<ul style="list-style-type: none"> • Improve groupings, harness collective interest • Raise awareness of the group • Improve loyalty and commitment
Explore a different model of organising and unions to reach out to a wider population	<ul style="list-style-type: none"> • Change the perception of unions • Increase interactivity — make unions engaging
Enhanced collaboration with non-union, non-governmental organisations, align the goals of unions and organisations	<ul style="list-style-type: none"> • Benefit workers in organisation groups • Align the goals of unions vs. organisations • Manage expectations of the organisation • Respond to attempts by organisations that undermine worker interest • Work with convening bodies for different professions to bring their communities onboard and adding legitimacy to the organising



Chapter 5: The 4As Approach to Digital Organising — Guide to Individuals

Building on the findings in Chapter 4, we propose the 4As Approach to Digital Organising and have developed a digital organising toolkit to help identify and select appropriate digital tools for different stages and to address challenges of organising.

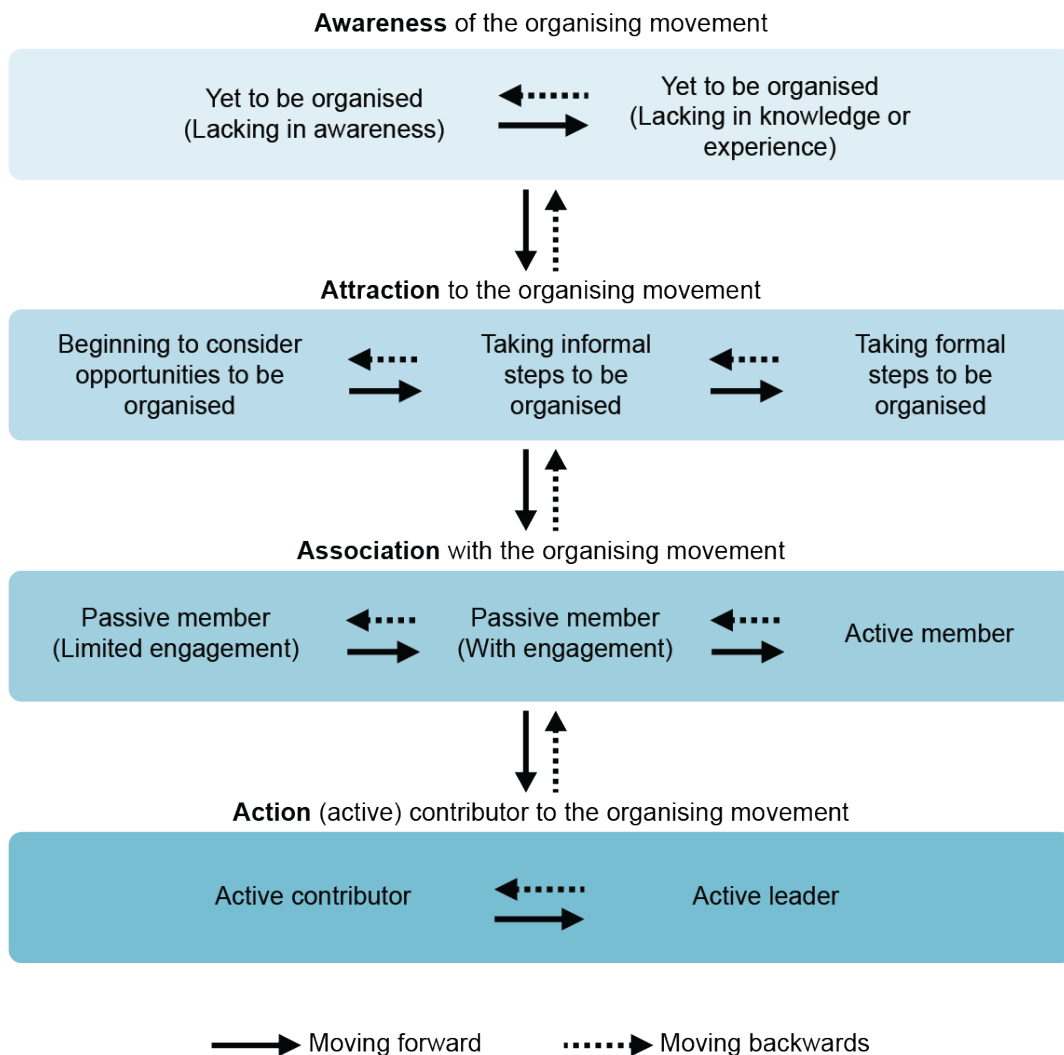
The 4As Approach to Digital Organising is a framework detailing how individuals and organisers can approach organising through the use of digital tools. There are two parts to this 4As approach, one detailing the organising journey of the individual and another focusing on the organising journey of organisers.

This chapter focuses on the first part of this approach where we present a guide to understanding individuals as they participate in organising. We detail the stages that individuals are likely to go through when they begin to be involved in organising and eventually when they decide to join associations, communities, or unions either as participating members or leaders actively involved in the organising of others. The Transtheoretical Model of Change (DiClemente & Prochaska, 1998; Prochaska & DiClemente, 1983) provides the theoretical foundation for the different stages of change and decision-making during this journey, from pre-contemplating to contemplating joining an association, community, or union, to taking action to join and become an active contributor to organising.

In the overview of the guide to individuals in Figure 6, we document the four stages in the organising journey that comprise 4As: Awareness, Attraction, Association and Action. There are also different levels within each stage, characterised by the level of commitment and engagement in organising. Individuals can flexibly move back-and-forth within each stage and progress forward or regress in stages as they increase their involvement with the organising movements.

