In collaboration with
McKinsey & Company

WORLD ECONOMIC FORUM

Putting Talent at the Centre: An Evolving Imperative for Manufacturing

WHITE PAPER

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Foreword

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Technology isn't at the heart of production. People are. Putting people at the center is not a new idea, but technology has undeniably transformed industry and continues to do so, which means this imperative is evolving – and so must our playbook for meeting it.

Currently, a gap exists between business ambitions and the frontline talent needed to achieve those aims. By 2030, **54% of the workforce** in the advanced manufacturing sector will require training to meet evolving skill demands. As former leaders in production, we've heard "people first" countless times. Yet, we know how challenging it is to turn that slogan into reality – especially in manufacturing and supply chains.

Why is the frontline talent challenge so acute? At a basic level, workers often struggle to earn a living wage, especially in developing economies. According to McKinsey & Company, 40% of frontline workers in manufacturing face financial insecurity, driving high turnover. Even in higher-wage contexts, competitive pay alone isn't enough. Employees seek meaning, growth and a workplace that values their contributions. Without this, burnout and disillusionment take hold.

As a result, talent retention has become one of the biggest challenges for industrial organizations. A McKinsey study shows that companies with effective people strategies are 2.2 times more likely to outperform their peers. Yet many still treat talent as a cost rather than an investment. It's time to shift to a perspective that views frontline workers as key drivers of stability, productivity and growth.

Organizations that embrace this mindset – offering not just fair wages but opportunities for development and connection – will lead the future of production. Imagine a workforce where employees proudly say, "I belong. I contribute. I have a future here." These are the companies that will thrive, balancing business success with the well-being of the people at their core.

This is the focus of the **Frontline of the Future Initiative**, a World Economic Forum initiative in collaboration with McKinsey & Company. This initiative explores how investing in talent innovation creates a win-win: boosting business outcomes while strengthening people's relationship with their work. It offers a new playbook to meet the changing imperative to keep people at the centre of production.

Have we solved the talent challenge? Not yet. But we know this: the organizations that truly invest in their people today will own the industrial future. Join us as we explore what it means to build a better path forward – for business, for workers and for the world.

Executive summary

People, rather than technology, remain the true heart of industry.

While there has long existed an imperative to keep people at the centre of production, that imperative has and continues to evolve as industry undergoes fundamental transformations. A new age of intelligent operations has emerged – and while it requires new skills, it also creates new opportunities for frontline workers. A conscious approach to investing in talent is the missing ingredient that will allow companies to meet these challenges and opportunities.

The **Global Lighthouse Network, a World Economic Forum initiative, co-founded in 2018 with McKinsey & Company, and counselled by an advisory board of industry leaders**, has demonstrated technology's transformative potential in manufacturing. Yet human workers remain central to production, and industries worldwide face an urgent need to transform frontline work amid mounting productivity and stability challenges.

The Frontline Talent of the Future Initiative addresses this challenge by identifying global success stories and creating an actionable playbook for talent strategy. The initiative launched a pilot with 10 companies and at 13 sites across the globe to identify leading talent innovations. Initial results demonstrate positive impact: pilot participants achieved, on average, 52% improvement in stability metrics, 34% improvement in financial metrics, and 28% improvement in productivity and operational health and safety metrics.

Meeting the imperative to keep people at the centre of manufacturing has always been difficult, but dual factors have compounded the challenge: productivity growth has declined to just 1% in advanced economies from 2016-2022, while 71% of US manufacturers struggle with workforce stability. Five root causes drive this instability: talent shortages, widening skill gaps, evolving worker needs, struggling supervisors, and insufficient rewards, recognition and incentives.

Leading organizations are pioneering a fundamental shift: viewing frontline talent not as a cost, but as an investment comparable to capital. Research shows that companies typically spend three times more on talent than capital equipment, but they lack the same rigorous investment approach for talent – particularly at the frontline level.

Success requires locally tailored strategies and investment in six core capabilities beyond compensation: work design and safety, talent planning, attraction and onboarding, talent development, talent effectiveness, and culture and experience.

Research conducted for this paper found that leaders take three critical steps: 1) they set aspirational strategies after understanding the problem, 2) they invest in talent innovations, and 3) they build the holistic workforce operating model at the corporate and site level to drive and sustain impact. While even leading companies have only begun to tap the full potential of talent innovation, they distinguish themselves by connecting innovations directly to measurable impact.

In 2025, the Global Lighthouse Network will deepen its focus on talent by including additional talent-related innovations and solutions in its framework. This means sites can apply for a lighthouse award to be recognized for achieving world-class performance with distinction in talent transformation. These organizations will help shape a future where frontline talent development drives sustainable industrial growth.

Understanding the evolving talent imperative

To unlock productivity and stability, the world must adapt to meet a changing talent imperative.

> Today's frontline workers are technology operators and creative problem solvers.

The world must adapt to the evolving industrial imperative centred on people. Based on insights gathered from leading manufacturers and supply chains over the past year, one key takeaway stands out: no matter how advanced digital technologies become, people remain at the heart of all transformation. A new age of intelligent operations has emerged – and while it requires new skills, it also creates new opportunities for frontline workers. Meeting these evolving challenges and opportunities for the frontline calls for a new playbook.

The understanding of the Fourth Industrial Revolution has been informed by the **Global Lighthouse Network**, a World Economic Forum Initiative, co-founded in 2018 with McKinsey and Company, and counselled by an advisory board of industry leaders, it began with a focus on individual manufacturing sites that comprised the vanguard for operational excellence and has since expanded to recognize leaders in performance and sustainability impact across the production value chain. Now comprising 189 lighthouses, the Global Lighthouse Network has provided increasing evidence that for all the advances technology has made, the human frontline remains essential.

A changing frontline reality calls for a revised playbook

Frontline work has changed remarkably. In many ways, today's frontline workers are technology operators and creative problem solvers. Robotics connected to the internet of things (IoT) now operate where line workers once laboured in repetitive, dull and sometimes dangerous tasks. These advancements have changed frontline labour, but the new skills they demand have made the talent puzzle even more complex and companies continue to face people-related challenges – specifically, maintaining frontline talent productivity growth and stability:

- A company's **frontline productivity** growth is the change in the output generated by the system per unit of input (e.g. units per hour), but it's also more than this. It is the improvement in quality, service, yield, non-labour costs, etc. In other words, all the relevant indicators for the system's performance enabled by the frontline.

- A company's **frontline stability** depends on having people with the right skills and attitudes who consistently show up and stay with the organization. The ultimate stable workforce is the one that is fully present, fully engaged and remains with the organization.

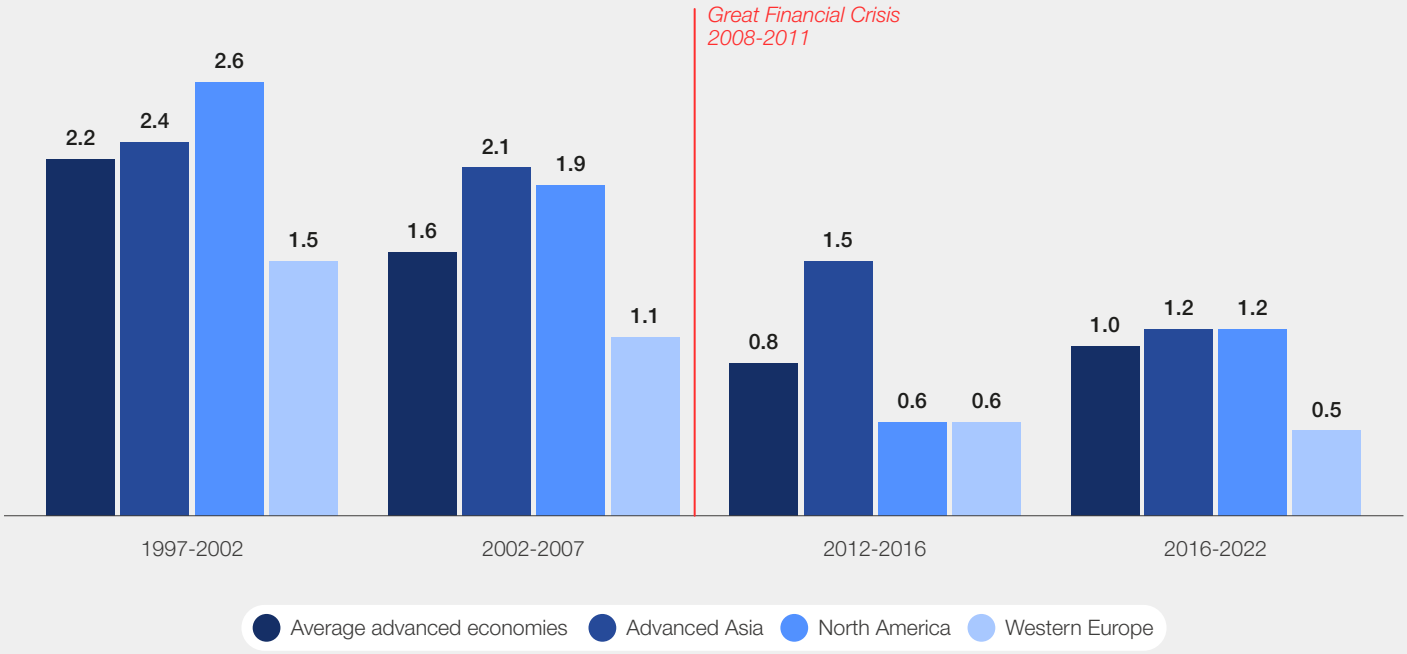
Because of this reality – that **the future of production remains about people** – global industry needs a new playbook for talent, and meeting such a tall order requires a powerful collaboration. This is why McKinsey & Company and the World Economic Forum collaborated again in 2023 to charter the **Frontline of the Future Initiative**, with the aim of identifying frontline talent success stories from across the production value chain. In 2025, the Global Lighthouse Network will deepen its focus on talent by including additional talent-related achievements and solutions into its framework. **This means that starting in 2025, sites can apply to be recognized for achieving world-class performance with distinction in talent transformation**.

