"Long Term Unemployment, Volunteering and Reenvisioning the Nature of Work"

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Executive Summary

The Rationale Behind The Project, its Novelty, and Contribution

Automation and technological progress are radically transforming the world of labor by taking over tasks previously performed by workers and creating occupations that did not exist before. Over the next five years, the impact of most technologies on jobs is expected to be net positive, but for this to happen many workers will have to switch careers or acquire new skills to avoid unemployment. This is a non-trivial issue. Studies conducted thus far have identified four main frictions that impede the optimal match between workers and occupations as a response to the changes brought forward by automation:

- <u>Skills Frictions:</u> A mismatch exists between the skills workers possess and those demanded by employers. This mismatch is expected to become more acute as the skills projected to experience highest demand are those currently in shortest supply.
- 2. <u>Identity Frictions:</u> Workers' identity is often tied to their jobs. As job seekers tend to look for jobs in the same occupation as their previous employment, this impedes them from successfully transitioning from obsolete occupations to those in higher demand.
- 3. <u>Information Frictions:</u> Due to the uncertainty inherent to the automation transition, workers often lack the necessary information to make decisions on their career development, including which industries will have job openings, which skills they value, or whether reskilling/upskilling is a necessary investment.
- 4. <u>Location Frictions:</u> Workers are often unwilling to move to new areas, even when these offer better job opportunities, due to the costs associated with moving.

Reskilling and upskilling programs have been proposed to facilitate the transition from soonto-be obsolete jobs to new arising opportunities, but they are often not taken up by blue-collar workers. Our extensive fieldwork outlines that this can be traced back to skill, informational, and identity frictions being particularly salient for blue-collar workers. First, a lack of understanding of the market situation prevents workers from seeing the personal benefits of training programs. Indeed, workers perceived them as another top-down management-led initiative that failed to represent frontline workers' interests.

Moreover, workers expressed difficulty in finding representation in programs that resonated deeply with white-collar workers in previous training interventions. Slogans such as 'find your purpose at work' did not generate the same attention among a population that has historically

not been offered the possibility to find personal achievement via work. Moreover, workers did not identify as much with individual purpose as a force of motivation. The desire to contribute to one's community turned out to be a much stronger lever.

Finally, these concerns are aggravated by the anxiety felt in the face of change, coupled with the difficulty of thinking about themselves in a professional future different from their current role. These issues are not specific to blue-collar workers but are more severe among this population due to limited development opportunities offered throughout the work career and cognitive bandwidth constraints, which make opening to learning new skills more difficult in the face of scarcity and uncertainty.

Our Solution: The Intervention

As a solution to this problem, we propose a new way of approaching the discussion around the future of work. The intervention is composed of three parts:

- <u>Training Sessions for The Future of Work Representatives</u>: The first part consists of a training session for the `future of work representatives' (FoW), the blue-collar workers who are responsible for delivering the intervention.
- One-to-One meetings: After the training, the FoW representatives go back to their factories to start the main part of the intervention, which is carried out via one-to-one conversations with their colleagues. The goal of these meetings is to spark a discussion regarding workers' future to help them design a plan to secure a livelihood despite the changes to come.
- 3. <u>Experiential Learning within the Community</u>: The workers are also offered the opportunity to reflect on themselves via a volunteering experience in their community.

Each part of the intervention is designed to address the frictions that prevent blue-collar workers from taking up upskilling and reskilling opportunities.

Tackling Skill Frictions: First, our intervention is delivered through a bottom-up approach. The one-to-one meetings are held by the FoW representatives -- blue-collar workers specifically selected among the people who play important roles in the company's social network. Workers are more prone to engage with the content of the intervention and embrace the idea of developing new skills when encouraged by colleagues instead of managers. It is crucial for the intervention to take place before potential lay-off communications, to ensure

that participants' available cognitive bandwidth is not limited by the pressure of imminent unemployment.

Tackling Information Frictions: The approach to tackling information frictions is twofold. First, the training session contains an information session on the Future of Work by an external speaker that provides an overview of the economy-wide transformations in factory structures over the past three decades and future projections. Automation is framed as an industry-wide shift, rather than a company-specific issue, for workers to understand that, while the company would benefit from reskilling and upskilling its workforce, so would they. This has proven successful in addressing workers' reservations and clarifying the program's intent. Secondly, the curriculum of the intervention is co-designed together with the FoW representatives to ensure that wording and content resonate with the participants.

Leveraging Location Frictions to Tackle Identity Frictions: As a second exercise, the workers are offered the additional opportunity to reflect on themselves via a volunteering experience in their community. The experience is accompanied by two workshops to guide the reflection process. During the first workshop, the participants navigate through their personal stories to identify what could be a previously overlooked hindrance that they can work on or get more comfortable with, via the experience in the community. The participants then go and engage in experiential learning within the community. Lastly, they discuss their experience with their group in the second workshop. The aim of this exercise is to identify some key challenges they face in their everyday life and the parallelism with their experience at work, to foster a discussion regarding how these challenges could be overcome, potentially identifying the need to be trained to develop skills they are lacking. This approach leverages the desire to contribute to one's community to tackle identity frictions. Indeed, it provides workers with an opportunity to reflect on where they would like to grow and try out things they wouldn't dare attempt at work in a low-risk setting, starting from a place of safety and enjoyment - their community. Furthermore, by connecting individuals with the contribution they can make in their community, it leverages the power of social engagement and prosocial behavior to help alleviate cognitive bandwidth constraints, allowing individuals to focus on long-term objectives rather than short-term worries.

The Pilot of The Intervention

This report describes the delivery and the insights of the pilot of the intervention carried out in collaboration with a multinational consumer goods company in three UK factories, one in

South Wales (hereafter Factory 1) and two in North England (hereafter Factory 2 and 3). Two features are worth noting.

Firstly, the pilot is not characterized by random treatment assignment. Facilitators interacting only with selected workers would have eroded trust, undermining the foundations of the intervention. Moreover, a structured approach could have undermined our ability to observe how the conversations naturally evolve and whether spillovers across workers are present.

Secondly, different modes of delivery of the intervention were tested across the factories. Our experimentation outlined that the optimal design to adopt depends strongly on the characteristics of the factory and the priorities of the company. On the one hand, while a flexible approach of delivery maximizes the number of conversations carried out, their spontaneity and genuinity, it also poses some challenges for the representatives, as they might have to carry out meetings on top of their daily workload. On the other hand, while rigidity minimizes coordination and replacement costs, in some instances meetings could not take place as nobody could be found to cover the representative on the day.

Since the beginning of the pilot in the last quarter of 2023, a total of 95 meetings have been held. According to the data collected in Factory 1, the great majority of participants had one meeting with the FoW representatives, and the FoW representatives have now to take action to continue the progress. Reskilling opportunities were the most discussed, with learning about new technologies being the second item. The majority of workers are interested in exploring skills pertaining to manufacturing, which could be different from their current role or helpful in progressing within their current career path. Soft skills, such as leadership and team management, are also in high demand. Lastly, some workers want to explore industries that differ from their current occupations. The threat of job instability appears to be important as a reason for moving into different areas and industries.

The Evaluation: data collection tool and administrative data

To gather data on the effectiveness of the intervention, we developed a data collection tool. The tool is designed to collect information following the one-to-one meetings to gain as much quantitative and qualitative insights as possible, while minimizing the hassle for the representatives, maximizing the tool use, and allowing information recording in a private and confidential manner. For this purpose, (i) the tool is digital; (ii) it makes use of a software that allows maximum flexibility to the representatives to customize the way to process and visualize

information; (iii) it is composed of a survey co-designed with the representatives' input; (iv) representatives have been repeatedly trained in using the collection tool.

The information collected via the digital collection tool is complemented by administrative data -- central HR records and local data held in each factory, that are collected with the aim of evaluating the impact of the intervention on workers' careers and productivity. Collecting data at the factory level can prove to be quite challenging. The report describes our learnings regarding the workflow that constitutes the best practice in collecting the data.

From piloting to co-design at scale: learnings for replication

The groundwork done for this project was lengthy and unpredictable and required flexibility from the research team and our partner company. Throughout this challenging process, we collected important learnings:

- <u>Choosing the right partners</u>: It is critical to have partners supporting the project who share the vision of the research team, and are willing to invest in exploratory, high-risk high-reward projects.
- 2. Finding the right people to deliver and co-design the intervention: The FoW representatives played a critical role in every stage of designing and implementing the intervention. While they were selected as they represented the ideal collaborators, when scaling up, the effective delivery of the intervention requires representatives to be assisted by a support team to avoid placing additional burdens on their already difficult-to-manage workload.
- 3. <u>Everything is data:</u> Conversations with participants and representatives provide crucial information on how to design appropriate programs. When piloting, insightful conversations occur naturally and organically, but during the scale-up, it is important to design occasions when these conversations can continue to occur.
- 4. <u>Balancing methodology and intervention design</u>: While the pilot was not characterized by random treatment assignment, for the scale-up, building an element of randomization could be important. However, for exogenous treatment assignment not to come at the expense of effectiveness, it needs to be performed with strong attention to trust and morale around the intervention and avoiding randomization at the individual level to be able to fully capture the extent of spillovers across workers.

Implications for Research, Policy and Practice

The learnings from this pilot will inform the scaling-up of the intervention, with the goal of causally determining its effects on workers' careers and productivity. We expect the intervention to inform practice on a sustainable and responsible automation process that meets the needs of firms, workers, and the local community.