Figure 6: The 4As Approach to Digital Organising — Guide to Individuals

Guide to Individual Organising Journeys



We explain the *4As Approach to Digital Organising — Guide to Individuals* in detail in Table 5 and list the common challenges of organising shared by our workshop participants, which included association, community and union members. Further, we asked the question: What role should technology play during this stage of organising?

Organisers can use Table 5 to identify the stages and status of their potential or current members to select appropriate digital tools for engaging different groups of members at different stages. For instance, organisers could consider how to enhance the *Awareness* of individuals and *Attract* them to the organising movements or how they should strengthen members' *Association* with the movement to encourage them to be *Active* members.

Table 5. A Detailed Explanation of the 4As Approach to Digital Organising — Guide to Individuals

Stage	Status	Description	Common challenges encountered for organising	Role technology plays*
Awareness	Yet to be organised — Lacking awareness	Potential members/targeted individuals do not have exposure to organising, even though they might have been organised before (e.g. in their social life such as hobby groups)	<ul style="list-style-type: none"> Limited exposure and awareness of organising and the existence of the Labour Movement 	<ul style="list-style-type: none"> Raise awareness among the general public
	Yet to be organised — Lacking in knowledge or experience	Potential members/targeted individuals may be aware of the existence of organising around them but lack knowledge or experience of what it means and the benefits	<ul style="list-style-type: none"> A misconception or lack of understanding of the Labour Movement Misconception about who can join the Labour Movement and be represented (e.g. PME might have the misconception that they are not allowed to join or be assisted by the Labour Movement) 	<ul style="list-style-type: none"> Enhance interests and motivations for being organised
Attraction	Beginning to consider opportunities to be organised	Potential members/targeted individuals are gaining interest and growing in motivation to be organised while identifying potential organising movements to be part of	<ul style="list-style-type: none"> Identifying individuals or groups who might be in this stage and engaging them Helping workers understand the value proposition to join the Labour Movement Finding a cause/belief that individuals can relate to when being organised 	<ul style="list-style-type: none"> Encourage participation of non-members in organising initiatives and events Attract and facilitate non-members to register for membership
	Taking informal steps to be organised	While considering whether to be formally organised, potential members/targeted individuals may already be participating in the activities (e.g. as non-member participants/volunteers)	<ul style="list-style-type: none"> Attracting individuals to consider formally joining the Labour Movement, especially if there are alternatives to being involved in the movement without being formally part of it Getting individuals to consider the purpose and mission of organising rather than the transactional privileges gained when being formally organised 	<ul style="list-style-type: none"> Facilitate non-members to provide feedback Facilitate organising movements to respond to non-members' feedback and provide support
	Taking formal steps to be organised	Potential members/targeted individuals have decided to be formally organised and have taken steps to register or sign up		<ul style="list-style-type: none"> Facilitate non-members to interact with others (members and non-members) Provide easy means and nudges to sign up for membership

Stage	Status	Description	Common challenges encountered for organising	Role technology plays*
Association	Passive member — limited engagement	Limited participation in events and initiatives that are part of the organising movement, but maybe using services and privileges	<ul style="list-style-type: none"> Engaging members who may not have direct interactions with the leaders in the Labour Movement Encouraging participation in events and initiatives 	<ul style="list-style-type: none"> Encourage participation of members in initiatives, events and services
	Passive member — with engagement	Occasionally participating in events and initiatives that are part of the organising movement	<ul style="list-style-type: none"> Sharing the services and privileges afforded to members Encouraging passive members to continue to remain in the movement to stem attrition 	<ul style="list-style-type: none"> Facilitate passive members to provide feedback Facilitate organising movements to respond to passive members' feedback and provide support Facilitate passive members to interact with organising movement and/or other members
	Active member	Actively participating in events and initiatives that are part of the organising movement	<ul style="list-style-type: none"> Identifying and mentoring members with the potential and willingness to be contributors to events and initiatives in the Labour Movement Identifying a worthy cause for members to step forward to contribute towards 	<ul style="list-style-type: none"> Facilitate interactions among members and cultivate group commitment Facilitate active members to provide feedback and facilitate organising movements to respond to their feedback Encourage active members to contribute and take initiative

Stage	Status	Description	Common challenges encountered for organising	Role technology plays*
Action	Active contributor	Contributors of events and initiatives that are part of the organising movement	<ul style="list-style-type: none"> Identifying and mentoring members with the potential and willingness to be more involved in leading the Labour Movement Ensuring the wellbeing of active contributors requires commitment, time and energy Identifying potential signs of burnout and providing adequate support for the contributors 	<ul style="list-style-type: none"> Facilitate interactions among active contributors and between active contributors and leaders of organising movements Encourage active contributors to take a leading role in organising movements
	Active leader	Leaders of the organising movement	<ul style="list-style-type: none"> Ensuring the wellbeing of active leaders requires commitment, time and energy Identifying potential signs of burnout and providing adequate support for the leaders to enable them to lead the Labour Movement e.g. leadership training, professional coaching Leadership renewal and succession planning 	<ul style="list-style-type: none"> Strategic use of a constellation of technologies to augment the work of leaders to help them organise more efficiently and effectively

*Note: Refer to Table 7 for more details.