This white paper presents insights from the **Frontline Talent of the Future Initiative's pilot programme**. It highlights challenges identified by participating sites and shares the innovative strategies companies have used to address them – offering the first chapter of a new frontline talent playbook. While the report draws heavily on US data due to its availability and industrial scope, these insights reflect global trends observed by initiative leaders.

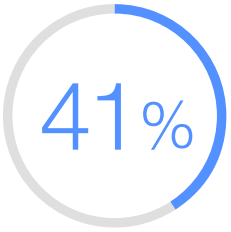
The essential differentiator: impact orientation

Much has already been written about talent in the context of the production system. What sets the Frontline Talent of the Future Initiative apart? It's about drawing a **direct line to impact**. Unlike other thought leadership efforts focused more generally on talent, this initiative has intentionally tied each innovation directly to a demonstrable productivity or stability outcome. On average, pilot participants saw a 52% improvement in stability metrics, a 34% improvement in financial metrics, and a 28% improvement in productivity and operational health and safety metrics.

FIGURE 1 **Average productivity growth across advanced economies**



Source: Mischke, J., C. Bradley, M. Canal, O. White, et al. (2024). *Investing in productivity growth*. McKinsey Global Institute. https://www.mckinsey.com/mgi/our-research/investing-in-productivity-growth.



of respondents to a recent survey of manufacturing employees, are planning to leave their jobs in the next three to six months.

Productivity and stability remain elusive

In most sectors of developed economies today, business can no longer rely on the old tactics of increasing prices and finding new sources of growth as the drivers to increase profit. Rather, productivity is now, in many respects, the only viable path to increased financial performance.

Despite this, productivity growth everywhere is slowing. Advanced economies saw productivity growth of only 1% between 2016-2022, down from 2.2% between 1997 and 2002, a period driven by the boom of the "dotcom" era. The last 15 years have seen productivity growth decline, largely driven by the global financial crisis but also by other systemic issues, including ageing populations and decreased workforce participation.

Manufacturing is no exception

The manufacturing sector, a pillar of most economies, is no exception to the trend. In the US, a similar productivity pattern of accelerated, declining and meagre growth has unfolded. Between 2011 and 2019, the decline in productivity growth was even stronger in manufacturing than in the broader economy, with only 0.7% growth. Most recently, from 2020 to date, the manufacturing growth rate has partially recovered to 1.8%, with the latest report at 1.3% in Q2 2024[1] – but it is still lagging the historic rates, leading business leaders to reevaluate their productivity strategies.

Labour stability, critical to improving productivity, presents a growing challenge. An outlook survey by the National Association of Manufacturers (NAM)[2] found that more than 71% of manufacturers have difficulty attracting and retaining employees. One driver is labour market participation, which dropped sharply during the COVID-19 pandemic; meanwhile, job switching spiked – neither of these has returned to pre-pandemic norms. Internal McKinsey research[3] has found that among respondents to a recent survey of manufacturing employees, 41% are planning to leave their jobs in the next three to six months. Absenteeism and attrition remain major issues for companies.

of workers' existing skill sets are predicted to be transformed by 2030.

Attrition, especially among those in the first 90 days of employment, remains stubbornly high, reaching three digits in many sectors. This instability has left many executives grappling with how to operate in the new normal.

Unpacking the five drivers of talent instability

These challenges have five root causes: talent shortages, widening skill gaps, evolving worker needs, overburdened supervisors, and insufficient rewards, recognition and incentives.

1 Talent shortages

The long-term viability of any company depends on sufficient access to skilled and capable talent. Inevitably, the balance between supply and demand for manufacturing talent varies geographically; however, demand greatly outpaces supply in much of the world. The US Bureau of Labor Statistics reported 622,000 unfilled manufacturing job openings nationwide, while the overall labour force participation rate fell from 67% in the 1990s to below 63% in 2023.[4]

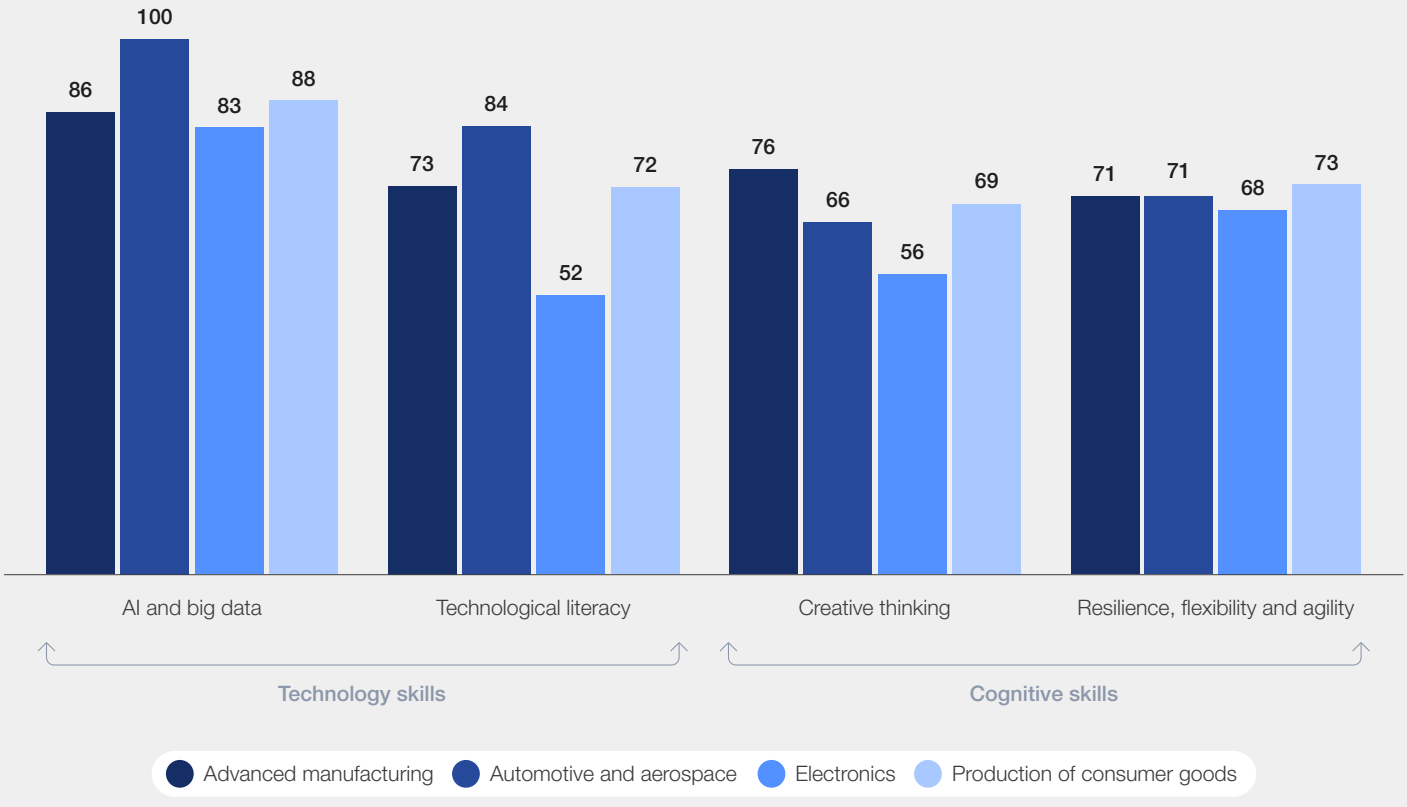
Furthermore, skills gaps can make it feel like there aren't enough people – even if the data show a surplus in the local market. If the available workers lack requisite capabilities, or if employees jump from company to company looking for a higher wage, companies still face talent shortage and/or instability.

2 Widening skill gaps

The integration of digital technologies in the industry is rapidly changing the skills required for frontline workers. Companies are struggling to find workers with the requisite skills as they switch from manual assembly to automated and digitized lines. This sentiment was shared by executives participating in the Frontline of the Future Initiative, including one human resources (HR) leader who said, "the biggest challenge is the digital requirements of our frontline workers. We need to make sure that more and more workers are knowledge-based workers, not just skilled workers." This is echoed in the World Economic Forum's *Future of Jobs Report 2025*, which predicted that 39% of workers' existing skill sets will be transformed by 2030.[5]

Artificial intelligence (AI) and big data are among the most pressing priorities for workforce upskilling in 2024, especially in industries like advanced manufacturing, automotive, aerospace, consumer packaged goods (CPG) and electronics. By 2030, skill gaps in the labour market are expected to be the primary barrier to business transformation, cited by 63% of surveyed employers in the *Future of Jobs Report 2025*.[6] Cognitive and behavioural skills, creativity and agility are also gaining importance to ensure employees can navigate rapid technological and organizational shifts. Companies focusing on these areas are better positioned to adapt to the evolving industrial landscape and maximize generative AI's (genAI) potential for value creation.