First, the work carried out so far outlines that existing resources can remain underutilized when workers do not see the value of looking beyond the status quo, struggle to identify the next steps in their careers, or face difficulties pinpointing specific skills to develop. We foresee that a program that is decentralized in its implementation and adopts a bottom-up rather than top-down approach can help in addressing these failures, fostering a more efficient match between workers' expertise and the skills demanded by firms.

Secondly, our intervention aims to provide evidence that the benefits of volunteering go beyond improving workers' attractiveness to employers, developing new skills, and improving wellbeing. We posit that community contribution can unlock a deeper change if accompanied by a guided reflection process, by relieving behavioral constraints particularly prevalent amongst the vulnerable – namely a fixed mindset and consequent limited cognitive bandwidth – and by fostering productivity and motivation.

Lastly, by targeting individuals in locations that are expected to undergo restructuring, often in economically disadvantaged areas, the initiative can also play a crucial role in reducing the challenges faced by vulnerable groups and creating grassroots economic opportunities.

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I. The issue at hand: fast-changing world of labor, but slow workers' adaptation

Changes in labour markets due to automation will require millions of workers to reskill or switch industries. Four frictions hinder this process:

Skill Frictions: the skills workers possess do not match the skills employers demand of new employees.

Information Frictions: workers' identity is often tied to their job, so they look for the same jobs as their previous occupation when laid off, impeding transitions to industries in higher demand.

<u>Identity Frictions</u>: the uncertainty inherent to the automation transition means workers lack of information regarding their work prospects and future labour market conditions

<u>Location Frictions</u>: workers are often unwilling to move to new areas, even when these offer better job opportunities

As automation and technological change gather pace within the workplace, so too do skill obsolescence and unemployment. By 2030, 30% of work activities within the US and Europe are expected to be automated, accelerated by the deployment of generative AI (Hazan et al., 2024). As a result, according to a recent report from McKinsey's Global Institute, 375 million people will be forced to switch industries or re-skill by that year (Manyika et al., 2017). Indeed, 9% of labour demand will be in occupations that did not exist ten years ago, created as a result of technological advancements (Lin, 2011).



Figure 1 - Current work activities displaced by automation by 2030, by country

Notes: Source - McKinsey Global Institute, 2017

The net impact of automation on labour demand will be determined by the comparative strength of the displacement effect - which occurs when capital takes over tasks previously performed by workers' - and the productivity and reinstatement effects - the process through which technological progress increases workers productivity and reinstates labor into a broader range of tasks (Acemoglu et al., 2019).

Over the next five years, the impact of most technologies on jobs is actually expected to be net positive (World Economic Forum, 2023), but for this to translate in a net positive effect on employment, reshuffling of workers to new occupations will be necessary. This is a non-trivial issue. Studies conducted thus far have identified four main frictions that impede the optimal match between workers and occupations as a response to the changes brought forward by automation (Susskind, 2020).

1. Skill Frictions

Business executives have been reporting skills shortages within their companies (Hazan, 2024) – shortages that are expected to become more acute as skills projected to experience the most demand growth by 2030 are those that are currently in shortest supply. Indeed, while technology has been found to be an effective substitute for labour in routine, codifiable tasks, the demand for and value attributed to uniquely human abilities has been rising (Hazan, 2024, Autor, 2015). This is particularly true for social and emotional skills such as empathy, advanced

communication, and creative problem solving, which are harder to program into software due to the absence of clearly defined "rules" (Bughin et al., 2018), and which demand and remuneration has significantly grown in the last fifty years.⁵

2. Identity frictions

This phenomenon is aggravated by the mismatch between the type of occupations jobseekers search for and available work opportunities. Indeed, jobseekers tend to look for jobs in the same occupation as their previous employment, even at the cost of remaining unemployed for a longer period (Belot et al. 2019; Herz, 2019; Patterson et al., 2016; Sahin et al., 2014).

Workers' identity and sense of self are often tied to their jobs (Carbado et al., 1999). Workers' connection to their "job identity" can inhibit them from searching for employment in alternative fields. Indeed, occupational changes might come with a plethora of socio-economic and psychological challenges, including the prospective loss of social ties and identities tied with occupations (Mousteri et al., 2018; Nichols and Ralston, 2011).

Given that many occupations are predicted to become obsolete, this tendency can impede workers from successfully transitioning to industries in higher demand. For example, Susskind (2020) highlights that some workers without a college degree, who have been displaced from traditional manufacturing jobs, opt to continue their job search rather than accept work in socalled "pink-collar" occupations within the care sector.

3. Information Frictions

Even when workers are willing to transition to different occupations, they often lack the necessary information to decide how to embark on this process, including which industries will have job openings and which skills they value. Lack of information and uncertainty regarding their work prospects in different occupations have been shown to prevent individuals from exerting effort to look for and apply for occupations in which they believe they have a low probability of success (Belot et al., 2019). A challenge that is further amplified by the high degree of uncertainty inherent to the current automation transition, which makes it even harder for workers to understand which skills will be valued in the future, as well as how their own industries will be impacted (IFW, 2022).

⁵ Using data from the US since 1980, Deming (2017) documents that social skill-intensive jobs grew by 12 percentage points as a share of all jobs, and wages for these occupations rose more rapidly than those for other professions within this period.

4. Location frictions

Lastly, workers are often unwilling to move to new areas, even when these offer better job opportunities (Bryan et al., 2014). Moving entails monetary costs, namely the procurement of a moving truck or storage, and non-pecuniary costs of leaving behind friends and family and getting accustomed to a new location (Ransom, 2022), which workers might be unwilling to bear even in the face of better employment opportunities. This is particularly the case for non-college graduates, who were found to be six to nine times less willing to move than college graduates in Spain (Ahn et al., 1999). This contributes to increasing spatial inequality. Indeed, in the Global North, there are staggering differences in unemployment rates across regions within the same country or state (Kline and Moretti, 2013).

II. The importance of re-skilling and retraining workers and the challenge with blue-collar workers

Blue-collar workers do not participate or benefit from reskilling programs to the same extent as white-collar workers. In our qualitative research we find evidence of:

Information Frictions

Lack of understanding of the labor market situation, prevents workers from seeing the personal benefits of these programs

Content and wording of programs often not targeted to the blue-collar population

Identity and Skill Frictions

Workers have difficulty in thinking about themselves in a professional future different from the current role

Anxiety in the face of learning impedes the learning of new skills

Why are these issues more prevalent with blue-collar workers? Limited development opportunities offered throughout their careers and cognitive bandwidth constraints in the face of scarcity.

Different solutions have been suggested to address these challenges and facilitate the transition of people from soon-to-be obsolete jobs to new arising opportunities: training programs, job search assistance, monitoring, sanctions for failing to search, job search assistance, subsidized employment, and counseling services. Among these initiatives, a proactive approach to reskill and retrain workers, particularly from the private sector, is paramount. Indeed, preparing workers for a new world of work coincides with many companies' self-interest, as they will likely retain a large proportion of workers with obsolete skills (Manyika et al., 2017).

While training programs have been found to have, on average, positive effects on the probability of employment in the medium and long run (Card et al., 2018; Humlum et al., 2023), these aggregate results hide stark heterogeneity. Indeed, while for white-collar workers training programs have been found to improve future employment opportunities and are associated with higher worker well-being and wage dispersion (Saloniemi et al., 2014;

Almeida-Santos et al., 2010), <u>blue-collar workers have displayed reluctance in participating in</u> <u>these programs</u>. As reported by the OECD in their 2019 report 'Getting Skills Right: Engaging Low-skilled Adults in Learning', workers with relatively low skills are less than half as likely to participate in adult learning. Furthermore, evidence from the Programme for the International Assessment of Adult Competencies (PIAAC) shows that only 20% of adults with low skills participate in job-related learning. Moreover, <u>even when blue-collar workers do</u> <u>participate in reskilling programs, they often do not benefit from them to the same extent as</u> <u>their white-collar counterparts</u>. In Finland, health and well-being increased with training for participants with a higher socioeconomic status but had negligible or even negative effects among blue-collar workers (Saloniemi et al., 2014).

Our extensive work in the field outlines that this can be traced back to <u>skill</u>, <u>informational</u> and <u>identity</u> <u>frictions being particularly salient for blue-collar workers</u>, triggering resistance to take-up in reskilling opportunities and hindering their effectiveness.

Firstly, focus groups highlighted a severe lack of understanding of the current and future labor market situation, which prevented workers from seeing the personal benefits of these training programs. Workers uncovered a general lack of trust in the effectiveness and objectives of reskilling initiatives. The concern that workers voiced in focus groups was that these programs consisted of another top-down management-led initiative that failed to represent frontline workers' interests. Many workers viewed the future of work programs with skepticism, perceiving them as 'just a way of getting workers on board with being fired'.

"People need to see the benefits of the programme before [participating]".

- Quote from Factory Employee

This information friction is further aggravated by the difficulty of finding representation /embodiment in the programmes' mission, exacerbated by a misalignment in wording and content of interventions often not targeted to the blue-collar population.⁶ We discovered that

⁶ In line with our findings, many of the companies interviewed by Harvard's Digital Reskilling Lab reported struggling with persuading employees to embark on reskilling programs. The report highlights the importance of being transparent about the benefits of training programmes, and designing them from the employee's point of view, to reduce the risk and cost of participating (Doumi et al., 2023). As one of their interviewees explains, to build a successful reskilling programme, companies should "design a product [their] employees actually like.", instead of imposing on them management's idea for their professional future.

while slogans such as 'find your purpose at work' are effective motivation for white-collar workers, they do not resonate to the same degree among a population of workers that has historically not been offered the possibility to choose among different work opportunities, given the limited availability in their areas of residence.