Digital Organising Toolkit

To operationalise the 4As Approach to Digital Organising, we developed the following toolkit to help organisers quickly identify and assess the digital tools they can adopt. A total of 20 digital tools, including social media platforms (e.g. Facebook, LinkedIn), communication and instant messaging apps (e.g. WhatsApp, Telegram), video sharing and live streaming platforms (e.g. TikTok, Instagram), video conferencing and webinar services (e.g. Zoom, Microsoft Teams), official website, email etc. are rated in terms of key technological features and potential applications for organising (refer to Appendix B for the full list of digital tools).

In Table 6, we describe the eight key technological features that are important to consider when assessing the suitability of a digital tool for organising. In Table 7, we illustrate how digital tools can be identified to address the challenges of organising presented in the 4As Approach (see Table 5 for details).

The recommendations provided in Table 7 are non-exhaustive as appropriate organising practices vary across platforms, contexts, audiences and continually evolve with the emergence of new digital tools. Organisers need to assess a variety of conditions including their resource base, purposes of organising, the composition of their audiences on different platforms, profiles of targeted participants (e.g. age, education, occupation, industry) to design appropriate and optimal digital organising strategies.

Table 6. Technological Features of Existing Digital Tools

Feature	Description	Suitable Digital Tools*
Interactivity	<ul style="list-style-type: none"> The ability for users to interact with one another and organising bodies The presence of different modes of interaction on the digital tool 	<ul style="list-style-type: none"> Chatbots Communication and instant messaging apps (e.g. WhatsApp/Telegram) Video conferencing and webinar services (e.g. Zoom)
Distributed Content Production	<ul style="list-style-type: none"> The degree to which contents on the digital tool are generated and reproduced (e.g. edit, repost, delete) by distributed users instead of by certain groups of users and administrative bodies (e.g. union staff) 	<ul style="list-style-type: none"> Social media platforms (e.g. Facebook) Communication and instant messaging apps (e.g. WhatsApp/Telegram) Online discussion forums
Network Expansion	<ul style="list-style-type: none"> The ability for users to establish new relationships and broaden social networks with the help of the digital tool 	<ul style="list-style-type: none"> Social media platforms (e.g. Facebook/LinkedIn) Video sharing and live streaming platforms (e.g. TikTok)
Network Strengthening	<ul style="list-style-type: none"> The ability for users to strengthen existing relationships and forge deeper bonds with the help of the digital tool 	<ul style="list-style-type: none"> Communication and instant messaging apps (e.g. WhatsApp) Social media platforms (e.g. Facebook)

Feature	Description	Suitable Digital Tools*
Information Richness	<ul style="list-style-type: none"> The ability to host a wide range of information in large quantities, diverse formats (text, audio, video etc.) and topics 	<ul style="list-style-type: none"> Social media platforms (e.g. Facebook) Communication and instant messaging apps (e.g. WhatsApp) Video sharing and live streaming platforms (e.g. YouTube)
Information Retrieval	<ul style="list-style-type: none"> The degree to which contents on the digital tool are archived and stored (in its original form) for an indefinite time after relevant conversations or activities end The degree to which a certain piece of content can be easily searched or pinpointed 	<ul style="list-style-type: none"> Official website Email Communication and instant messaging apps (e.g. WhatsApp)
Appeal to Wide Range of Audiences	<ul style="list-style-type: none"> The ability for users to access a wide range of audiences (in terms of number of active users and diversity of user profiles) via the digital tool 	<ul style="list-style-type: none"> Social media platforms (e.g. Facebook/ LinkedIn) Video sharing and live streaming platforms (e.g. TikTok)
Public Accessibility	<ul style="list-style-type: none"> The presence/absence of barriers to enter the digital tool or certain groups on it The degree to which the digital tool and contents hosted by the digital tool are publicly accessible or are paywalled 	<ul style="list-style-type: none"> Social media platforms (e.g. Facebook) Video sharing and live streaming platforms (e.g. TikTok) Official website Event management services (e.g. Eventbrite)

*Note: As of July 2021. The full assessment of existing digital tools in terms of the above technological features are available in Appendix B.

Table 7. Potential Applications of Existing Digital Tools for Organising

Intended Purpose	Description	Potential Digital Tools*	Example(s) of Applying Digital Tools for Organising
Enhance Awareness	<ul style="list-style-type: none"> • Raise awareness among the general public about potential opportunities for being organised through sharing basic and introductory information about organising and the Labour Movement • Enhance social reputation and profile of group/organisation, make them visible to the general public (especially people lacking knowledge about organising) 	<ul style="list-style-type: none"> • Social media platforms (e.g. Facebook, Instagram) • Video sharing and live streaming platforms (e.g. YouTube, TikTok) 	<ul style="list-style-type: none"> • Disseminate short introductory videos about organising, Labour Movements etc. • Circulate attractive posts and tags about organising initiatives and outstanding members • Create online activities accessible by all users (e.g. short award-winning quiz/survey about organising, photo competition, video challenge etc)
Enhance Interests and Motivations	<ul style="list-style-type: none"> • Enhance individuals' understanding of and interests in being organised through sharing information about the Labour Movement, the vision and initiatives of organising movements, who can join etc • Attract non-members to consider joining the group/organisation through sharing information about the services and benefits that the group/organisation can provide to its members 	<ul style="list-style-type: none"> • Video sharing and live streaming platforms (e.g. YouTube, TikTok) • Video conferencing and webinar services (e.g. Zoom, Clubhouse) 	<ul style="list-style-type: none"> • Design customised introductory posters and videos for different targeted groups (e.g. new graduates), and post on the group/organisation's official account across various digital platforms • Organise free webinars to introduce initiatives for groups/organisations and potential benefits of joining
Encourage Participation of Non-Members	<ul style="list-style-type: none"> • Attract and encourage non-members to participate in initiatives, events and movements organised by the group/organisation through widely disseminating information about activities across online platforms • Provide easy means to register for and participate in these initiatives and events • Provide easy means to sign up for membership, and provide information and assistance for onboarding 	<ul style="list-style-type: none"> • Social media platforms (e.g. Facebook, Instagram) • Video sharing and live streaming platforms (e.g. YouTube, TikTok) 	<ul style="list-style-type: none"> • Circulate advertising posters and videos of organising initiatives and events • Share interesting photos, videos and participant feedback about past events to attract new participants • Include QR codes in social media posts that lead potential members to official website, registration page and other information/resources