FIGURE 2 **Focus areas of upskilling and reskilling by share of companies**



Source: World Economic Forum. (2025). *Future of Jobs Report 2025*. (Based on upskilling reskilling focus 2025-2030).

3 Evolving worker needs

Today's frontline workers are looking for discernible career path. They respond to inspiring leaders, value meaningful work and seek more scheduling flexibility. However, many employers do not fully appreciate these changing needs. Research by McKinsey found that when manufacturing employers were asked what they thought were drivers of frontline attrition, they cited work-life balance, flexible schedules and ability to work remotely.[7] In fact, while these issues did matter to employees, they didn't matter as much as employers thought they did. Rather, the top three factors employees cited as reasons for quitting were:

1. They didn't feel valued by their organizations (37% cited this as one of their top three reasons).

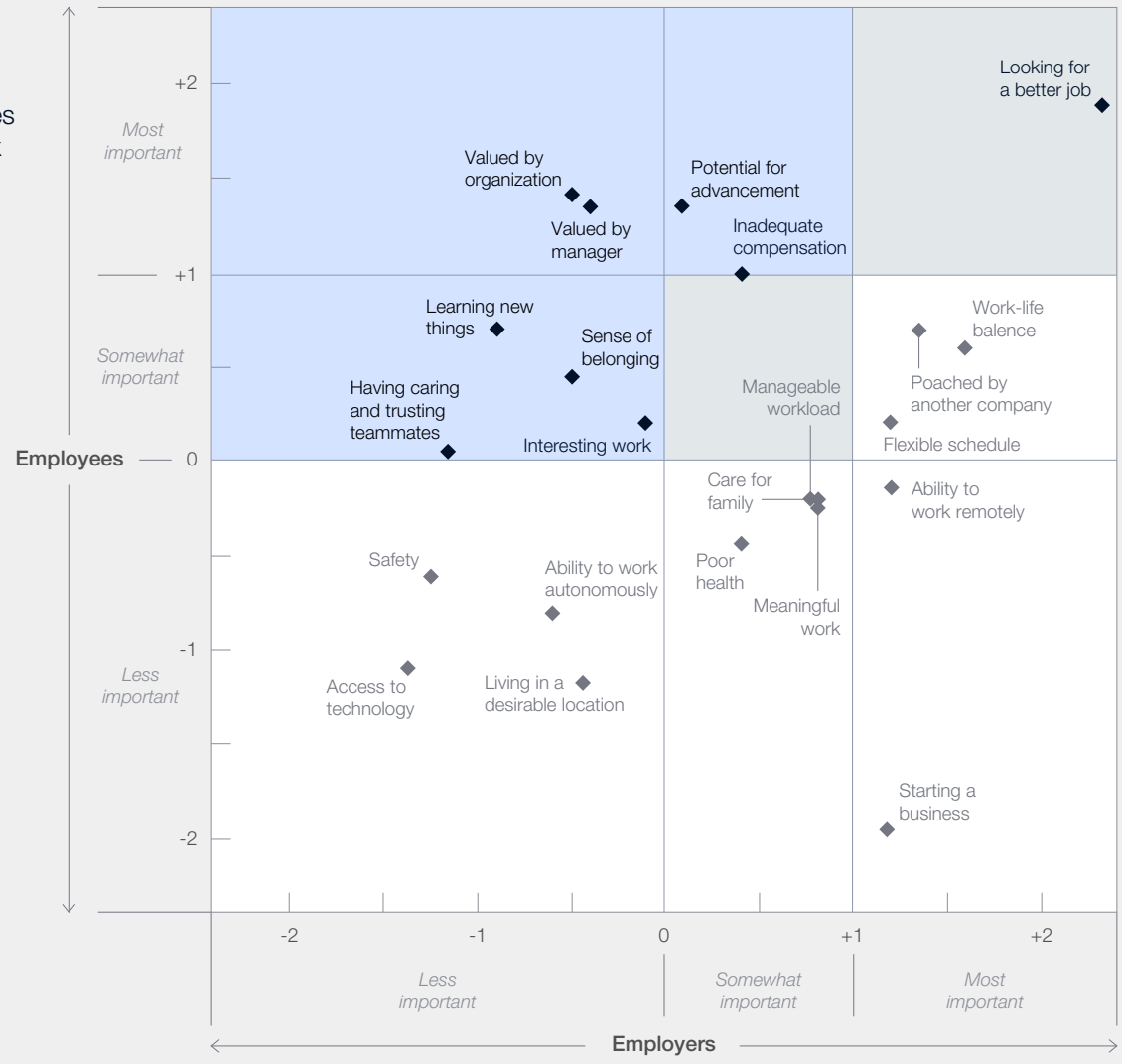
2. They didn't feel valued by their managers (36% cited this as one of their top three reasons).

3. They didn't see potential for advancement (36% cited this as one of their top three reasons).

One of the most challenging aspects of developing an effective talent strategy lies in the fact that, for the first time in history, today's frontline workforce comprises five generations with considerable variation in their preferences and priorities. For example, while Gen Z cares about compensation, they care about it much less than older workers do. Meanwhile, they place a higher premium on meaningful work compared to other generations.[8] This could include prioritizing working for value-based organizations with purpose-driven cultures. These generational preferences and career-progression shifts mean that organizations have to look at their employee value proposition (EVP) holistically to take decisive action.

FIGURE 3 **Factors that are important to manufacturing employees versus what employers think is important**

Employers seem to overlook the relational elements that are key drivers for why employees are leaving, such as lack of belonging or feeling valued at work.



Source: McKinsey & Company. (2024). *Talent Trends Survey*.

4 Overburdened supervisors

Supervisors are eager to help people develop, but they're finding that they're able to dedicate less than a third of their time to people leadership, which includes activities related to coaching and employee development. The majority of their time is dedicated instead to individual contributors and administrative efforts.[9] Meanwhile, employees cite feeling valued by their manager and having a sense of belonging as two of the most important factors impacting their decisions to stay at a company. Middle managers, in particular, are struggling, with approximately 40% of them reporting burnout – the highest rate of burnout reporting among all job levels.[10] This is being reflected among their reporting workers, too: 31% of workers say they are reporting to uncaring and uninspiring leaders.

FIGURE 4 **Where managers spend their time, by percentage**

Average share of working time spent in each area, percentage of respondents

Non-managerial work

Source: McKinsey Global Survey of middle managers, 706 middle managers, 29 March-8 April 2022.

5 Insufficient rewards, recognition and incentives

Wage growth has outpaced inflation. In fact, in 2022 and 2023, it peaked at roughly 8% annualized. In 2024, wage growth has remained around 4%.[11] However, additional compensation is not enough to keep frontline workers in their roles. There are two reasons this is true.

Firstly, while wages have grown in production roles, they've also grown in other sectors, which has incentivized workplace switching and contributed to instability. In cases where wages are below the living wage – which remains the case for many frontline positions – the incentive to switch is even stronger.

Secondly, as mentioned above, it's about more than just wages. Pay matters – indeed, McKinsey analysis from October 2024 indicates that 41% of workers feel their compensation is insufficient.[12] The dollar amount is transactional, and it is table stakes. Beyond this, non-monetary factors play in, and the performance of frontline workers has to be supported by things that go beyond the transactional: recognition and appreciation. When workers consider leaving a company, a contributing factor is often not feeling valued by their managers or the organization as a whole.

1 The key to talent strategy: viewing the frontline as an investment

Frontline labour should be considered an essential investment, rather than just a cost line.

Historically, business leaders have viewed the workforce as a cost centre. Recent McKinsey research analysed the top 1% of publicly traded companies in developed markets in terms of labour productivity and total return to shareholders (TRS) and found that companies that create value focus on driving capital and labour productivity in tandem. They do this by thinking of labour not as a cost but as an investment, similar to how they think about capital.