Secondly, it emerged from focus groups that workers' reluctance to participate in these initiatives was also related to identity and skill frictions – a fear and anxiety in the face of change, coupled with difficulty in thinking about oneself in a professional future different from the current role. Many of the blue-collar workers we interacted with felt overwhelmed when being confronted with a choice of which new skills to learn in a context of ever-increasing uncertainty caused by technological advancement and automation.

- Why are these frictions more pressing to blue-collar workers?

Identity and skill frictions are not a challenge specific to blue-collar workers, as previously mentioned. However, blue-collar workers tend to be affected to a greater extent due to:

- Limited development opportunities: Blue-collar occupations are associated with monotonous tasks which are less conducive to learning or self-development (Hu et al., 2010), and workers are often not provided with sufficient opportunities for upward mobility and social recognition (Hennequin, 2007). To cope with a relative lack of autonomy and prospect for growth, workers often adopt an instrumental attitude to work (Lucas and Buzzanel, 2004) that further alienates them from their work.
- **Cognitive bandwidth constraints:** a large literature documents that scarcity negatively impacts cognitive bandwidth and makes individuals more likely to focus on their immediate needs rather than long-term plans (Mani et al., 2013; De Bruijn and Antonides, 2022; Shah et al., 2015).

This lack of opportunity for personal development throughout workers' careers can make proactively approaching significant changes, seeing oneself as able to learn new skills or project oneself in a different role more challenging. Moreover, opening up to learning new skills and facing the uncertain prospects of changing occupations is even more difficult when confronted by the threat of losing what may be the main source of income for the family (Caretelli, 2024).

III. Our solution

As a policy solution to this problem, we propose a future of work <u>composite intervention</u> that combines a multifaceted approach:

<u>Skill Frictions</u> - a mode of delivery that transfers agency to the worker and relaxes cognitive bandwidth constraints to allow for effective learning.

<u>Information Frictions</u> - full involvement of workers in conversations about the future of work to provide participants with the information necessary to plan their future effectively

<u>Identity Frictions</u> - leverage location frictions – via connection to the community – to implement a process of experiential learning that encourages self-reflection to discover facets of individual identity that go beyond the current occupation

The sections below outline the key characteristics of these pillars. The details regarding their implementation are provided in Section V.

III.1. Tackling Skill Frictions: A Bottom-up intervention and effective timing for a prospective approach

<u>A Bottom-up Approach</u>

Firstly, the mode of workshop delivery follows a bottom-up approach characterized by two key elements:

A) <u>The future of work representatives</u> - The intervention is delivered by workers to workers. The first step of the intervention required identifying the workers whom other workers seek out for guidance and support and who act as role models and key opinion formers within the factory. These individuals possess strong interpersonal skills and have an established network of relationships within their

factories. These workers become the `future of work representatives' -- the workers that deliver the future of work intervention to their colleagues.

B) <u>One-to-One Meetings</u> - The conversations are delivered in 1:1 sessions that spontaneously evolve following workers' requests.

This bottom-up approach, coupled with individual meetings, ensures that the workers feel comfortable having conversations about their professional future, are more prone to engage with the content of the intervention, and are more open to embracing the idea of developing new skills. Indeed, instead of a dialogue with their line manager, external career planners, or members of the Human Resource team, the intervention focuses on leveraging peer-to-peer support to navigate through the uncertain future. Moreover, this ensures that workers feel comfortable voicing their thoughts on their personal development, coming up with their own suggestions regarding the skills they want to develop, and ultimately making sure that it is clear that upskilling and reskilling are opportunities for the workers to prepare themselves for Future of Work.

Effective Timing for a Prospective Approach

Secondly, to allow workers to take full advantage of the intervention, the intervention relies on a prospective approach and will start before the communication of redundancy or plant closure takes place. The intervention is more effective if conducted before a potential lay-off communication, as participants' available cognitive bandwidth would likely become more limited under the pressure of imminent or actual unemployment, as explained above. In this perspective, timing crucially ensures that participants have the cognitive bandwidth to re-orient a previously passive role in the face of change, moving from a mindset of scarcity to one of abundance.

III.2. Tackling Information Frictions: Information Session on The Future of Work and Targeted Messaging

Information Session on The Future of Work

To ensure that the one-to-one meetings effectively inform workers about the issue at hand and empower them to take control of their own future, the intervention includes, among the training sessions for the future of work representatives, a 'session' delivered by an external speaker on the future of work – a comprehensive overview of the economy-wide transformations in factory structures over the past three decades and the future projections.

This presentation aims at effectively conveying the inevitability of change and presenting two paths for the workers to consider: resist the transformation or embrace a collaboration with the firm and actively reskill to allow both workers and the firm to navigate the transition more successfully. In a context of deep lack of trust in management, this helps the representatives understand, and then convey effectively to their colleagues, that the change is not firm-specific, but rather involves the entire industry, providing them with the instruments to understand that upskilling and reskilling is in their personal interest, not just in the 'management's interest'. As such, it seeks to address the informational frictions hindering reskilling.

Targeted Messaging

Additionally, to ensure that individuals can make the best use of the information provided, we tailor the intervention to blue-collar workers specifically. The constraint in upskilling for a new career often does not lie within ability or availability of opportunities but with constraints on workers' perceptions that inhibit them from seeing the value of the upskilling or discovering the overlaps between a potential career path and their passion and purpose. In other words, the choice of words becomes paramount in ensuring the intervention not only speaks to workers in clarity but also with authenticity such that workers are able to resonate with the messages and to approach the conversation of future careers with a different perspective. So, the dissemination materials that went out to the factory workers and the curriculum of the intervention itself were co-designed together with the FoW representatives.

III.3. Leveraging Location Frictions to Tackle Identity Frictions: Experiential Learning within the Community

To address identity frictions, the composite intervention provides participants with the opportunity to develop themselves and experiment within their community via volunteering in the social sector. This serves multiple purposes.

First, these experiences outside of work provide a low-risk setting for addressing identity frictions by trying out things participants wouldn't dare attempt at work. Focus group discussions with workers highlighted that an approach based on storytelling and abstract conversations regarding purpose, which previously proved successful for white-collar workers (Ashraf et al., 2024), was not helpful in guiding workers to identify skills and opportunities they might like to pursue.

"We don't really get answered questions like, you know, deep life questions. What does it have to do with work?"

- *Quote from factory employee on conversations about purpose*

Although blue-collar and white-collar workers may have the same desire to find purpose, they might face different barriers that prevent them from discovering their true selves. Indeed, blue-collar workers might not have the same opportunities to reflect on themselves while at work, or experiment with different roles, learning about their abilities and their passions as white-collar workers do. Volunteering within the community aims to provide them exactly with this. Because this environment is separate from work, aligned with their passions, and embedded in a community they care about, the approach -- rooted in experimental learning beginning from a place of enjoyment -- allows participants to step outside their comfort zone and try things they previously thought impossible—not with the assurance of triumph, but with the openness to learning through experience and, crucially, with the privilege of allowing oneself to make mistakes.

Furthermore, the social engagement and prosocial behavior that our intervention provides also contribute to helping employees overcome the fear linked with changing or losing one's occupation. Related literature in social and clinical psychology provides substantial evidence of the positive effect of prosocial behavior (such as civic engagement and charitable donations) on overall well-being and mental health (Borgonovi, 2008; Jenkinson et al., 2013; Raposa et al., 2015; Dunn and Norton, 2013). This effect can be understood through the framework of Self-Determination Theory, which identifies relatedness – a sense of attachment to other people – as one of the main psychological determinants of well-being (Ryan & Deci, 2017; Wray-Lake et al., 2019). By connecting individuals to their social impact, volunteering can then help alleviate cognitive bandwidth constraints, allowing individuals to focus on long-term objectives rather than short-term needs.

Lastly, volunteering, while not meant to be an unpaid internship, may also alleviate information and skills frictions by offering participants an opportunity to learn about their community and other industries and develop new skills, potentially expanding the set of jobs participants target, and contributing to facilitating workers' transition. Indeed, community engagement may allow participants to develop skills such as empathy and communication that are projected to be highly demanded across industries in the future, and are crucial for sectors such as the social and care sectors that are less susceptible to automation (Bughin, 2018; Deming, 2017; Autor, 2015). Developing these skills will allow participants to improve their competitiveness in the labour market and will equip them with the tools necessary for a potential shift in career toward contribution to the community.

IV. The Pilot of the Intervention

This report describes the delivery of the pilot of the intervention carried out in collaboration with a multinational consumer goods company in three UK factories. The following sections provide an overview of the three factories – section IV.1, which is essential to get a sense of the setting of the intervention and the generalizability of the findings. Section IV.2 follows by providing a description of the curriculum and highlighting the motivation behind the design choices made.

IV.1. The Setting

The project is a collaboration with a multinational consumer goods company operating in over 190 countries around the world. Historically, many production workers viewed the company as a lifelong employer, and in some factories, it is still common to see multiple generations—grandparents and grandchildren—working side by side. However, rapid advancements in automation and AI are reshaping the future of work, putting many current roles at risk while creating a demand for new skills to maintain existing positions. This shift highlights the need for workers to prepare for a future where simply performing their current duties well may no longer guarantee job security. Recognizing this challenge and aligned with the company's commitment to providing "livelihoods for life," whether within or outside the organization, the collaboration focuses on equipping production workers to adapt to these changes.