Intended Purpose	Description	Potential Digital Tools*	Example(s) of Applying Digital Tools for Organising
Encourage Participation of Members	<ul style="list-style-type: none"> Facilitate members to become aware of and make use of services and privileges offered by groups/organisations through sending targeted information to different groups of members Encourage members to participate in initiatives and events of groups/organisations through regular updating of new event information via member-only approaches (e.g. mailing list and chat groups exclusive to members) Enable and facilitate relationship building between members and groups/organisations 	<ul style="list-style-type: none"> Communication and instant messaging apps (e.g. WhatsApp, Google Hangouts) Video conferencing and webinar services (e.g. Zoom, Microsoft Teams) Email 	<ul style="list-style-type: none"> Create mailing lists and chat groups exclusively for members to share information about new initiatives and services available for members Create and share tutorial videos introducing the privileges, services and resources available for members and providing step-by-step guides on how to access and use these resources
Facilitate Feedback to Group/ Organisation	<ul style="list-style-type: none"> Provide diverse and easy approaches for all users (both members and non-members) to connect with the group/ organisation and encourage them to ask questions and provide feedback Strengthen connections between members and group/ organisation leaders, create a feedback loop to better understand members' needs and in turn to enhance the services and programmes for the members 	<ul style="list-style-type: none"> Communication and instant messaging apps (e.g. WhatsApp, Telegram) Video conferencing and webinar services (e.g. Zoom, Microsoft Teams) Email 	<ul style="list-style-type: none"> Create a chatbot hosted on popular communication and instant messaging apps for feedback gathering Set up 'virtual information desks' across all platforms that will direct feedback to the appropriate channels Organise virtual town halls using video conferencing and webinar services that are simultaneously broadcast live and available for viewing post-event

Intended Purpose	Description	Potential Digital Tools*	Example(s) of Applying Digital Tools for Organising
Respond to Feedback and Provide Support to Participants	<ul style="list-style-type: none"> • Provide diverse approaches for groups/organisations to respond to questions and comments from users (members and non-members), and offer customised suggestions and support • Allow the group/organisation leaders to understand the needs and concerns of non-members to develop strategies for attracting potential members • Allow the group/organisation leaders to understand the needs and challenges of existing members, to better safeguard member welfare and retain passive members 	<ul style="list-style-type: none"> • Communication and instant messaging apps (e.g. WhatsApp, Telegram) • Video conferencing and webinar services (e.g. Zoom, Skype) • Email 	<ul style="list-style-type: none"> • Use channels and group features on communication and instant messaging apps to allow participants to share, feedback and discuss • Organise dipstick polls on communication and instant messaging apps on rapidly developing issues to understand ground sentiments • Set up an online forum that individuals can interact, share and post, with experts on hand to provide customised/tailored solutions (e.g. suggestions on career development) when the opportunity arises
Facilitate Interactions and Group Identification Among Participants	<ul style="list-style-type: none"> • Establish and strengthen relationships and connections between non-members and members, thereby enhancing non-members' motivations for participation and enrolment • Establish and strengthen relationships and connections among members, allowing them to acquire information and support from the member community • Facilitate efficient communication and coordination of participants on events and other organising issues • Cultivate group commitment, identification and loyalty among participants/members 	<ul style="list-style-type: none"> • Communication and instant messaging apps (e.g. WhatsApp, Telegram) • Social media platforms (e.g. Facebook, Instagram) 	<ul style="list-style-type: none"> • Create issue- or event-based chat groups involving both members and non-members for task coordination, daily interactions and relationship building • Regular online team building activities (e.g. virtual games, reading groups, virtual lunch-time catch-ups) to strengthen relationships between members • Create digital badges for membership and affiliation with individual groups/organisations

Intended Purpose	Description	Potential Digital Tools*	Example(s) of Applying Digital Tools for Organising
Encourage Contributions, Initiatives and Leadership	<ul style="list-style-type: none"> • Identify and contact active members who show interest to contribute to and engage deeper in organising events and supporting other tasks in the group/organisation • Identify and contact active contributors who have capabilities and/or show enthusiasm to become leaders • Encourage members to seed ideas for new initiatives and support the implementation of these initiatives 	<ul style="list-style-type: none"> • Communication and instant messaging apps (e.g. WhatsApp, Telegram) • Video conferencing and webinar services (e.g. Zoom, Microsoft Teams) 	<ul style="list-style-type: none"> • Personalised recommendations of initiatives or opportunities through in an online digital 'marketplace' • Create digital working groups across groups/organisations for cross-fertilisation of ideas and sharing of resources and expertise • Create a digital portal/platform for individuals to submit ideas and be recognised for them

*Note: As of July 2021. The full assessment of existing digital tools in terms of potential applications for organising are available in Appendix B.