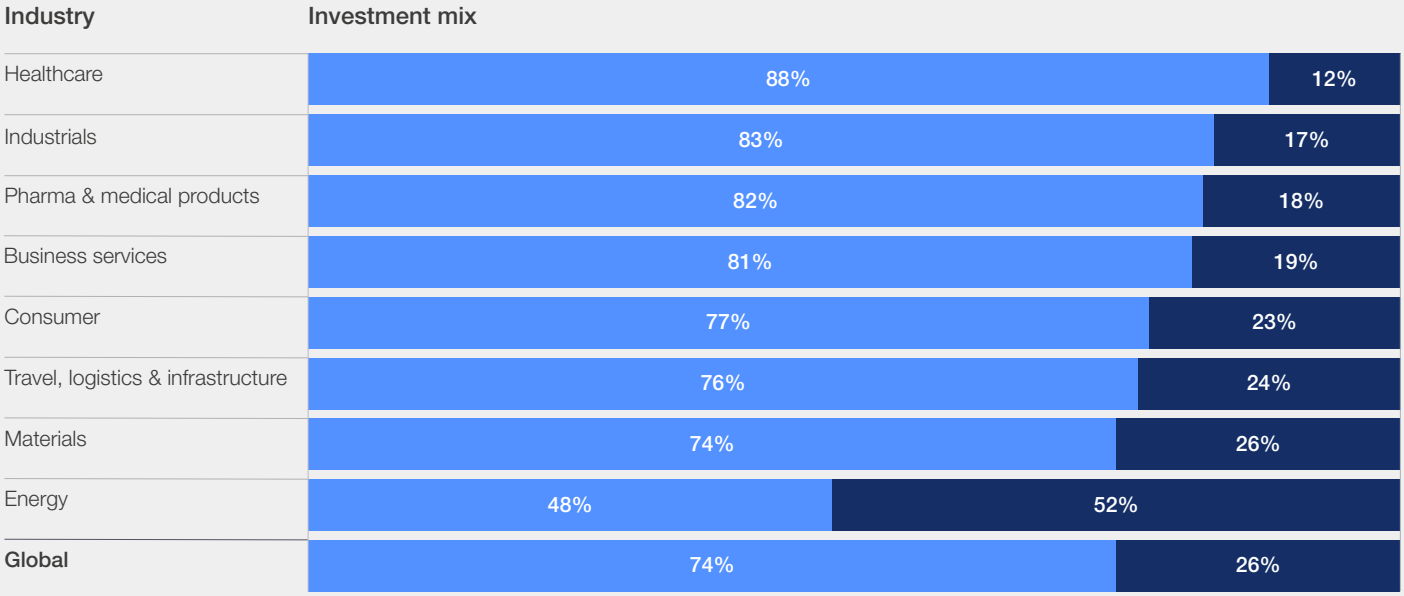
The Frontline Talent of the Future Initiative has identified a common mindset that underpins all leading organizations: **the belief that investing in talent allows them to shape their own destiny**. These companies create their own future by building a talent strategy with a localized approach, investing to build the workforce they need. This chapter will examine that mindset shift, then explore how companies can make a localized talent investment strategy based on understanding sites' local contexts – and provide a snapshot of the potential value gains smart talent investment can offer.

1.1 (Re)invigorating your approach to talent investment

Companies spend enormously on people, so it might seem counterintuitive to suggest that talent investment is lacking. To be sure, McKinsey research has found that on an annual basis, most companies – even in capital-intensive sectors – spend about three times as much on talent as they do on capital equipment.

FIGURE 5 | **Industries direct over 70% of investment towards labour**

Average investment mix by industry, 2010-2021



Companies have robust capital investment processes, but investments in talent are not rigorously evaluated despite the relative weight in investment factors.

Labour investment (labour cost) Invested capital (WC+PP&E)

Note: WC = working capital; PP&E = property, plant and equipment.
Source: McKinsey Value Intelligence platform, McKinsey analysis.

Research shows that in addition to compensation, leading organizations make targeted investments across six critical talent capabilities.

The difference in how they do so is stark. For capital expenditure (CapEx), there's a rigorous process aimed at ensuring the business case is clearly articulated. Companies have adopted disciplined, analytical thinking around CapEx investment – with calculated metrics such as return on invested capital (ROIC). After many reviews and filters, CapEx investment plans are subject to the highest level of board approval thresholds.

When it comes to talent, there is rarely as much rigour or consideration – a stark and telling contrast. For example, there is no generally accepted method for measuring "returns on talent investment." Moreover, talent investments are largely concentrated in upper management and knowledge workers, leaving the frontline relatively neglected. This is a provocation that ripples throughout organizations, threatening both productivity and stability. Those who begin embracing the frontline as an investment will see rewards emerge amid the "people dynamics" of their companies.

Summary of ways to invest in talent

Talent is no longer an enabler to the strategy; when it comes to operational excellence, the strategy is the people strategy. The research shows that in addition to compensation (pay, benefits, equity, etc.), leading organizations make targeted investments across **six critical talent capabilities**, introduced here and explored closely in the next chapter. Leaders think of these six capabilities as the "what" and then execute against prioritized initiatives through their integrated frontline operating model between operations, HR and finance to define the "how":

BOX 1 **Six talent capabilities**

1. **Work design and safety**: Reimagining frontline work to create safe and productive workspaces and processes
2. **Talent planning**: Understanding the frontline skills needed at the organization and site-level; matching demand and supply through dynamic scheduling
3. **Attraction and onboarding**: Finding and activating the next generation of frontline talent
4. **Talent development**: Building distinctive frontline capabilities for operators and supervisors
5. **Talent effectiveness**: Managing performance for operators and supervisors, driving the right behaviours to achieve performance aspirations
6. **Culture and experience**: Defining and delivering a compelling employee value proposition

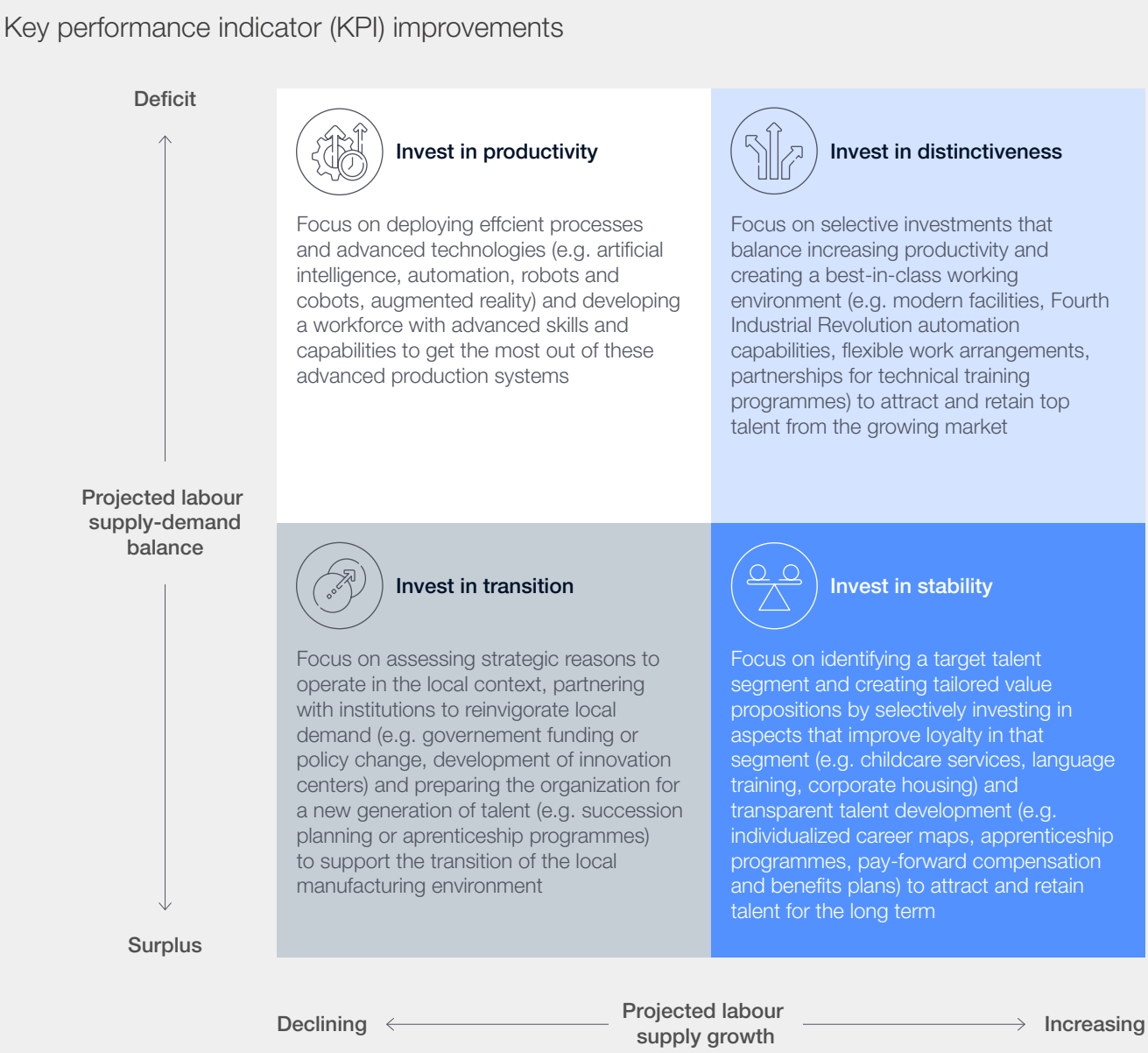
It is not necessary to excel in all six talent capabilities to succeed, but the analysis found that among companies leading on talent, all six capabilities were mature – with "spikes" in the areas that made most sense for their context. Indeed, a crucial first step in developing talent investment strategy is understanding the workforce in the context of the site.

1.2 Understanding your unique workforce

A company or site seeking to operationalize frontline talent investment should first perform a diagnostic that will inform its direction. This requires taking a holistic look at the labour market(s) where it operates to understand local labour dynamics.

The talent imperatives show that companies cannot standardize their approach to talent in the same way they standardize their machines and production systems across production sites. Previous research published by McKinsey in collaboration with the World Economic Forum[13] found that understanding local labour market conditions is critical to determining an appropriate strategy. The research suggests there are four types of environments.

FIGURE 6 **Understanding local talent market conditions can help leaders make better talent investments**



Source: McKinsey & Company.

FIGURE 7 | **Top 15 manufacturing labour economies**

Source: McKinsey & Company.