<u>The pilot of the intervention was carried out in three UK factories in South Wales and North England</u>. The three locations' economies are varied, but all have <u>historic ties to the manufacturing industry</u>. Educational attainment and median wages in the three regions are lower than the averages for Wales and the UK; around a quarter of the population hold a bachelor's degree or higher and median salaries for full-time employees range from 30k to 32k pounds per year. <u>Overall, on top of the geographical differences and distance between the communities, the three factory sites show great heterogeneity in size, products made, readiness for the intervention, and embeddedness in local communities.</u>

Table I - Fact	ory Inform	ation by	Site
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Site	Number of factories in intervention	Number of Employees	Shift Patterns	Number of production lines
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Factory 1	1	<200	5 crews and 5 shifts weekday - A: 6am-2pm, B:2pm-10pm, C:10pm-6am; weekend - D: 6am-6pm, E: 6pm-6am	4
Factory 2	1	<500	4 crews (1,2,3,4) - 24 x7: 2 days, 2 nights, 4 days off. 3 crews (A,B, C) - 24 x 5: 3 days, 2 off, 3 nights, 4 off, 2 days, 1 off, 2 nights, 4 off. From September everybody 24 x 5	13
Factory 3	2	~400	5 crews and 5 12 hour shifts (2 days, 2 nights, 4 days off) 3 crews and 3 8 hour shifts from October (6am - 2pm, 2pm – 10pm, 10pm – 6am, Monday to Saturday)	14 (across 2 factories)

Factory 1: At factory 1's location, it is home to manufacturing since the beginning of the 20th century, has seen many of its factories close down over the past ten years, which depressed rates of economic activity. At the time of conducting background information collection, Factory 1 had 3 production lines, with a new line being added, requiring new training and hiring of workers. The factory has a homogeneous workforce, with workers operating in close proximity to each other. In terms of factory size, it is the smallest among all three, with less than 200 workers. Workers alternate along 5 shifts. During each shift, a "crew" of 14-17 workers and four team leaders work at the same time, supervised by one manager. Most workers are on the same pay scale. Only one subdivision exists into machine operators and technical operators who are more experienced and get higher pay. Besides being relatively small, the factory stands out from the rest in terms of its embeddedness in the local community. At the factory, most workers are neighbors, family members or friends in the community, and the factory has a track record of success in their community days with high take-up rates in volunteering. Moreover, the location consists of a relatively small population under 10,000 (as of the 2021 census) with the factory being one of the largest manufacturing plant in the area which is just under 15km², especially after the closure of several large factories in the area in the past few years. Lastly, looking into occupational distribution, in comparison to the surrounding area, the location has more process, plant and machine operatives, making it an

environment that would likely benefit from a diversified business ecosystem. All these reasons make the site the perfect setting for the development of the community engagement curriculum.

Factory 2: At Factory 2, the location enjoys a range of operating industries, but since the 1980s has maintained a focus on the service sector. Moreover, being close to a more densely populated area, the factory attracts workers from a bigger distance. Hence, the factory's population is characterized by a lower degree of closeness and orientation to community, despite the factory still having run some community events in the past. Unlike Factory 1, which has seen expansion in its operation, individuals at Factory 2 had undergone a different experience due to alleged sale talks. Lastly, among all the three factories, this is the factory that expressed the greatest reservations towards the Future of Work intervention due to time availability and workforce constraints, and that anticipated some potential resistance from the workers.

Factory 3: Factory 3 is one of the company's biggest and oldest factories. The location's population is over 2 thousand inhabitants. The company is one of the main employers in the area. At the site, there are four factories, two of which are part of the intervention. At the moment of background information collection, there were 5 12 hour shifts (2 days, 2 nights, 4 days off) and 5 crews, a system that moved to 3 eight hour shifts later on (6am - 2pm, 2pm – 10pm, 10pm – 6am, Monday to Saturday). There are 14 lines in total across the two factories.

IV.2. The Curriculum

The intervention is composed of three parts:

- <u>Training Sessions for The Future of Work Representatives</u> The first stage of the intervention consists of a series of training sessions for the Future of Work representatives to prepare them to effectively deliver the intervention to their colleagues.
- 2. <u>One-to-One meetings</u> After the training retreat, workers go back to their factories to start the Future of Work conversations.
- 3. Experiential Learning within the Community As a second exercise in our composite intervention, the workers are offered the opportunity to reflect on themselves via a volunteering experience in their community, in addition to engaging in conversations with the future of work representatives. The experience is accompanied by a 2-session workshop to guide the reflection process.

IV.2.1. Training Sessions for The Future of Work Representatives

All the representatives participated in in-person training in May 2023. The training covered a wide range of topics:

Outline and structure of one-to-one meetings Training on effective communication Session on The Future of Work Practice session

Outline and structure of one-to-one meetings: The training started with a session with the company's HR director, who provided the representatives with a comprehensive outline of the structure and aim for a one-to-one meeting.

During this session, the representatives were instructed that the one-to-one meetings aim to spark a conversation regarding workers' future to start colleagues on their journey towards designing a plan to secure a livelihood for themselves despite the changes to come. Specifically, the representatives are asked to discuss facts about the future of work, explain the concepts of upskilling and reskilling, and discuss with their colleagues where they think the community needs might fit into the picture. The representatives would then continue by actively engaging the workers by asking them questions about their interests and what brings them joy, both at work and in their personal lives, to foster a meaningful dialogue about their future aspirations. In the concluding part of the conversation, the representatives discuss the next steps and explore potential re/upskilling opportunities.

<u>Training on Effective Communication</u>: In the following session, one of the company's development lead instructed the representatives, with the help of games, on fundamental principles and essential skills for effective communication, as well as techniques for establishing trust and fostering strong connections with the workers.

Information Session on The Future of Work: The training continued with a session where an external speaker provided a comprehensive overview of how factory work has transformed over the past 35 years, drawing on his lifelong experience working with the company's factories.

Specifically, he detailed the progression from labor-intensive processes to a current state of partial automation and offered projections of a future with minimal human involvement in factory operations. Framing these changes as an industry-wide shift rather than a company-specific issue helped the facilitators understand the broader economic context of automation and AI advancements. In addition, this tackled initial skepticism from facilitators who viewed the program as a covert effort to prepare workers for layoffs. Indeed, the workers got to understand that, while the company would benefit from reskilling and upskilling its workforce, so would they. Two potential paths are open in front of them – resistance to change, which could harm all stakeholders, or take an active role, collaborate, reskill, and take agency over the changes this automation process will necessarily create. This effectively highlighted the stakes and encouraged a mindset shift among representatives. Lastly, besides alleviating distrust, this training session motivated the representatives to embrace their role in preparing their colleagues for the Future of Work.

The selection of an appropriate external speaker, whose expertise can be trusted but that can be perceived as relatable and approachable at the same time, is crucial for the effective delivery of this session. In the pilot, the session was delivered by a person that established themselves as a leader in social change with considerable experience in the field, but who started as a bluecollar worker in the same company sharing a common past with the workers. To replicate the intervention with success, one could potentially consider someone within the company that progressed from a previously blue-collar worker background into a leadership role.

<u>**Practice Session:**</u> Lastly, the training ended with a session where the representatives wrote down and practiced their introductory speech in the one-to-one meetings and how to respond to different potential reactions of their colleagues.

IV.2.2. The One-to-One Meetings

After the training, the representatives return to their respective factories to kickstart the intervention.

While the representatives received their training together at the same time, the actual start date and the progress of the Future of Work conversations at each site differed, depending on local factors such as production arrangements. Similarly, to accommodate local circumstances, the representatives also adopted different approaches to introduce the programme to their colleagues.

Factory 1: The meetings organization and organic delivery in the factory reflect the lower coordination costs associated with the relatively modest workforce size and the tight-knit community.

Firstly, this is the site where the next phase started first. In this factory, the representatives delivered a short presentation to the shifts on top of creating a video that was shown on screens across the factory. Moreover, this is the factory where the announcement of the Future of Work program received the greatest enthusiasm. The deck of slides that the representatives created and tested in this factory will then be used for the announcement in the other two factories. Lastly, in this factory, the process of signing up for the one-to-one meetings is organic. The workers directly approach the representatives to schedule a time to talk. The meetings are then divided by the representatives across themselves depending on time availability. However, often meetings happen informally, with extemporaneous conversations. While this approach maximizes the number of conversations carried out, their spontaneity and genuinity, it also poses some challenges for the representatives. Indeed, the fact that meetings are not officially scheduled in the worker's daily plan has resulted in representatives having to perform this duty on top of their daily workload.

Factory 2: Factory 2's meetings' organization is characterized by a structured schedule to minimize coordination and replacement costs. Rigidity however comes at a cost.

At Factory 2, the representatives put up paper sign-up sheets in the foyer. Each representative has a date blocked out for the one-to-one meetings every month, so one representative every week takes care of the request for the week. This allows the factory to minimize coordination and replacement costs, as they can plan for a person to cover the representatives' shifts in advance. While this structured setup is likely the most feasible approach given the size of the factory, its rigidity created a few challenges. As line managers want to minimize the number of workers on payroll on a day and it is hard to a-priori predict the one-to-one meetings signups, there were occasions when workers had signed up for one-to-one meetings, but the meetings did not take place as nobody could be found to cover the representative's work on the day.

Factory 3: At Factory 3, conversations started later and are characterized by a more structured system for signing up, that includes HR representatives.

At Factory 3, the intervention was announced to workers in September 2023 and rebooted via an employee newsletter at the start of 2024. Communication included slides presented during quarterly briefings across the five shifts. This factory also differs in the way they organized the sign-up and coverage of the one-to-one meetings. The process is more structured. Workers initially signed up for one-to-one meetings using an Excel booking sheet, but now they primarily request meetings directly, via email, or occasionally through HR, who redirects them to one of the four FoW representatives. Representatives typically handle discussions within their designated areas, but representatives also occasionally assist each other, coordinating through meetings or email.