Chapter 6: The 4As Approach to Digital Organising — Guide for Organisers

Labour Movement 4.0 is a vision where digital tools are an integral part of organising, from outreach and engagement with members and non-members to having a digital presence that goes beyond informative websites to become user-friendly, useful, engaging and on-demand platforms that meet the needs of members and non-members. To achieve this vision, organisers need to transform and adopt digital tools and digital organising.

This chapter presents the second part of the 4As Approach to Digital Organising that focuses on providing a guide for organisers to understand and plan their digital organising. The extent to which organisers are using digital organising can be categorised into four groups according to their Awareness, Attraction, Association and Action (use) of digital tools to organise. Figure 7 illustrates the stages that organisers may be at with digital organising and we explain these stages in Table 8. It can thus serve as a self-calibration/self-assessment exercise for organisers. With greater adoption and utilisation of digital tools, organisers will progress to become more digitally-savvy and can cultivate an established digital presence as they use digital tools more effectively and consistently.

Figure 7: The 4As Approach to Digital Organising — Guide for Organisers

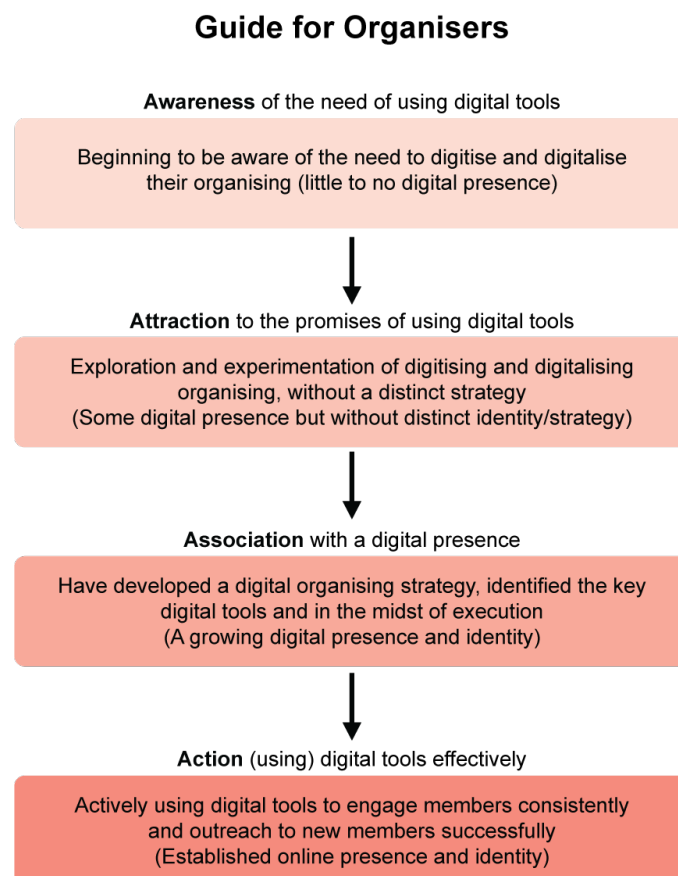


Table 8. A Detailed Explanation of the 4As Approach to Digital Organising for Organisers

Stage	Description	Digital status	Common challenges when digital organising	What should organisers do?
Awareness	Organisers have yet to or have just begun to become aware of the need to use digital tools for organising	<ul style="list-style-type: none"> Limited to or no use of digital tools for organising Limited or no digital presence 	<ul style="list-style-type: none"> Limited understanding of the potential applications of digital tools for organising Limited knowledge of the digital tools available Need is not evident. Members and potential members may not be technologically savvy 	<ul style="list-style-type: none"> Understand the digital tools available currently Learn how other organisers are using digital tools for organising Identify areas for improvement in their current organising approach to explore if digital tools could help
Attraction	Organisers are exploring and experimenting with different digital tools to organise. However, a clear strategy is lacking	<ul style="list-style-type: none"> Eclectic use of digital tools for organising Nascent digital presence without a coherent and distinct identity 	<ul style="list-style-type: none"> Incoherent approach towards experimenting with digital tools Lack of clarity about the purpose of using digital tools and the strategy Limited resources to acquire or subscribe to the digital tools 	<ul style="list-style-type: none"> Identify the digital tools that their members and potential members are using Increase literacy in the identified digital tools among organisers Develop a clear strategy for digital organising Seek grants for acquiring or subscribing to digital tool, or identify cost-appropriate digital tools

Stage	Description	Digital status	Common challenges when digital organising	What should organisers do?
Association	Organisers have developed a digital organising strategy and identified the key digital tools to help them in organising. They are also in the midst of expanding their use of digital tools	<ul style="list-style-type: none"> • Deliberate use of digital tools for organising • A growing digital presence with a clear identity 	<ul style="list-style-type: none"> • Growing a digital presence and clear identity • Increasing digital literacy among members • Sustaining digital engagement • Striking the balance between digital and non-digital organising 	<ul style="list-style-type: none"> • Create and curate content, engagements and events that facilitate digital organising • Pace the use of digital tools to ensure consistency • Continue outreach to existing members who are not digitally-engaged and to potential members to steer them towards digital engagement • Retain hybrid arrangements for key organising engagements, e.g. newsletter, roadshow
Action	Organisers are using digital tools to organise actively and effectively	<ul style="list-style-type: none"> • Active and effective use of digital tools for organising • Established digital presence and identity among members and non-members 	<ul style="list-style-type: none"> • Keeping abreast of technological developments and changing digital consumption patterns 	<ul style="list-style-type: none"> • Conduct an annual or biannual pulse-taking exercise to stay updated on digital tools that members are using • Continue to experiment with emerging digital tools



Chapter 7: Discussion

Finally, we integrate our findings from engaging members of the public with the lessons and insights gleaned from international case studies of digital organising in work and non-work contexts. We will also summarise how digital tools are increasingly used in organising workers and the implications for existing models of organising in the Labour Movement's context.