Many economies, like the US and China, are facing productivity imperatives, where manufacturing labour shortages combine with a shrinking labour pool to create fierce competition for labour. This compounds the difficulty of attracting skilled talent in sufficient numbers, while raising the risk that vital skills and knowledge will be lost as experienced employees retire or leave. To mitigate the impact of labour shortages, manufacturers with sites that face a productivity imperative can prioritize two levers. The first is deploying efficient processes and advanced technologies; the second is developing and retaining a workforce with advanced skills and capabilities to get the most out of advanced production systems.

Additionally, sites can seek to understand their overall employee value proposition (EVP) – a comprehensive framework that outlines the unique benefits and experiences offered to employees in exchange for their skills, capabilities and contributions. Understanding how employees view the current EVP will allow the site to make target investments.

The company or site should also understand its overall performance on critical productivity metrics, including but not limited to labour unit productivity, overall equipment effectiveness (OEE) and yield. Likewise, it should understand how stability factors like absenteeism, turnover, vacancy rate and time to fill are impacting productivity metrics.

BOX 2 | **Questions leaders should ask themselves**

Do I understand the labour dynamics in the local talent market(s) I operate in?

Do I know who my main talent competitors are and how their EVP differs from mine?

Do I know my main drivers of attraction and attrition?

Do I know what our employees want and how desires differ across generations, job types and locations?

Do I know how my maturity level across the six talent capabilities compares to my peers?

Do I understand the value associated with improving specific stability metrics, for example: time to fill, absenteeism and turnover?

Additionally, the company or site should garner a comprehensive understanding of its overall maturity in each of the six capabilities mentioned earlier: work design and safety, talent planning, attraction and onboarding, talent development, talent effectiveness and culture and experience. This means knowing where they are ahead of the curve and behind it, but it goes further – the site should determine, based on the market and strategy, where to focus its efforts.

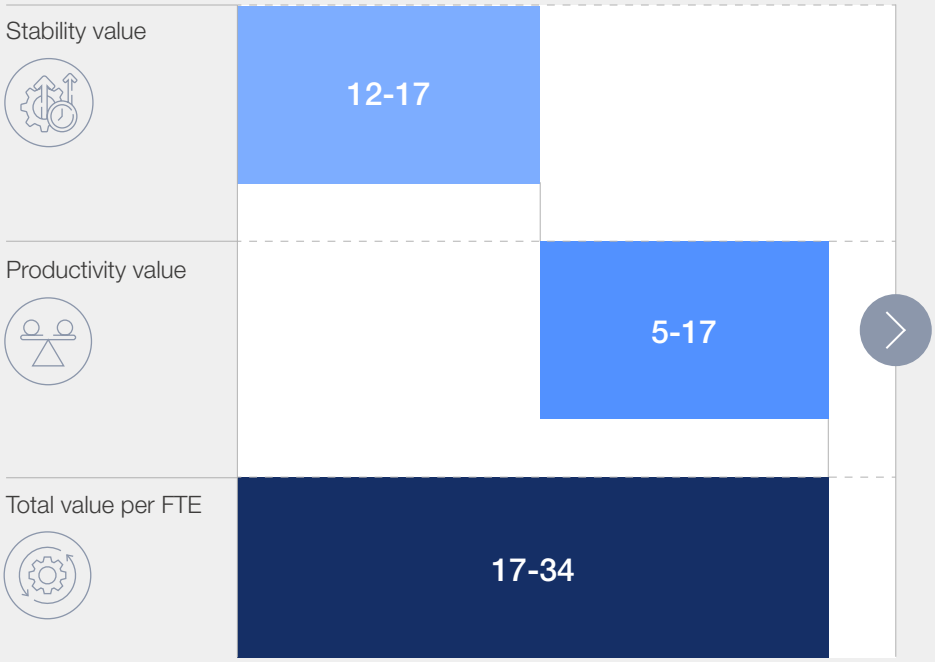
These puzzle pieces come together to allow companies and sites to understand the value of improving productivity and stability metrics. From there, they can craft a holistic set of initiatives that enable them to use various levers that can improve talent stability and overall business performance.

McKinsey research has found that improving productivity and stability could help companies realize significant value. The average earnings before interest, taxes, depreciation and amortization (EBITDA) impact observed was in the range of $17,000-34,000 per active employee. McKinsey found that the investment required to implement these initiatives typically generates a return of three to five times the initial investment within one to two years.

FIGURE 8 | **Improved stability and productivity generate meaningful value**

Average EBITDA impact per medium-skilled worker

Thousand dollars per active frontline US FTE per year[1]



Sources of value

- Cost of covering shifts
- Recruiting costs
- Training costs
- Productivity lost during vacancy
- New employee ramp-up loss

+

- Supervisor productivity loss
- Productivity lost from low engagment
- Skills mismatch

=

Organization with **60,000 frontline** employees that can...

- Decrease attrition by **5pp**
- Increase engagment by **12pp**

Could see over **$300 million** of capturable annual savings (+~0.8pp EBITDA margin)

Note: 1. FTE = full-time equivalent; pp = percentage points. Assumes average salary of $63K used for US; ~$40k used for EU (not including overtime or benefits). Turnover of 33% per year. Time to fill = 28 working days, work week = 5 days. Contribution per FTE = S&P500 median gross margin per FTE.

Source: McKinsey analysis; Society for Human Resources Management (SHRM) estimates of times spent on HR activities (e.g. interviews); BLS.

2 Building the workforce with proven frontline innovations

Frontline innovators across the globe prove talent innovation can have direct impact on productivity and stability.

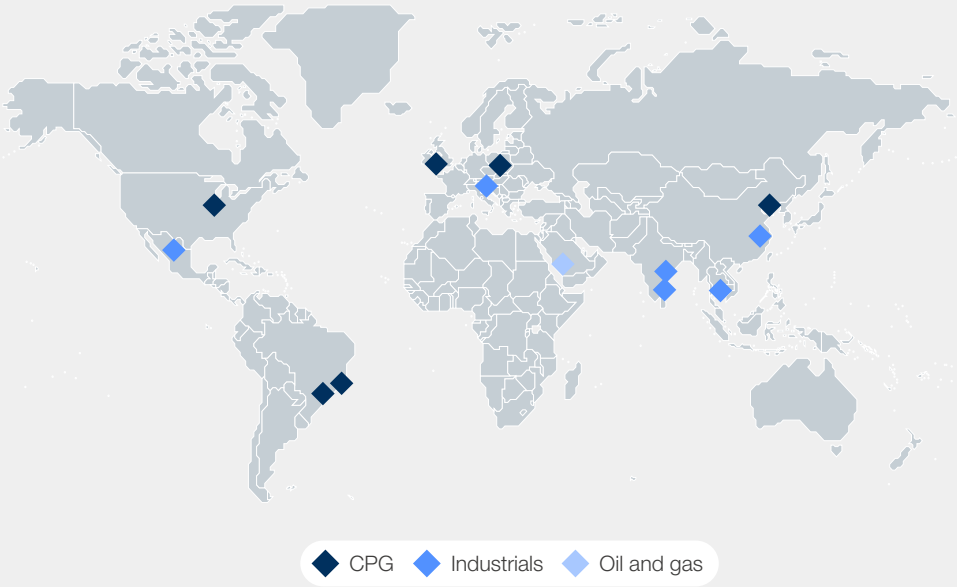
The Frontline Talent of the Future Initiative aims to identify talent innovations from the world's highest-performing sites, with a clear focus on the people doing the frontline work. It seeks to provide answers to the toughest questions around talent strategy. This chapter explores how participants in the initiative's pilot programme have done that, telling the stories of the innovations these leading sites have deployed.

A talent initiative modelled after the Global Lighthouse Network

In keeping with the Global Lighthouse Network's tradition of collaborating with frontrunner organizations, the initiative's pilot programme involved a partnership with nine leading companies known for exceptional people and talent programmes. It aimed to uncover the strategies and investments that have led them to beat the odds and see outsized improvements in productivity and stability. Each site shared its motivations for investing in a talent transformation and the talent innovations that enabled performance gains in key metrics. Sites with inspiring talent transformations were selected for visits, allowing a deeper understanding of their innovations.

FIGURE 9 **Pilot participants spanned geographies and industries**

Site locations



13 Sites participated in pilot from 10 companies

8 Sites visited

80 Number of feedback sessions company leaders and academics

61 Number of talent innovations identified

Source: World Economic Forum. (2024). *Putting people first: a new imperative for manufacturing*. https://www.weforum.org/stories/2024/12/manufacturing-industrial-sites-talent/.

2.1 Investments in capabilities must match local talent strategy

Frontline Talent of the Future pilot participants demonstrated that there is no silver bullet or one-size-fits-all approach for solving talent. Rather, each site faced unique challenges and overcame them by investing in different innovations and capabilities. Consider the following examples:

> There is no silver bullet or one-size-fits-all approach for solving talent. Rather, each site faced unique challenges and overcame them by investing in different innovations and capabilities.

CASE STUDY 1

Western Digital – Prachinburi, Thailand

Western Digital in Prachinburi, Thailand faced a significant technology shift in the hard disk drive industry, which necessitated a focus on efficiency as the site resized its operations. While the highly technical nature of the industry made finding skilled talent difficult to begin with, the site's rural location compounded the challenge. When circumstances required a radical business transformation, including investment in Fourth Industrial Revolution technology, automation and intelligent work re-design, the site was pressed to upskill its workers and maintain a high engagement level. It partnered with universities and technical institutes to develop technical skills training, **shifting 37% of the workforce to jobs at higher technical levels** – but it went further to assist workers and maintain engagement. Recognizing the importance of helping employees expand their skills portfolio, the site took a unique approach by offering classes such as baking, e-commerce, and hair styling. The site's efforts yielded improvements in engagement (14%) and held the attrition rate steady amid difficult circumstances.