IV.2.3. Experiential Learning within the Community

The second part of the composite intervention, the "Experiential learning within the community" curriculum is developed and tested out in Factory 1 - a closely knitted community with strong relationship with the local community. The participants are the 4 Future of Work representatives.

The curriculum development is characterized by 3 key aspects:

Leveraging community to tackle identity frictions

Effective timing for a prospective approach

Co-design with the Future of Work representatives

This part of the intervention consists in 2 workshops and an experience within the community

Leveraging community to tackle identity frictions

For many years, the team has collaborated with the company in running a Discovering Your Purpose (DYP) workshop with its white-collar employees around the globe to help them identify with their individual purposes. The effect of the workshop is evaluated in another study, which shows effects such as an increase in performance and self-reported meaning and happiness (Ashraf et al., 2024). However, what resonates deeply with one group does not always work universally for others. Prior to the current intervention, the research team engaged in multi-year early qualitative work, including assisting in the delivery of the white-collar DYP workshop to blue-collar workers in one of the company's factories, which resulted in low takeup. Conversations and focus groups with factory workers highlighted that blue-collar workers did not feel connected with the language and the ideas brought forward in the workshop. Specifically, they did not identify with individual purpose as a force of motivation and joy, rather they identified more with the concept of community and community-contribution. Therefore, the research team decided to include community-based experiences within the FoW intervention. We leverage community embeddedness as an entry point for the curriculum to provide workers with an environment where they can feel comfortable being pushed outside their comfort zone. The ultimate goal is to allow them to overcome their barriers in a supportive environment, starting from a place of joy.

Effective timing for a prospective approach

The first pilot of the workshop further brought up the importance of timing the intervention right and the limitation of presenting the experience as volunteering. Prior to the current intervention, the research team had attempted to pilot a similar volunteering-based intervention at another factory. Contrary to the current three sites, the factory announced its closure around the time of intervention, hence putting job insecurity at the front of workers' minds. As a result, the intervention concluded with very few signups, as workers did not see the value of engaging in a non-remunerated activity at a time when their own earnings were in jeopardy, highlighting the importance of not having one's cognitive bandwidth occupied with fear of job losses to engage in experiential learning. This was further exacerbated by the fact that the word ''volunteering'' brings people to think about an activity that is voluntary in nature, hence not remunerated, instead of emphasising the aspect of contribution to the current intervention have been carefully adapted to speak about community contribution rather than volunteering within the community.

Codesign with Future of Work Representatives at Factory 1

Building upon the insights from the earlier qualitative work, we developed the curriculum of the workshop and we further tested it out at Factory 1. The choice of Factory 1 as our initial site to test out the community- engagement intervention, as discussed in section IV, is justified by its closely knitted communities, both internally and externally, in its relationship with the local community. Indeed, the factory is already deeply involved in making a positive difference in the local area through its community days and other activities..

Also in this case, the design of the workshop was done in close contact with the recipient population and with constant feedback from the factory's representatives, who are the individuals who we decided to try out the curriculum with before scaling it up to the rest of the factory. The rationale behind this decision was twofold. Firstly, through our previous experience in co-designing the main intervention, we have learnt the immense value of having input from the representatives. The representatives have been selected exactly because they displayed exceptional pro-social motivation, empathy, or ability to motivate their peers due to their position in the factory social network and their charisma. Given their involvement from the start, who better than them to help us understand how to best integrate the community add-on within the main intervention? Secondly, when the intervention is scaled up to the rest of the factory, the representatives will be the workshop instructors. They are the ideal candidates

given their established roles as catalysts for the FoW conversations, and given the intimate relationship that they established with their colleagues as a result.

The Curriculum

The community engagement intervention is a curriculum that consists of two workshops and an experience within the community:

Workshop 1: "Skills, passions, and community. how does it all fit together?" - The purpose of the first workshop is to invite the participants to investigate where their passions, their skills, the area where they want to see growth in and the needs of their communities intersect. Participation in the first workshop is conditional on having carried out some pre-work, that is propaedeutical to a constructive and fruitful discussion.

Follow-up Session: "Identify your community experience" - this reflection session with the instructor aims to discuss learnings and ultimately identify what activity of engagement in the community participants will undertake.

"Experiential learning in the Community" - The participants then go on to do an experience of their choice within their community that allows them to experiment with an area where they had previously struggled both at work and in personal life in a low-stake environment. During the experience, participants are asked to keep notes on their reflections and their progress.

Workshop 2: "Share your learnings" - Finally, the participants come back to regroup to share and discuss their experience with their group in the second workshop.

Workshop 1: "Skills, passions, and community. How does it all fit together?"

The primary aim of the first workshop is to collaboratively explore with participants what it means to take control of their career paths, define what community means to them, and identify where these two areas overlap.

Adapted from the concept of *Ikigai*, the participants are prompted to first find the intersection between their passions, their skills, and their communities' needs through a series of draw/write-and-discuss activities aimed at helping them characterize what they love, what they are good at and what comes to their mind when asked to think about their community and its needs. Finally, the participants are asked to think about how these three elements can interact to identify something where they would like to see growth in⁷.



Notes: Readaptation of the concept of Ikigai. Adapted from García, H., & Miralles, F. (2017). Ikigai: The Japanese secret to a long and happy life. Penguin.

Participation in the first workshop is conditional on having carried out some pre-work, which is essential to a constructive and fruitful discussion. Every participant is provided with a prework booklet. Partly adapted from what was used in the white-collar purpose workshop, the pre-work asks the workers to do a series of activities. First, workers are asked to reflect on their daily life, and identify something that they enjoyed doing and an instance in which they felt challenged. In addition, the participants are asked to engage with their friends, family, and colleagues to identify the most appropriate words to describe them and what they are good at doing. Also in this case, the participants are free to choose to write or draw some pictures. The

⁷ This is different from the conventional Ikigai model, where the fourth circle is "what can I be paid for". Indeed, we do not wish to limit workers imagining their future work path as something that has to necessarily fall into the realm of things they know, they have experienced before, or they think it is locally available at that moment in time.

content of these individual reflections will then be shared during the workshop with the other participants. As the workshop can only be as good as each participant's level of commitment, the completion of the pre-work is a mandatory prerequisite for workshop participation.

To reiterate the vital role that the representatives played in the design stage of the intervention, the inclusion of drawing as an option for participants to portray their stories on top of writings is one of the ideas for improvements that came from the four representatives after going through the workshop and thinking about how it could be scaled up to include some of their colleagues who have difficulties in correctly expressing their thoughts in writing, and that would have been discouraged from fully participating in the workshop as a consequence. Drawing is widely used in psychological assessment and psychotherapy in a vast array of settings (Handler and Thomas, 2014), and the feedback from the representatives is informative on its applicability in our particular context.

Follow-up Session: "Identify your community experience"

After the first workshop, the participants have a few days to digest what they have learnt, and refine where they see their *lkigai* to be. Then, they regroup in a reflection session with the instructor to discuss their learnings and ultimately identify what activity of engagement in the community they will undertake. After the first workshop, the participants are left with the request of thinking about a volunteering activity they wish to engage in. Starting from this activity – a place of joy and security, and navigating through their personal stories, the debriefing session prompts the participants to identify what could be a previously overlooked hindrance that the participant can work on, overcome or get more comfortable with, via the experience in the community.

In the pilot with the representatives, this follow-up session proved invaluable in drawing a common thread that connected the seemingly disjointed aspects of their personal and professional lives into a unified narrative. We all have tasks, activities, roles, and jobs that we would like to undertake, but we don't feel completely comfortable tackling for various reasons – perhaps we do not perceive them as relevant, we lack confidence in our abilities, or we don't view ourselves as the right person for the job, often without being fully aware of them. Building on their private reflection, during this session, the representatives were guided in uncovering these challenges, identifying the cognitive and noncognitive skills that had been holding them back, and drawing the connection between their personal and their work life, by asking a series of targeted questions. Once these barriers were identified, the representatives

were able to set clear objectives, which they could then actively pursue through their volunteering opportunities.⁸

Because these experiences are outside the work environment, aligned with their passions, and embedded in a community they care about and identify with, they provide a safe space for workers to test whether the challenges they face are as overwhelming as they initially seemed, or a low-risk setting for trying out things they wouldn't dare attempt at work. This approach clearly encompasses a simple change towards a "growth mindset". Indeed, starting from a place of joy, we ask participants to try things they previously thought impossible – not with the assurance of triumph, but with the openness to learning through experience and with the privilege of allowing oneself to make mistakes. Moreover, crucially, the discussion is framed around finding one's place in the community, requiring participants to reflect on their true selves rather than an idealised version of who they think they should be. Indeed, constant focus on self-improvement or becoming an idealised version of oneself may actually become a source of frustration and suffering.

"Experiential learning in the Community"

Given its deep personal focus, the volunteering experience stands apart from traditional corporate community service days by offering tailored, individualized experiences instead of assigning employees to pre-arranged group activities.

To ensure the success of this unique approach, we conducted thorough research into various volunteering organizations within the area capable of providing suitable opportunities for our representatives. In this particular case, the search was directly performed by us, but when scaled up, each factory will be responsible for finding one or multiple organizations to match participants with opportunities. Two are the key requirements that these organization(s) need to meet: (i) they have to be local, in order to minimize the cost for workers to engage with volunteering; (ii) they have to have access to multiple opportunities of different types, to be able to accommodate each participant's specific interests. For Factory 1, we established contacts with a local volunteering broker, a platform that bridges local organizations (NHS, sport clubs, oxfam, pet rescues, etc.) in need of volunteers to interested people.