Despite the challenges of declining union membership, including difficulties in engaging employees in light of evolving worker profiles such as young, gig, platform, and freelance workers, we found that labour unions' use of digital technology opened up new opportunities for member engagement and renewal. Additionally, digital technologies are expanding the role of international and transnational networks, collectives, and campaigns that promote worker organising, thus enabling new capabilities and geographical reach. Together, these developments may help to mitigate the challenges facing workers today, such as increasing globalisation and the weakening of traditional forms of labour union representation and membership (Carneiro & Costa, 2022). This may in turn help the Labour Movement to galvanise new support and interest, and ensure their ongoing importance and relevance.

Digital Tools Are Part of Organising Workers Today

From both the case studies in Chapter 2 and the findings in Chapters 4 and 5, it is evident that digital tools are increasingly the norm for organising today. Even as some unions are experiencing a crisis with declining membership rates, organisational changes and the rise of the gig economy and precarious work, other unions have managed to thrive and continue to grow. While there may be many factors contributing to this difference, we observed that these thriving unions are largely those who have embraced digital technologies in their organising and can reinvent themselves to appeal to new groups of workers. Our engagements with participants also showed that there is a strong preference among workers to incorporate digital technologies when being organised.

The use of digital technologies, however, has to go beyond simple everyday technologies, such as Facebook, WhatsApp and Websites, that provide the means for information dissemination and communication. Today, it is necessary to strategically leverage a suite of digital technologies to proactively engage organised and unorganised workers across a range of contexts and services to keep labour movements and the value of being organised foremost in people's minds. This is especially crucial as individuals can now freely seek information and advice from many channels and sources in the porous and borderless online world. Nevertheless, the challenge of deciding what digital tools to use and with what motivations, and understanding how different tools can be synergised remain practical challenges. Hence, the 4As Approach to Digital Organising and digital toolkit presented in Chapters 5 and 6 are the first steps to aid organisers in deciding the *When*, *What*, *Why* and *How* of using digital tools to organise.

Digital and Issues-Based Organising

The proliferation of digital tools also signals an opportunity for rethinking existing organising models. From our case studies, we observed that it has led to ground-up, organic organising of workers using social media, especially in emerging industries and jobs such as gig economy work. This is underpinned by the lack of representation and formal organising, coupled with easy access to technology that can galvanise support among unorganised workers with relative ease and speed. Organising outside the purview of more traditional labour movements has also led to more spontaneous organising of collective actions and transnational organising. Besides, we have also identified in both our case studies and inputs from participants growing desires and a trend for ideology- and value-based organising. This is most clearly seen in the organising of 'Amazon Employees for Climate Justice' to call for more aggressive climate plans by Amazon. The efficiency, convenience and reach provided by organising through digital means provide traditional Labour Movements with the opportunity to expand or change the *How* and *Who* they are organising.

Practical Considerations of Digital Organising

Organising will incorporate more digital tools going forward. We can expect organisers and Labour Movements to embark on a digital transformation of sorts in terms of how they organise, engage and grow their movements. Digital tools will also continue to evolve, perhaps at a faster rate than before, and this will require organisers to be adept at evaluating these new tools and incorporating them into their organising to ensure that they remain current and relevant to population shifts.

Digital organising has necessitated organisers to embark on digital transformation and acquire the technical expertise and resources to remain current and continue attracting membership. Organisers need to be mindful of the limitations and development cycles of technology and should look to continually update the digital tools used to stay relevant. Nevertheless, different organisers are at different stages in the journey to digitally organise and will need to consider the different availability of resources, priorities and characteristics of the individuals they are organising. In this case, they might consider a modular approach towards digital organising. This would entail prioritising aspects of their organising that are most wanting, and transforming these with the most accessible and affordable digital tools currently available. Chapters 5 and 6 share insights on this.

In this area, the Labour Movement in Singapore has been actively developing a digital ecosystem and is preparing its unions and associations to incorporate digital organising into their organising model and strategies. The 4As Approach to Digital Organising frameworks, digital toolkit and digital ecosystem development guidelines arising from this research will contribute towards strengthening the Labour Movement's existing digital transformation efforts.

In conclusion, this research affirms that the organising of workers will benefit from greater use of digital tools because they open up fresh possibilities for organising while offering inroads to revitalise existing movements. Nonetheless, the caveat is that organisers will need to be savvy and deliberate in their selection and application of these digital tools for them to be effective.