CASE STUDY 2

Flex – Althofen, Austria

Flex in Althofen, Austria, is known for a high mix of technically complex products that require an extremely skilled and engaged workforce to produce. Already, fierce competition for talent is compounded by its rural location. To address this, the site focused heavily on attraction, engagement and retention. This included building a talent pipeline by investing in high school programmes and apprenticeships, **increasing the number of apprentices by 20%**. They also created a programme to upskill workers from non-traditional manufacturing backgrounds. To increase engagement, the site worked to develop managers' skill sets while providing clear career development pathways. These efforts led to a **7% increase in the rating of direct managers**.

2.2 Multinationals must also localize talent strategy

> Localization requires strong local HR and operations teams with thorough knowledge of local markets. These teams must be proactive and reactive to local market movements.

Localizing a talent strategy may feel daunting to multinationals who operate in many countries and regions. In some ways, localization may run contrary to ways of thinking motivated by efficiency of scale. Efficiency goals drive companies to centralize many teams and create global policies. Yet global measures of efficiency may not be what matters most when it comes to solving locally for talent. An essential question emerges, then: what missed opportunities might be realized with a localized strategy?

Localization requires strong local HR and operations teams with thorough knowledge of local markets; moreover, these teams must have the autonomy to be proactive and reactive to local market movements.

Unilever embodies localized investment to meet different market imperatives

One of the initiative's pilot participants, Unilever, embodies this approach. The company gives site leaders and local HR the flexibility to implement local solutions that fit their site's unique needs.

CASE STUDY 3

Unilever – Kilbourn, Chicago, USA

Unilever's Kilbourn, Chicago, USA, saw an opportunity to address evolving workforce preferences and enhance performance. They embarked on a people transformation journey focused on improving retention, engagement and operational efficiency. The site implemented performance-driven rewards and recognition that created shared goals and an "always-on" Gemba philosophy to enable continuous dialogue. They also addressed a critical aspect of employee feedback by implementing a transparent and flexible scheduling app. Additionally, improved retention by creating development opportunities with a flexible, dynamic organizational structure. **These efforts led to a 48% improvement in absenteeism while OEE increased by 16%**.

CASE STUDY 4

Unilever – Tianjin, China

Unilever's Tianjin, China plant sought a new and sustained approach to attract and retain talent, particularly in a context of rapid business growth and digital transformation. They focused on attraction, onboarding and talent development. Their talent acquisition tool helped **increase the number of applicants by 567%** while their onboarding booster programme **improved new employee retention by 19 percentage points**.

2.3 Innovative talent investments across six capabilities

The initiative revealed that leading companies are investing in talent across the six capabilities mentioned earlier in this paper: **work design and safety**, **talent planning**, **attraction and onboarding**, **talent development**, **talent effectiveness**, and **culture and experience**. When companies couple these investments with total employee compensation packages appropriate for their industry and location, they see productivity and stability improvements that greatly outpace their peers. This chapter presents insights gathered from site visits all over the world, offering a detailed look at proven, innovative solutions with the power to shape the future of frontline talent.

Work design and safety

Reimagining frontline work is crucial to create safe, productive workspaces and processes. Leading companies are redefining what it means to work on the frontline. They are linking talent requirements to a future technology roadmap. Job roles and organizational structure are updated regularly to meet evolving needs, with augmentation, automation and outsourcing deployed appropriately. Technology is used to augment workers, reducing their time spent in manual, repetitive or dangerous tasks; meanwhile, a strong safety programme proactively identifies and mitigates risks. Employees have easy access to tools and resources that support mental and physical well-being.

CASE STUDY 5

Unilever factory implements agile and continuous organizational restructuring – USA

Operating in a highly competitive talent market with high attrition risk, Unilever Kilbourn initiated a process that systematically reviews and revises the plant's organizational structure every six months to create roles that align with current business needs and the available talent pool. A focus on developing opportunities in various roles across all levels of the organization has retained top talent, to the extent that **81% of local management has come from intentionally developed roles**. The site has also seen a large improvement in employee retention, with an **attrition reduction of 68%**, attributed to this newfound ability to create development opportunities in a flexible and agile way.

CASE STUDY 6

Western Digital uses a digital control room to transform operator roles – Thailand

A digital control room fundamentally shifted the work of operators away from repetitive manual jobs. The new approach integrates automation, redesigns shopfloor process flow, engages touchless WIP (work in process) control, and incorporates industrial IoT (IIoT) signals and alerts into a command centre. The initiative improved OEE and reduced flow disruptions, **boosting labour productivity by 21%**; likewise, it reduced equipment failure diagnostic times from two hours to 10 seconds with over 90% accuracy. Machine learning (ML)/AI-enabled predictive maintenance provides operators and technicians with prescriptive solutions, allowing for faster response time. The command centre has contributed to achieving a 91% engagement score. The system provides both operators and technicians with an upward career path – **46% of job roles have been redefined, with 37% shifting upward** to involve higher skill levels.

Talent planning

Understanding the organization and site-level needs for frontline talent and matching demand and supply through dynamic scheduling are crucial actions. Talent planning in manufacturing focuses on understanding both organizational and site-level needs for frontline talent in the future. The most advanced sites layer skill-mapping (the process of identify the skills required for each role/position and the skills of every available employee) with their talent attraction and employee development plans, using innovative approaches that coordinate analysis and implications with strategic planning, integrating human resources analytics across all talent processes. They prioritize finding ways to address workers' desire for flexibility, implementing advanced approaches to labour schedules (e.g. self-scheduling systems) to respond to changing demands and employee preferences while optimizing productivity. HR collaborates with business leaders to align people strategies with overarching organizational goals. Based on evolving strategies, job roles and responsibilities are regularly updated through ongoing redesign efforts, such as job audits.

CASE STUDY 7

Schneider Electric's competency management system enables smart talent planning – India

Schneider Electric's Chennai site used digitized competency management system enables planning for global, regional and site-level competency needs while offering assessment and development tools for workers. Given the broad range – 11 technologies in technical competency with 131 sub-technologies, along with nine domains in digital competency covering 25 job codes – the tool helps managers identify priorities, set detailed plans, and choose the most critical technologies for current and future operations. The system also maps employee competencies and provides visibility on skills across sites, facilitating the borrowing of talent when business needs arise. Schneider's "Be Green" metric was implemented to ensure at least two experts in critical competency levels at each site, supporting redundancy and process stability. **The company has achieved 100% dual coverage for digital competencies at their sites**.

CASE STUDY 8

Haier COSMOPlat's dynamic line balancing affords scheduling flexibility – China

Driven by the need to provide increased flexibility for workers, especially new parents, Haier developed a novel "virtual industrial engineering system" that creates customized work instructions by position based on the product, the number of employees available and the available employees' skill levels. Using AI algorithms, the system allocates tasks and assigns workers to stations to balance the line. It can generate new work instructions within three seconds, allowing flexibility to continuously rebalance the line. Operator satisfaction has improved, and the system has significantly reduced the daily workload of industrial engineering (IE) engineers, freeing them from tedious work to focus on higher-value tasks. The system helped Haier achieve an **overall line balance rate improvement from 65% to 85%**.

Attraction and onboarding

Finding and onboarding the next generation of shop-floor talent are crucial steps. Best-in-class organizations are continuously searching for qualified candidates through diverse channels; meanwhile, they maintain a prequalified candidate pool for key positions. They ensure that screening and hiring processes are fair and involve operational managers, often using automated tools and panel interviews. New hires undergo structured onboarding programmes to integrate into the company culture and develop necessary skills, with supervisors incentivized to improve performance and retention. Regular check-ins (e.g. at intervals of 30, 60 and 90 days) are often managed by a partnership between supervisors and HR.

CASE STUDY 9

Flex offers apprenticeship programme for young talent – Austria

Facing challenges in attracting talent to its rural site, Flex expanded its traditional apprenticeship programme, which enables students aged 15 or 16 to enter a four-year programme and specialize in electrical engineering, mechatronics or metal techniques. It blends academic learning with professional training. Investments in the programme have allowed Flex to **grow the number of apprentices by 20%** since 2020 while **increasing the participation of women to 25%**.

CASE STUDY 10

Unilever develops a hiring programme for disadvantaged socioeconomic backgrounds – Brazil

Unilever Pouso Alegre, aiming to expand employment opportunities to disadvantaged population groups, partnered with the Center of Reference of Social Assistance (CRAS) to solicit job candidates – especially women, refugees and underrepresented groups. This intentional hiring effort sought to overcome factors that had presented obstacles to these groups, including requirements for specific job knowledge, minimum education levels, language requirements and minimum prior experience. The company's traditional hiring process took up to three months, precluding people in vulnerable situations who could not wait that long.

Unilever designed a pilot programme that set aside dedicated job openings and accepted applications in multiple languages. They shortened the hiring process to one month, during which candidates received a cost-of-living stipend while onboarding. A training programme, built in conjunction with a local technical high school, enabled candidates to learn basic job skills, along with mathematics and Portuguese. The pilot hired 20 people and was so successful that Unilever embedded the process into recurring business. The programme provides access to a wider talent pool, reducing vacancies and improving diversity – including **increasing the number of Black workers by 50%, the number of female workers by 9% and the promotion rate of Black workers by nearly 40%**. Programme participants have also had a lower turnover rate than the larger worker population.