To maximize the quality of the match and the scalability of the process to a bigger audience, the workshop instructor is asked to create a brief summary of each participant's personal story

⁸ For examples of participants' stories and learning refer to the Facilitator Guide in Appendix.

based on what was discussed in the reflecting session. After confirming with the participants that they are authentic accounts, the stories are then shared with the local organisation that starts looking for potential opportunities for each participant. The last step of the process is a meeting between the participant and the organization (in-person or on Zoom) to discuss the curated opportunities and choose one to pursue.

During the experience within the community, participants are asked to start from the *Ikigai* circles they filled in during their first workshop and continue their reflection on themselves. Each participant is provided a booklet, and is asked to annotate reflections on their experience, what they are learning about themselves, and if and how this can be applied to their everyday work. These notes will be the starting point for the discussion in the second workshop.

Workshop 2: "Share your learnings"

The representatives involved in the pilot are currently going through their volunteering experiences, hence the second workshop has yet not been piloted. However, one of the facilitators in the pilot had already committed to regularly volunteering in the community at the time of the first workshop. So, within the first workshop the participant already reflected on their experience of community-contribution. Their experience can then be used to provide an example of what happens in the second workshop, after the participants go through their experiential learning process in the community.

For this participant, the volunteering experience was chosen precisely because it was something they were passionate about, they enjoyed doing, and provided them with a way to make a contribution in their community. The participant was already able to identify the key challenges faced during their volunteering experience, and the parallelism with their experience at work, where they recognized that the very same challenges are preventing them from progressing to a role with more responsibilities. Specifically, the participant found it challenging to give feedback to colleagues, which hindered their ability to lead a team. Finally, the discussion led them to recognize that overcoming these challenges would require them to get trained to develop some communication and management skills they are lacking. As a result of our conversations, they are currently undertaking management training.

V. The Data Collection: Challenges and Learnings

To gather data on the effectiveness of the intervention, we rely on a codesigned data collection tool and on administrative data.

V.1. Co-designed data collection tool

It allows the representatives to collect information digitally through Qualtrics via a tablet following the one-to-one meetings.

Aim: allow us to gain as much quantitative and qualitative insights as possible about the conversation and its outcomes while minimising the hassle in data transfer, creating the least minimum burden for the representatives to maximize the tool use, and allowing the representatives to record information about the meeting keeping them private and confidential at the same time.

(i) the tool is digital;

(ii) it makes use of a software that allows the maximum flexibility to the representatives to customize the way to process and visualize the information;

- (iii) the survey questions were co-designed with the representatives' input;
- (iv) the representatives have been repeatedly trained in using the collection tool.

The essence of the one-to-one meetings is that of an intimate and personal conversation between the representative and the worker. For this reason, neither the factory's management team nor a representative of the research team can be present during the meeting. However, to be able to gain as much quantitative and qualitative insights as possible about the conversation and its outcomes, we created a data collection tool (please see Appendix for the complete list of questions in the form) to allow the representatives to record information about the meeting, while keeping them private and confidential at the same time. The collection tool allows the representatives to collect information digitally through Qualtrics via a tablet that each person is provided with. For each representative, we opened a Qualtrics account with new credentials known only to the representative and the research team. The choice of Qualtrics was motivated by the necessity to find a software that allows collecting meeting information digitally to minimise the hassle in data transfer. Moreover, this particular software allowed us to offer the representatives the possibility to customize the way to process and visualize the information. Indeed, the representatives could create their own summaries and reports, their own analyses, or download the records as a spreadsheet if they preferred to analyse them in Excel. As we receive more meeting records from the representatives, we will also help create reports regularly to help the representatives understand the progress and challenges in their conversations with their coworkers. Ensuring that the representatives could use the platform and record meetings in the way that best meets their own needs was essential for the data collection to create the least minimum burden and maximize the tool use. Lastly, the choice of Qualtrics, instead of any of the company's existing survey instruments, and the restricted access to the accounts were meant to reassure the representatives that whatever they inputted into the tool would be shielded from the company's access.

The data collection is composed of two parts. Each representative is instructed, before the initiation of the first meeting, to seek consent from their colleague to share the meeting information and outcomes with the research team and/or with the company. If the worker gives consent to sharing information with the research team,⁹ the representative is then asked to input the information about the meeting into the data collection tool after the conclusion of the meeting. No record-keeping should take place during the meeting to avoid disturbing the natural flow of the conversation.

In order for the data collection tool to be perceived as useful rather than a burden by the representatives, the survey questions have been developed with the representatives themselves. In particular, the questions included in the final survey are the result of iterative co-generation of knowledge. From the very beginning, dating back to the initial training, the research team ran a session with the representatives from each factory to understand how the factories work and what information would be required to identify where workers are at any day and time. A second session was then held where facilitators were invited to put down on a giant whiteboard

⁹ Workers can withdraw their consent at any time. In the consent form, we also ask for workers' permission for future contacts for long-term follow-up purposes.

anything they would like to record or insights they would like to gain from the one-to-one meetings. These initial inputs formed the foundation of the question in the survey instrument. After having this initial draft, the survey was then shared with the HR team in each factory to gauge whether there was something they would like to track as well.¹⁰ Lastly, the survey was finalized with the representatives in focus groups during our subsequent factory visits. The final survey gathers information on the following dimensions: meeting's background information (the worker's name, role, line/shift number, function etc.), information on the discussion (what, if any, development opportunities were discussed), progress since previous meeting, if any, next steps and worker's attitude during the meeting. The full details of the data collection form are provided in the Appendix.

The last piece of important information is that, to maximize the quality of the data collection, the representatives have been repeatedly trained in using the collection tool by members of the team. On top of the initial Qualtrics training when we delivered the tablets, we also provided numerous in-person/live training sessions and pre-recorded tutorials and guidance materials were also made available to the representatives. Additionally, we provided several tutorials aimed at showing the representatives how to use the software 'Data & Analysis' functions.

¹⁰ It is worth pointing out that despite our incorporation of questions from the HR team, it does not change our agreement that the company management will not be able to access the meeting records in the absence of explicit consent from the workers.

V.2. Administrative data

Aim: allows us to estimate how the FoW intervention affects workers' productivity, exit, absences and performance.

Central HR records and local data held in each factory:

individual-level data for all workers employed in the factories on workers' backgrounds (e.g., gender, age band, tenure, job level and temporary leave status),

attendance and absence records,

training records,

peer-to-peer and manager recognition and take-up of volunteering opportunities. shift-level data on Overall Equipment Effectiveness (OEE)

Only some of the data have been retrieved as of yet. Collecting data at the factory level has demonstrated to be quite challenging:

factory data is stored locally at each site

different individuals overseeing different data

different record keeping systems

Gathering this data hence requires extensive coordination effort.

While the meeting records provide us with fine-grained qualitative details on the Future of Work conversations, it does not allow us to evaluate the effect the intervention has on various key outcome measures. To complement meeting records, we retrieve two additional main data sources – central HR records and local records held at each factory, for all the workers employed at the three factories. The central HR records contain individual-level information

on workers' backgrounds (e.g., gender, age band, tenure), role, and wage, useful to track whether the intervention has an impact on the worker progression within the company.

Turning to the local factory data, the data includes information on factory shift patterns collected from attendance sheets, which allow us to map where each employee is working on any given day. This information can be used to trace whether the effect of the intervention goes beyond the workers taking up the one-to-one meetings, but spillovers also to others in their shift, or to discern whether one-to-one meetings affect shift-level productivity. A second source of data is Overall Equipment Effectiveness (OEE) data to analyse the productivity effects of the FoW conversations on workers. This data includes information on the scheduled production time in which the manufacturing equipment is operational, whether it is working at optimal speed and the proportion of the output that passes quality thresholds. Thirdly, each factory provides us with data on training records for all employees. This includes compulsory training available to factory workers, which will be used to make sure that the effect on productivity is not due to other development training offered to workers. Fourthly, we collect data on manager and peer recognition. Colleagues can nominate one another to be mentioned on the factory newsletter for their contribution to the teams' performance or work environment, while managers offer small rewards, such as cantine vouchers, for standout performers. This information provides an insight into changes in effort exerted and interpersonal relations on the job due to the FoW intervention. The last source of data is the take-up of volunteering opportunities offered by the factory, which consist of paid and unpaid time off work for employees to volunteer within their communities. We observe the number of days and date of volunteering leave taken, as well as the type of activities workers perform while volunteering. This data allows us to analyse changes in the number of volunteering days taken and the likelihood of opting for skills-based volunteering, or control for individuals' tendency to volunteer prior to the intervention.

Table 2 in the Appendix provides a summary of each source of data.

Only some of the data have been retrieved as of yet. Indeed, collecting data at the factory level has proven to be quite challenging. Factory data is stored locally at each site, with different individuals overseeing different data locally (e.g., the person responsible for managing labour sheets could be different from the person managing training records). At sites where there are multiple factories, the same data category could also be managed by different individuals. Adding further to the data challenge, different sites can also use different record-keeping

systems that best suit their local situations. Gathering the data hence requires extensive coordination effort. We describe below the workflow that constitutes the best practice in collecting the data.

- 1. Coordinate with each factory's HR Business Partner (HRBP) to confirm what data is available and be put in touch with the person responsible for the data. This last step is necessary as each person will require permission to share the data from their HRBP.
- 2. Directly engage with the correspondents to reaffirm data availability and clarify format, data frequency, and time span covered. It is recommended to carry out this second step with an in-person or live conversation to minimize repeated work due to misunderstanding and maximize the communication effectiveness.
- 3. Where the raw data is not ready to be directly used for analysis due to its original formatting, it is recommended to inform the person responsible for providing the data to leave the cleaning/formatting of the data to the data analysis team to maximize the speed of delivery and minimize unnecessary work.