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Appendix A: Detailed Findings

Table A.1. Digital Technologies Used by Participants

	Total	Among 21-30 years	Among 31-45 years	Among 46 years and above	Test of statistical significance
	(n=48)	(n=22)	(n=13)	(n=13)	
Messaging apps (e.g. WhatsApp, WeChat, Telegram)	97.9%	100%	100%	92.3%	Pearson chi2(2) = 2.75, $p = 0.253$
Social media and networking (e.g. Facebook, Instagram, Twitter, YouTube)	97.8%	100%	100%	91.7%	Pearson chi2(2) = 2.90, $p = 0.235$
Professional networking tools (e.g. LinkedIn)	60.4%	81.8%	53.9%	30.8%	Pearson chi2(6) = 13.09, $p = 0.042$
Reward programmes and apps (e.g. CapitaStar, Landlease Plus)	38.3%	19.1%	69.2%	38.5%	Pearson chi2(6) = 11.62, $p = 0.071$
Online shopping platforms (e.g., Shopee, Lazada, Amazon)	81.3%	95.5%	84.6%	53.9%	Pearson chi2(4) = 11.01, $p = 0.026$
Online forums (e.g. HardwareZone)	27.1%	27.3%	46.2%	7.7%	Pearson chi2(6) = 16.61, $p = 0.011$
Job search websites (e.g. MyCareersFuture, JobStreet, Glassdoor)	50.0%	50.0%	53.9%	46.2%	Pearson chi2(4) = 4.43, $p = 0.351$

Table A.2. Understanding and Perception of Unions

	Total (n=48)	By age				By employment status						By education				
		Among 21-30 years (n=22)	Among 31-45 years (n=13)	Among 46 years and above (n=13)	Test of statistical significance	Full-time employee (n=23)	Job-seeker (n=2)	Retired/homemaker (n=5)	Self-employed (n=3)	Student (n=15)	Test of statistical significance	O/N levels: Nitec & Higher Nitec (n=9)	A levels/Diploma (n=11)	Bachelor's Degree (n=24)	Postgraduate (n=4)	Test of statistical significance
Importance of unions for workers in Singapore																
Pre: Importance of unions for workers in Singapore	7.08 (2.02)	6.36 (1.87)	7.62 (1.71)	7.77 (2.28)	$f(2,45) = 2.80, p = 0.072$	7.30 (1.69)	5.00 (1.20)	8.00 (2.35)	5.00 (1.00)	7.13 (2.36)	$f(4,43) = 1.77, p = 0.153$	7.44 (2.24)	6.64 (2.62)	7.00 (1.72)	8.00 (1.63)	$f(3,44) = 0.55, p = 0.652$
Post: Importance of unions for workers in Singapore	8.52 (1.40)	8.59 (1.10)	8.23 (1.59)	8.69 (1.70)	$f(2,45) = 0.39, p = 0.677$	8.78 (1.20)	7.00 (2.83)	8.80 (1.30)	6.33 (1.53)	8.67 (1.18)	$f(4,43) = 3.23, p = 0.021$	8.56 (1.81)	8.55 (1.29)	8.46 (1.44)	8.75 (0.50)	$f(3,44) = 0.05, p = 0.984$

Note: Scores range from 0 to 10 on an 11-point Likert scale. Higher scores indicate better understanding or greater importance.

Table A.3. Reported Importance in the Roles of Unions

	By age					By employment status						By education				
	Total (n=48)	Among 21-30 years (n=22)	Among 31-45 years (n=13)	Among 46 years and above (n=13)	Test of statistical significance	Full-time employee (n=23)	Job-seeker (n=2)	Retired/homemaker (n=5)	Self-employed (n=3)	Student (n=15)	Test of statistical significance	O/N levels; Nitec & Higher Nitec (n=9)	A levels/Diploma (n=11)	Bachelor's Degree (n=24)	Postgraduate (n=4)	Test of statistical significance
Organising worker	8.38 (1.30)	8.14 (1.32)	8.31 (1.38)	8.85 (1.14)	$f(2,45) = 1.26, p = 0.294$	8.52 (1.24)	8.50 (2.12)	8.80 (0.84)	7.67 (1.53)	8.13 (1.46)	$f(4,43) = 0.54, p = 0.705$	8.45 (1.04)	8.17 (1.43)	8.33 (1.32)	9.50 (0.58)	$f(3,44) = 1.24, p = 0.306$
Training and skills upgrading	8.54 (1.47)	8.50 (1.47)	8.23 (1.79)	8.92 (1.12)	$f(2,45) = 0.73, p = 0.489$	8.61 (1.59)	9.00 (1.41)	9.00 (1.00)	8.67 (0.58)	8.20 (1.61)	$f(4,43) = 0.37, p = 0.830$	7.91 (1.64)	8.79 (1.56)	8.89 (0.78)	9.25 (0.50)	$f(3,44) = 1.28, p = 0.294$
Collective bargaining	8.63 (1.42)	8.45 (1.62)	8.62 (1.04)	8.92 (1.44)	$f(2,45) = 0.43, p = 0.652$	8.96 (0.88)	9.00 (1.41)	8.20 (2.04)	8.67 (1.53)	8.20 (1.86)	$f(4,43) = 0.78, p = 0.546$	8.91 (1.58)	8.54 (1.41)	8.22 (1.56)	9.25 (0.50)	$f(3,44) = 0.66, p = 0.584$
Ensuring worker rights	8.96 (1.24)	9.05 (1.36)	8.77 (0.83)	9.00 (1.41)	$f(2,45) = 0.21, p = 0.814$	9.09 (0.79)	9.00 (1.41)	8.00 (1.87)	9.67 (0.58)	8.93 (1.58)	$f(4,43) = 1.07, p = 0.385$	9.55 (0.52)	8.83 (1.34)	8.56 (1.59)	9.00 (0.82)	$f(3,44) = 1.25, p = 0.304$

Note: Scores range from 1 to 10 on a 10-point Likert scale. Higher scores indicate greater importance.