CASE STUDY 11

Aramco uses AI Matching to optimize talent selection – Saudi Arabia

To streamline the hiring process and optimize talent attraction, Aramco implemented an AI matching selection and forecasting tool. By filtering resumés and accurately aligning candidate profiles with the organization's needs based on analysis of large data sets, the tool highlights potential hires with skills anticipated to be in demand. For example, it flagged digital and instrumentation technician candidates with expertise in emerging technologies, ensuring strategic hiring decisions. This refined process has not only enhanced the quality of new hires but has also improved operational efficiency. It reduced the **overall time to fill by 43%**; meanwhile, **new hire satisfaction percentage rose by 36%**, reaching a 99% satisfaction rate.

Talent development

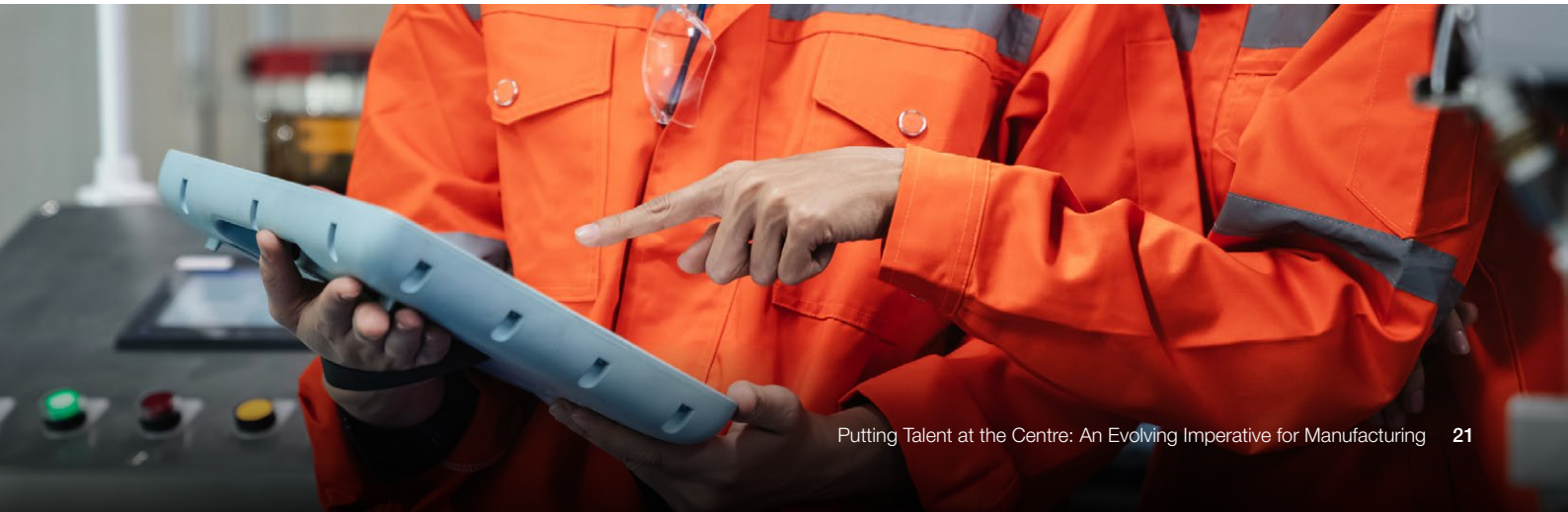
Building distinctive capabilities for operators and supervisors is crucial. Due to rapid innovations in technology, it's crucial to have a robust approach to reskilling. Additionally, leading companies make sure to measure the return on investment (ROI) in learning programmes regularly to inform future strategies. They often partner with universities, technical schools and governments to develop strong training methods and programmes. They focus on creating multi-skilled employees and measuring the coverage of critical skills across their sites. When development is combined with skill mapping to identify and document both technical and non-technical skills required for each role, leaders are increasingly finding ways to improve the quality of training and learning outcomes while reducing the total time required.

CASE STUDY 12

Unilever develops technical operators programme – Brazil

The maintenance team at Unilever's Pouso Alegre site was overwhelmed, focused primarily on reactive basic maintenance. They restructured job responsibilities and created the role of technical operator with an aim of providing autonomy operators by reducing their dependency on maintenance. The operators with a high degree of technical aptitude received three months of training. To provide additional opportunities, especially for women, the company partnered with Senai, a technical school, and offered scholarships in automation, mechatronics and mechanics. Scholarship recipients attended night classes for one year before becoming technical operators.

Unilever's various initiatives have created upward mobility into technical careers – indeed, technical operators now represent about 12% of the operators on the floor. The programme has **increased OEE by 4%, reduced breakdowns due to basic conditions by 42% and decreased maintenance activities by 35%**. It has promoted 10 technical operators. Overall, it has enhanced skills, improved efficiency and encouraged a culture of continuous improvement and autonomy.



CASE STUDY 13

Aramco implements gamified training – Saudi Arabia

Aramco designed a gamified training programme to improve training while addressing workforce safety and process skills gaps among a site's young workforce. The programme provides an immersive, multi-player, collaborative space offering 60+ certified courses covering operational requirements as well as elements of leadership, onboarding, safety and well-being. The investment allowed for a **43% reduction in operating expenses** (OpEx) by reducing the need for training-related travel and in-person training sessions. The training enables operators and technicians to safely and successfully perform preventive maintenance to essential equipment under rigorous conditions, simulating real-life scenarios that cannot be replicated in a classroom environment, and without having to shut down production. The initiative has improved maintenance technician competency, **reducing the maintenance backlog by 11%**.

CASE STUDY 14

Western Digital builds a digital leadership essentials programme – Thailand

Facing challenges in finding and hiring talent with the right skill set, Western Digital collaborated with a university to develop a multidisciplinary curriculum for its employees. The curriculum was optimized to develop skills for digitized manufacturing, with competencies in areas such as software, database, ML/AI and advanced mathematics. Western Digital co-designed specialized tools such as IIoT sensors and software for frontline upskill/reskill training in conjunction with universities and suppliers, enhancing workforce competency and labour productivity. Participating professors provide onsite training, and participating employees can earn academic credit towards a degree. Through this initiative, Western Digital has increased its **frontline workers trained in IIoT fundamentals by 49%** while boosting the number of employees promoted due to upskilling and reskilling by 26.8%.

Talent effectiveness

Managing performance for operators and supervisors that drives the right behaviours to achieve performance aspirations. Leaders in talent effectiveness use digital solutions to enable clear visibility of hour-by-hour performance metrics mapped to specific goals and engage in performance-oriented huddles. They recognize and reward employees based on performance linked to overall business goals and use automated processes to track time and attendance. Frontline workers receive coaching focused on how they impact organizational success; meanwhile, managers are trained to provide effective coaching and feedback. Managers and supervisors spend the majority of their time on the shop floor coaching their teams.

CASE STUDY 15

Unilever Kilbourn implements creative performance-based rewards – USA

Kilbourn implemented a creative, performance-based rewards system designed to energize the workforce through gamification and a rewards structure built around a monthly point system designed to comply with collective bargaining agreement rules. Employees are rewarded for achieving common site goals, shift goals and individual goals; points can then be redeemed for gift cards. The site has introduced bi-weekly town halls, during which site leadership shares updates regarding factory performance and awards points for best-performing shifts. These gatherings encourage friendly competition and provide a venue for sharing improvement ideas. This has not only boosted engagement but also sparked innovation across the factory floor. The results have been transformative. **OEE has been boosted by 16%, product waste has decreased by 34%, employee engagement has increased by 26%**, **revenue per employee increased by 36%** and **absentee rate has improved by 48%**.

CASE STUDY 16

Haier COSMOPlat deploys an innovative approach to salary accounting – China

Haier has revolutionized frontline worker payroll with its innovative salary accounting system, replacing an old paper-based payroll model that was time-consuming, error-prone and a source of frequent employee dissatisfaction. The new digital solution integrates with the manufacturing execution system to automatically gather data on output and attendance. The system uses facial recognition to identify employees and calculates employee salary based on output, quality and safety, with additional credits for innovations. Employees can see exactly how their salary was calculated, which increases transparency. The system has helped to **increase employee satisfaction by 10 percentage points**.

Culture and experience

It's essential to understand and define a compelling EVP. Culture and experience leaders use a multichannel approach to ensure robust two-way communication between employees and leaders within a psychologically safe environment that facilitates a culture of openness. They cultivate lively, inclusive communities through activities that promote connectivity and deep connection. They have structured diversity, equity and inclusion (DE&I) programmes with clear key performance indicators (KPIs) in place to advance diversity (e.g. gender, geographical, racial), equity and inclusion, career development and mentorship. When employees exit, leading organizations deploy surveys to track reasons for departure, using feedback for talent management improvements.