VI. Evidence on progress of one-to-one meetings

From the project's inception, there was a clear tradeoff between randomisation and the need for the Future of Work conversation to develop harmoniously. Specifically, for the bottom-up approach of the Future of Work intervention delivery to work effectively, it was crucial that the conversations between representatives and workers evolved organically. Multiple conversations with the representatives regarding how to best start and carry on these meetings, highlighted that this structured approach would have been ill-suited for these specific circumstances. Indeed, since workers often engage in conversations among themselves, the representatives interacting only with some selected workers while excluding others, would have eroded trust, and created skepticism and suspicion, undermining the very foundations of the interventions.

Provided that the main purpose of this pilot is to gather as many insights (both quantitative and qualitative) as possible to design the intervention and the curriculum, we chose to not incorporate a randomisation strategy to enable us to best observe how the Future of Work conversations and the community engagement workshop evolves and their intertwining with individualistic developments and the factory's team dynamics.

We present below the descriptive evidence we have gathered on the progress of the FoW interventions across the three sites.

VI.1 Conversations across sites

Site representatives

Four workers per site were assigned as Future of Work representatives at the beginning of the piloting. The four representatives for Factory 3 are currently active. At Factory 2 and 1, only three of the initial four representatives are carrying out meetings.

Number of meetings at the three sites

Meetings at all three sites started in 2023. Factory 1 was the first site to roll out videos advertising the FoW conversations. Since then, a total of 95 meetings have been held: 33 at Factory 1, 26 at Factory 2 and 36 at Factory 3.

Figure 3 - Number of Conversations



Notes: this figure includes all three sites

Meeting Content: a Closer Look at Factory 1

Factory 1 has shared detailed data on the content and actions arising from meetings, as well as consent from participants to analyse this information. Out of all the participants in Factory 1, the great majority have had one meeting with the FoW representatives. Three individuals have had two meetings, with 9 months of mean wait time between the two meetings. These individuals were among the first to have an initial conversation in the last quarter of 2023.





Notes: this figure includes only meetings at Factory 1

After each conversation, the FoW representative and the worker decide on next steps/action to take in their career journey. Depending on the action to take, the responsibility is on the worker, the representative, or line managers/HR representatives (site). An example of an action owned by a representative would be "FOW team looking into computer training to inform the worker" while a site owned-action would be "HR to book the training course for the worker". Figure 5 shows the number of meetings by the action owner. For the vast majority of meetings, the representative of FoW conversations has to take action to continue the workers' progress.



Figure 5 - Number of Conversations, By Action Owner

Notes: this figure includes only meetings in Factory 1

To understand how workers are evolving in their career journeys, we manually categorize actions into four categories:

1. Exploration phase: workers discuss possible interests with the representatives, without narrowing down on a particular area they would like to explore further.

Example: "Going to look into short courses in Degreed. Find out the options to upskill and progression path for promotions."

2. Preparing for action: workers decide on a particular area of interest;

Example: "PLC training set on Degreed. Looked into college courses, timeframe, course outlines."

3. Action booked: workers know what area they want to explore and have secured the activity that would allow them to do so (for instance, booking a training or arranging a shadow period);

Example: "Training now booked."

4. Action phase: workers begin the activity they have set out to do.

Example: "HR doing team leading sessions with the worker now"

Figure 6 shows that the majority of workers are currently in phase 3 (action booked), while 20% are still within the exploration phase. We expect future meetings to focus on the progress of workers after having completed their chosen activity.



Figure 6 - Percentage of Conversations, by Action Phase Conversation Stages for Factory 1

Notes: this figure includes only meetings at Factory 1

The reason for these meetings to take place to begin with was to foster a conversation regarding potential upskilling or reskilling strategies. The evidence from the one-to-one meetings held so far shows that the majority of workers are interested in exploring skills pertaining to manufacturing, which could be different from their current role or helpful in progressing within their current career path. Soft skills, such as leadership and team management, are also in high demand. However, some workers want to explore industries that differ from their current occupations. Many are interested in tech, mainly engineering. Others are looking to learn skills for positions in blue-collar occupations outside manufacturing, such as electricians, welders or truck drivers. When workers are unsure of the skills they want to learn at first, we classify the interest as "other".

Figure 7 - Number of Conversations, by Type of Training Requested



Notes: this figure includes only meetings at Factory 1

Manufacturing skills being the most in-demand can signify either that workers have already sorted into the industry they prefer to work in, or that workers seem to be having difficulties imagining themselves in professional roles too different from their own. At the moment, it is hard to distinguish between the two motivations. However, with more data available and more rounds of conversations, we will be able to observe if workers shift industry focus after having more meetings with the FoW representatives. Moreover, we will be able to shed light on whether leveraging community engagement is able to mitigate some of the identity frictions that might constrain workers' choices to what they already know.

Finally, to better visualize the types of opportunities and skills workers demanded, Figure 8 shows a word cloud of what workers discussed in the FoW conversations. Reskilling was their main focus, with many courses being requested and debated. There was also a big interest in learning about new technologies, both within their current occupation and as a way to move to jobs within the tech industry. The threat of job instability appears to be important as well, since workers discussed moving into different areas and industries.

Figure 8 - Word Cloud of Discussed Opportunities



Notes: this figure includes only meetings in Factory 1

"There are people who are more into technical or into more soft skills, in the same way people go either for arts or sciences. It depends very much on individual aspirations. Those in mechanics/electric may want to move to a position of responsibility and therefore need more soft skills."

Quote from factory worker and union representative on diversity of skills demanded

VI.2 Next Steps in Data Analysis

As we gain access to more data from the three sites, we will expand our current analysis and explore additional effects of the FoW intervention.

Firstly, we aim to reproduce the analysis of meeting content performed with the Factory 1 data on information on all three sites. Besides increasing the number of observations, this exercise allows us to understand whether there are systematic differences in meeting content or skills demanded by the site.

Secondly, we plan to match all workers' schedules with their attendance at FoW meetings, and merge this information with productivity data at the shift-line level. We will analyse whether attendance of FoW meetings affects workers' productivity, and whether there are spillovers in interest for the intervention, namely whether workers within a shift-line are more likely to attend the conversations if the colleagues they work closely with have done so as well.

Lastly, we aim to access individual-level data on worker exit, take-up of training and of volunteering opportunities to understand how going through the FoW meetings impacted workers' decision-making on their career.

VII. From piloting to co-design at scale: learnings for replication

The groundwork for this project was lengthy, and was completed thanks to the flexibility from our donors and partners. We share four learnings we gathered during this challenging process:

Choosing the right partners

Finding the right people to deliver and co-design the intervention

Everything is data

Difficulty of balancing methodology and intervention design

Collaborations between academics and corporations with the aim of creating knowledge rather than functioning as consultancy agreements - are a new concept. As such, there is no established blueprint on how to address key aspects of the research process.

The groundwork done for this project was a <u>lengthy</u> and <u>unpredictable</u> process that required <u>flexibility</u> from the research team and our partner company. The research team encountered obstacles in collecting data while ensuring compliance with the companies' data privacy policies, and building relationships with stakeholders in various company departments, due to their busy schedules and competing priorities. Our thinking on the intervention also evolved as we gained a deeper understanding of the company and its workers.

Below we detail a few key learnings that we gathered from going through this challenging process.

Choosing the right partners:

To facilitate this type of research, it is critical to have partners supporting the project who share the vision of the research team, and are willing to invest in exploratory, high-risk high-reward projects. Nuffield's flexibility and continuous support as the project evolved was a key contributor to its success, as was the company's engagement with the research team.

Finding the right people to deliver and co-design the intervention

It is crucial to find the right people. In particular, it is essential to get the support of positive role models. Indeed, as discussed extensively in the previous sections, the representatives played a critical role in every stage of designing and implementing the intervention.

- *How to identify them?*

Although often not in managerial roles, these individuals tend to take active roles in organizing additional activities, which gives them greater insights into guiding the intervention's operations. They are often people who play important roles in the company's social network in various ways, some as bridges between management and workers, others as union representatives – not afraid to stand up for workers' interests.

Getting these people's support ensures the intervention will be trusted and will reach every corner of the company. However, precisely because of their outstanding characteristics and the tendency to take on additional responsibilities at work, the positive-deviants will typically be constrained with busy schedules, potentially making the intervention an additional burden to their already difficult-to-manage workload. Moreover, while some may be based at a desk, others may be constantly moving between production lines, making them at times less accessible for scheduling and holding the 1-to-1 conversations.

When scaling up the intervention, it won't be possible to rely entirely on them. Surrounding the representatives with a support team to aid in their additional responsibilities is imperative for the intervention to be successful.

Everything is data

Always keep eyes and ears open. Every conversation is an occasion to learn information that can be used to design the appropriate programs. When piloting this process can be easily left unstructured, with insightful conversations naturally and organically occurring. However, it is important to design occasions to check in with the participants or the representatives also when the intervention is scaled up. This can be used to get information regarding the effectiveness of the particular design of the intervention, or the methods used to scale it up (representatives), or insights regarding, for example, the mechanisms of the observed effect (participants). Focus groups or interviews can help with achieving this objective.

The difficulty of balancing methodology and intervention design

Even though conducting a randomized controlled trial would be the most forthright manner to detect the effect of interests, it is not always the case that treatment can be randomly assigned. For example, in this case, a structured approach would have been ill-suited as it would have undermined our ability to observe how the conversations naturally evolve and whether spillovers across workers are present. Moreover, the representatives interacting only with some selected workers while excluding others, could have eroded trust, and created skepticism and suspicion, undermining the very foundations of the intervention.