Table A.4. Understanding of Organising of Workers After the Workshop

	By age					By employment status						By education				
	Total (n=48)	Among 21-30 (n=22)	Among 31-45 (n=13)	Among 46 and above (n=13)	Test of statistical significance	Full-time employee (n=23)	Job-seeker (n=2)	Retired/homemaker (n=5)	Self-employed (n=3)	Student (n=15)	Test of statistical significance	O/N levels; Nitec & Higher Nitec (n=9)	A levels/Diploma (n=11)	Bachelor's Degree (n=24)	Postgraduate (n=4)	Test of statistical significance
Post: The importance of using digital tools to organise workers	9.25 (0.91)	9.09 (1.06)	9.31 (0.75)	9.46 (0.78)	$f(2,45) = 0.70, p = 0.500$	9.22 (1.00)	9.50 (0.71)	9.40 (0.89)	9.00 (1.00)	9.27 (0.88)	$f(4,43) = 0.13, p = 0.972$	9.22 (1.20)	9.36 (0.92)	9.21 (0.88)	9.25 (0.50)	$f(3,44) = 0.07, p = 0.975$

Note: Scores range from 0 to 10 on an 11-point Likert scale. Higher scores indicate better understanding or greater importance.

Appendix B: Digital Organising Toolkit

Table B.1. Technological Features of Existing Digital Tools

	Interactivity	Distributed Content Production	Network Expansion	Network Strengthening	Information Richness	Information Retrieval	Appeal to Wide Range of Audiences	Public Accessibility
SOCIAL MEDIA PLATFORMS	★★★	★★★★	★★★★	★★★☆	★★★★	★★★☆	★★★★	★★★★
Facebook	★★★★	★★★★	★★★★	★★★☆	★★★★	★★★☆	★★★★	★★★☆
Instagram	★★★☆	★★★★	★★★★	★★★☆	★★★★	★★★☆	★★★★	★★★★
Twitter	★★★☆	★★★★	★★★★	★★★☆	★★★★	★★★☆	★★★★	★★★★
LinkedIn	★★★★	★★★★	★★★★	★★★☆	★★★☆	★★★☆	★★★☆	★★★☆
COMMUNICATION & INSTANT MESSAGING APPS	★★★★	★★★★	★★★☆	★★★★	★★★★	★★★☆	★★★☆	★★★☆
WhatsApp	★★★★	★★★★	★★★☆	★★★★	★★★★	★★★☆	★★★☆	★★★☆
Telegram	★★★★	★★★★	★★★☆	★★★★	★★★★	★★★☆	★★★☆	★★★☆
WeChat	★★★★	★★★★	★★★☆	★★★★	★★★☆	★★★☆	★★★☆	★★★☆
Discord	★★★★	★★★☆	★★★☆	★★★★	★★★☆	★★★☆	★★★☆	★★★☆
Google Hangouts	★★★★	★★★★	★★★☆	★★★★	★★★☆	★★★☆	★★★☆	★★★☆
VIDEO CONFERENCING & WEBINAR SERVICES	★★★★	★★★☆	★★★☆	★★★☆	★★★☆	★★★☆	★★★☆	★★★☆
Zoom	★★★★	★★★★	★★★☆	★★★★	★★★★	★★★☆	★★★★	★★★★
Skype	★★★★	★★★★	★★★☆	★★★★	★★★☆	★★★☆	★★★★	★★★★
Microsoft Teams	★★★★	★★★★	★★★☆	★★★★	★★★☆	★★★☆	★★★★	★★★★
Clubhouse	★★★☆	★★★☆	★★★☆	★★★☆	★★★★	★★★☆	★★★★	★★★☆
VIDEO SHARING AND LIVE STREAMING PLATFORMS	★★★☆	★★★☆	★★★☆	★★★☆	★★★★	★★★☆	★★★★	★★★★
Tik Tok	★★★☆	★★★☆	★★★☆	★★★☆	★★★★	★★★☆	★★★★	★★★★
Twitch	★★★☆	★★★☆	★★★☆	★★★☆	★★★★	★★★☆	★★★★	★★★★
YouTube	★★★☆	★★★☆	★★★☆	★★★☆	★★★★	★★★☆	★★★★	★★★★
OTHERS								
Official website	★★★☆	★★★☆	★★★☆	★★★☆	★★★★	★★★★	★★★☆	★★★★
Email	★★★☆	★★★★	★★★☆	★★★☆	★★★☆	★★★★	★★★☆	★★★☆
Forums	★★★★	★★★★	★★★☆	★★★☆	★★★★	★★★☆	★★★★	★★★★
Eventbrite	★★★☆	★★★☆	★★★☆	★★★☆	★★★★	★★★☆	★★★★	★★★★

Table B.2. Potential Applications of Existing Digital Tools for Organising

	Enhance Awareness	Enhance Interests & Motivations	Encourage Participation of Non-Members	Encourage Participation of Members	Facilitate Feedback to Groups/Organisations	Respond to Feedback and Provide Support	Facilitate Interactions and Group Identification	Encourage Contribution, Initiatives and Leadership
SOCIAL MEDIA PLATFORMS	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Facebook	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Instagram	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Twitter	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
LinkedIn	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
COMMUNICATION & INSTANT MESSAGING APPS	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
WhatsApp	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Telegram	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
WeChat	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Discord	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Google Hangouts	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
VIDEO CONFERENCING & WEBINAR SERVICES	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Zoom	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Skype	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Microsoft Teams	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Clubhouse	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
VIDEO SHARING AND LIVE STREAMING PLATFORMS	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Tik Tok	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Twitch	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
YouTube	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
OTHERS								
Official website	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Email	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Forums	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Eventbrite	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★

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