However, building an element of randomization could be important when scaling up the intervention with the aim of evaluating its effectiveness. For example, wherever possible, the intervention can be offered first to certain plants within the same factory or to certain divisions in a staggered roll-out approach. Or else, in the presence of fixed shift patterns across which workers do not interact with each other, it could be offered to some shifts first – e.g. weekly shifts vs weekend shifts. In any case, wherever possible randomization at the individual level should be avoided. The reasons are twofold. First, a randomization at the individual level would not allow to fully appreciate and evaluate potential spillover effects. Moreover, it might come at the expense of the effectiveness of the intervention if people who work closely with each other get demoralized when not offered the same opportunities.

VIII. Implications for Research, Policy, and Practice

This project aims to shift the discourse around the future of work, to enhance individuals' sense of agency and autonomy, with implications for productivity, well-being, and talent allocation. The intervention follows a bottom-up approach by:

Empowering workers to take charge of reskilling.

Providing information to help them plan their careers.

Leveraging community engagement to encourage self-reflection and identity development.

Unlike traditional upskilling programs, this approach addresses behavioral barriers that prevent workers from utilizing existing resources. It also offers insights into altruism and prosocial behavior as tools to overcome cognitive constraints and boost productivity.

By integrating with firms and trade unions, it provides a scalable model for supporting economically vulnerable communities in navigating job transitions.

This project crosses disciplinary boundaries to incorporate within economics, and societal discourse more broadly, how triggering a new way of approaching the discussion around the future of work can engender a greater sense of agency and autonomy amongst individuals, with possible implications for productivity, well-being and the efficient re-allocation of talent across society. To reach this objective, our intervention 1) utilizes a bottom-up approach that transfers agency to the workers for an environment conducive to learning and thinking about reskilling, addressing *skill frictions*; 2) empowers workers with the information to understand the situation and plan their future effectively, targeting *information frictions*; 3) leverages the safety net

represented by belonging to a community and the desire to provide a contribution to provide workers with an opportunity to reflect on what brings them joy beyond and within their professional life - addressing *identity frictions*.

This approach is innovative along multiple dimensions. First, it goes beyond simply addressing gaps in career or in the effectiveness of upskilling opportunities, which various organizations are attempting to do and studies before ours have explored in factory settings and beyond. For example, Guillouet et al. (2021) look at a language training program for local managers working for MNCs in Myanmar to see how it affects productivity and interactions with foreign managers. Or else, Adhvaryu et al. (2023) investigate how soft-skill training affects performance. Beyond factory settings, Chang et al. (2019), Azulai et al. (2020) and Alan et al. (2023) study the impact of soft-skill training programmes on workplace culture and interactions, or how the adoption of platforms such as Udemy and LinkedIn Learning can maximize access to both internal and external training opportunities (Bridgstock, 2019). Looking beyond the private sector, many governments globally recognize the importance of providing free upskilling programs to lower barriers for individuals seeking to pivot their career paths. For instance, in the UK, the Department for Education offers skills bootcamps through the Skills for Life initiative, while programs like Singapore's SkillsFuture serve a similar purpose. This work complements and extends the existing knowledge by explaining how existing upskilling resources can remain underutilised as workers may not see the value of looking beyond the status quo, struggle to identify the next steps in their careers, or face difficulties pinpointing specific skills to develop. Moreover, it posits that a program that is decentralized in its implementation and adopts a bottom-up rather than top-down approach can represent a promising approach to address these failures.

Secondly, <u>our intervention also aims at showing that volunteering might not only help workers</u> to improve their attractiveness for employers by developing new skills and improving their well-being, but that community contribution can unlock a much deeper change if accompanied by a guided reflection process. The existing literature finds positive effects of volunteering on employment (e.g., Baert and Vujić, 2016; Kamerade, 2013), happiness, health and well-being (e.g. Russell et al. 2019; Fiorillo e Nappo, 2017; Anderson, 2014; Borgonovi, 2008), skills, knowledge and capabilities (OECD, 2015) for unemployed workers.¹¹ Beyond unemployed

¹¹ Most of the studies, however, rely on "observational and largely cross-sectional data [...] and fails to deal with selection effects" (Nazroo, 2015)

workers, there is suggestive evidence that providing workers with opportunities to volunteer or donate to charity and highlighting the beneficial impact of their work on others has positive effects on performance (Charness et al., 2016; Kosfeld et al., 2017; Tonin and Vlassopoulos, 2015; Chandler and Kapelner, 2013). For this reason, many firms have now introduced volunteering policies, allowing employees days of volunteering, some of which are paid, and many governments also offer volunteering opportunities to unemployed workers with the aim of facilitating the transition back into the workforce. Our intervention builds on the power of altruism and prosocial behavior to (i) relieve behavioural constraints particularly prevalent amongst the vulnerable, namely a fixed mindset and consequent limited cognitive bandwidth, and (ii) foster productivity and motivation. <u>As volunteering is not only 'do good, feel good', but creates the possibility to 'do good, and learn more about yourself', we posit it can become an opportunity for workers to understand their malleability for growth and tap into their innate desire to serve by finding where their future career and community's needs cross.</u>

This way, this intervention can inform practice on a sustainable and responsible automation process that meets the needs not only of firms and organizations, but also of workers and the local community. The leading position of our partner firm and the collaboration with trade unions in the design phase of the project ensures that the insights from our experiment are easily scalable and applicable in a wide range of contexts, and thus relevant for policymakers and other companies across the world. Moreover, by targeting individuals at sites that are, or will be, affected by restructuring in economically underperforming areas, the intervention ultimately contributes to mitigating the risks faced by vulnerable groups and generating economic opportunities from the grassroots by leveraging resources such as community social capital and innovation.

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X. Appendix

X.1. Additional Tables

Source and Data			
Factory Shift patterns	shift + line + area a worker is working in for each day of the year		
	Employee level data		
Factory Attendance records	absences: sickness, paternity/maternity, holidays, etc for each day of		
	the year		
	Line by shift by area information		
Factory Production data	OEE data, plant downtime (with reasons why – TOP losses), waste,		
	services dispatch rate, additional key KPIs		
	Line by shift by area information		
Factory Training records	internal and external training requests and take-up		
	Employee level data		
Factory peer-to-peer and manager	Nominations and awards for improvements		
recognition	Employee level data		
Take-up of Volunteering	Requests and take up of volunteering opportunities and community		
opportunities	days through the company's volunteering policy (site sign up and		
	number of volunteering days taken, when, what)		
	Employee level data		
Central HR records	Employee ID		
	Gender		
	Age bands		
	Employee position number		
	Manager position number		
	Years within the company		
	If the employee is a blue-collar worker		
	Work level: 1 lowest, 6 highest		
	Salary grade		
	Full-time equivalent		
	Employment Type		
	Temporary Leave type		
	Employment status		
	Employment suitus		
	Position title		

 Table 2 - Summary of Administrative Data

X.2. Data Collection Tool - Forms

- X.2.1. Up-to-date version of the consent form link
- X.2.2. Up-to-date version of the form for the one-to-one meetings link

X.3. Training Session - Curriculum

Below we provide a high-level outline of the key sessions and activities carried out during the FOW representatives' training.

- 1. **Programme opening:** inform participants of the purpose of the programme, its objectives, logistics etc.
- 2. Participant Introductions: moment for participants to get to know each other.
- 3. **Trust Game:** games/exercises to build trust within the group to facilitate truthful and spontaneous sharing of personal information in the following sessions
- 4. Introduction to the Future of Work (FoW): ignite a conversation about the Future of Work, what it means to participants, discuss what makes them want to be involved, and their expectations of the role.
- 5. **Outline and structure of one-to-one meetings:** explanation of what one-to-one meetings consist of, the objectives, components, and potential outcomes of the discussion.
- 6. **Information session on the Future of Work:** overview of the economy-wide transformations in factory structures over the past three decades and future projections.
- 7. **Basic Principles and Key Skills for Effective Communication:** exercises, games, focus groups to understand the basic principles and develop the key skills for effective communications
 - a. Key principles for effective communication
 - b. Depth and level of communication to effectively connect with others.
 - c. Trust how to establish trust, and how to maintain it.
 - d. Build rapport so that communication becomes more effective.
 - e. Develop the key skills associated with active listening, question technique and providing feedback.
- 8. **Practice session for one-to-one meetings and script practice:** the participants get to practice with carrying out one-to-one conversations, developing their own personal script and experimenting with potentially difficult and/or sensitive situations

X.4. One-to-one Meetings - Supporting Material

You can find below a high-level summary of the topics discussed during the presentation of the program carried out by the FoW representatives to their colleagues once back in their factories after the training.

- What is Future of Work (FoW): introduction of the FoW program, which focuses on preparing workers for the future and helping them to be ahead of the game.
- Why Future of Work: information session on the fact that the program is motivated by the necessity to respond to the changes that are happening in the world of labor, with

drivers that go beyond the company to include the European Works Council and trade unions.

- Automation and factory changes: review of how technologies have changed overtime to prompt workers to realize the need of constant learning to keep up.
- Information on the FoW conversations: introduction of the FoW conversations and explanation of how it works and the logistics.

X.5. Experiential Learning within the Community - Curriculum

X.5.1. Example of poster for advertisement of the Experiential Learning within the Community opportunities.



X.5.2. Facilitators Guide link

X.5.3. Workshop 1 Supporting Material

- Slides link
- Participant Preparation Booklet link
- Participant Booklet link

X.5.4. Community Experience Participant Booklet link