CASE STUDY 17

Nestlé Garoto chocolate factory supports deaf and hard-of-hearing employees – Brazil

Nestlé set out to create a safe and inclusive work environment for deaf and hard-of-hearing employees, both by retrofitting machine alerts that relied on audio signals to include visual elements and by implementing several measures towards education and integration. Nestlé developed a comprehensive training plan, which includes courses in basic Portuguese, mathematics and financial management. To ensure the integration of deaf employees, the company hired a full-time Brazilian Sign Language (BSL) interpreter, offered BSL classes to all managers and supervisors, and translated all training and communication into BSL. The site has trained over **200 employees in BSL, creating a more inclusive environment for the roughly 6% of employees who are deaf or hard of hearing**.

CASE STUDY 18

Haier COSMOPlat implements a social platform for employee innovation – China

Haier has tapped into the creative energy and experiential capital of its own workforce by implementing a dynamic social platform that allows employees to share and upload ideas for innovations and factory improvements. Ideas can earn their originators corresponding creative points that equate to financial rewards. A unique feature of the system is that employees can propose ideas pertaining to areas outside of their department, bringing fresh, cross-departmental perspectives.

Moreover, all employees can view ideas on the social platform and can interact with ideas by "liking" them. This networking element has compounded the submission of excellent ideas, with 95% of employees participating in creative proposals. Over 500 ideas were submitted last year, achieving a **combined cost savings of $1 million**. Employees can receive approximately 30% of the cost-saving value of an idea once it is implemented.

3 Way forward: Operationalizing frontline talent investment

The right processes and teams are required to drive investment in talent.

Meeting the evolving people-centered imperative means transforming the mindset around talent and recognizing it as an investment rather than a cost line. The natural next question is how to shape and operationalize that investment. This chapter explores the way forward: creating a structured process and building a cross-functional team.

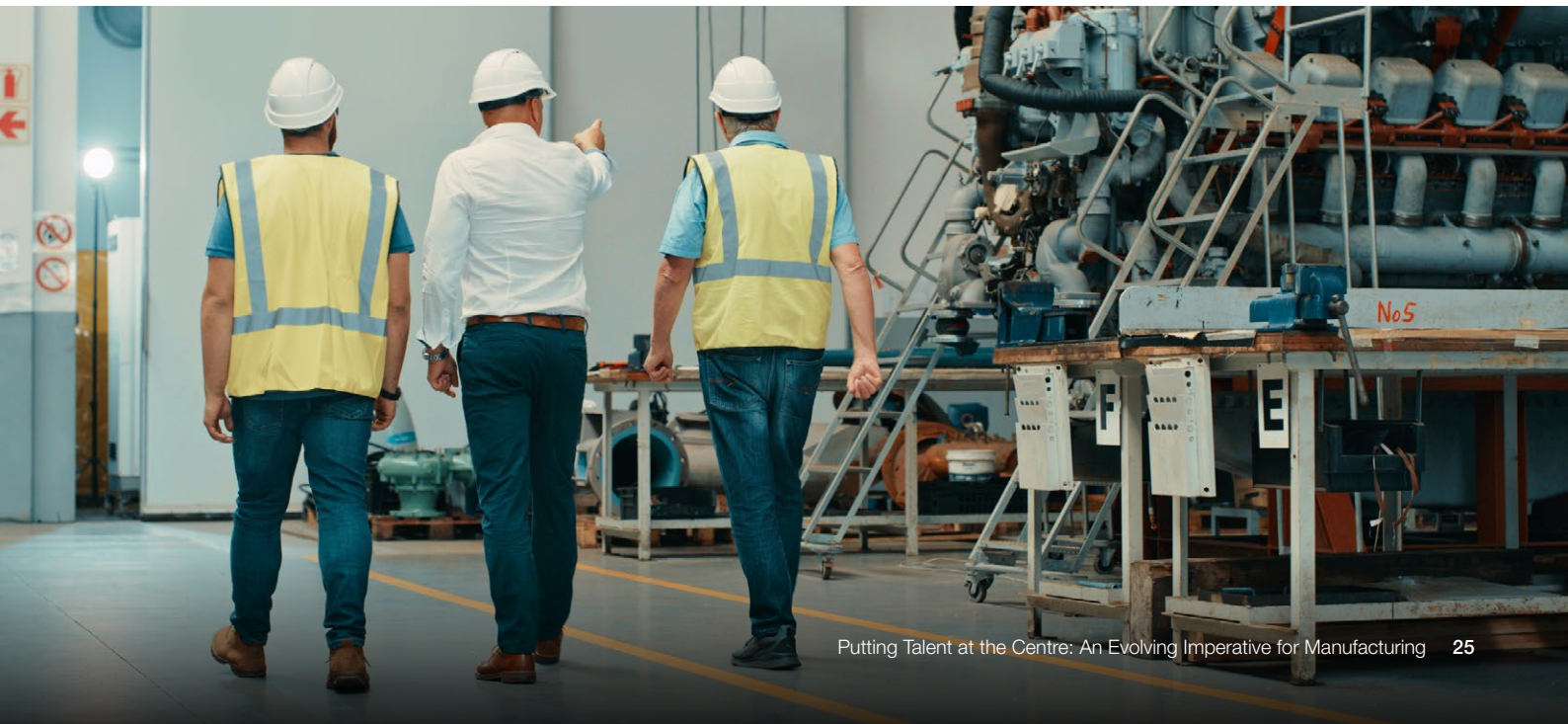
3.1 Create a structured talent investment process

> For talent innovation to become ingrained in investment strategy, companies must be able to demonstrate clear benefits, which is why it's crucial for companies to measure returns on talent investment.

Once an organization understands its workforce at a given site, it can incorporate talent investments into a standard process that mirrors what companies do for capital expenses. Frontline talent takes a local approach, and the initiative's pilot programme showed this clearly. **Indeed, most of the innovations viewed in the pilot (56%) were developed at the site level**. Of course, talent investments deserve attention from corporate leaders, and operationalizing talent investments throughout the network likely requires a quarterly review process for talent investments where business cases are presented and prioritized based on impact.

However, it's vital for headquarters to create an approval and authority structure that enables sites to manage their investments locally. Ideally, this would include different levels of authority based on the investment to create enough flexibility that entrepreneurial leaders can implement quick fixes without undue red tape.

For talent innovation to become ingrained in investment strategy, companies must be able to demonstrate clear benefits, which is why it's crucial for companies to measure returns on talent investment. All pilot sites were able to tie productivity and stability impact to their talent innovations. Unfortunately, this is the exception rather than the norm – measuring impact from talent-related investments like a new training programme is uncommon. Sites should begin by identifying the leading and lagging indicators for each investment, along with estimating the return on the cost of implementation.



3.2 Building a cross-functional team

Investing in talent requires a dedicated cross-functional leadership team that works to build solutions with, not for, the frontline. One of the barriers that emerges amid attempts to implement change is the idea that talent is a concern that belongs to particular domains or to HR only. The reality, however, is that HR, operations, logistics, engineering and other functions all need to come together to drive talent innovations.

Critically, all of the sites visited in the Frontline Talent of the Future Initiative prioritized employee involvement in ideation. They've created means and mechanisms to solicit, curate and implement ideas that originate with the workers closest to frontline processes. They've used idea collection tools, town halls and/or other meetings that facilitate dialogue, along with events like "hackathons" to bring employees together to solve problems. Doing this requires a cross-function team of HR, operations, logistics, engineering, finance and technology leaders who are dedicated to implementing frontline change. A crucial element is robust dialogue with workers to collect feedback during implementation and continuously adjust.

Progress on operationalizing talent as an investment is limited so far. Even companies at the vanguard of the quest to transform the talent landscape have only begun to realize the potential of what's possible. Many of them do not have formal talent investment approval processes or infrastructure. However, they have all begun to turn the theoretical into the empirical by connecting their innovations directly to impact.

Any organization seeking to transform should begin by measuring the results of talent innovations. This means identifying KPIs, measuring quantifiable metrics and digging in to find the evidence of ROI. The initiative has revealed that there is much more to do when it comes to defining how organizations determine the ROI on investing in talent. Likewise, there is room for progress in how they evaluate trade-offs between various potential investments so as to best suit their operating context.

Conclusion and next steps

The Frontline Talent of the Future Initiative has reinforced that the future of production is all about people – believing in them, investing in them and supporting their path forward into a redefined world of work.

It's true that the production system is undergoing a radical transformation, fuelled, in many ways, by accelerating advances in digital technology. Yet despite these changes – and perhaps even because of them – this moment calls for a renewed focus on the frontline workers who comprise the beating heart of industry.

This renewal is predicated on a fundamental mindset shift from viewing talent as a cost to understanding talent as a vital investment. Companies that commit to this transformative mindset shift open the door to the kind of talent innovations it will take to attract, engage and retain the frontline workers of today and tomorrow.

While the Frontline Talent of the Future Initiative's pilot programme has revealed important lessons, it is still in its early days, and there is a great deal of work to do. The search is under way for organizations that have developed a truly excellent process for governing frontline talent investment. There remains a great deal of potential to bring more structure to operationalizing talent investment – manifesting in the kind of robust, rigorous processes that so many companies have in place for capital investment.

Is your company a frontline talent innovation leader?

The Global Lighthouse Network will serve as the initiative's framework for continuing to explore frontline talent. If you believe you have achieved world-class performance with distinction in talent transformation, consider applying for the cycle that opens in May 2025. More information is available via the Global Lighthouse Network.

Appendix: Findings from the Frontline Talent of the Future pilot

Thanks are extended to the companies and sites that participated in the Frontline Talent of the Future Initiative Pilot:

- Aramco – Yanbu, Saudi Arabia
- The Coca-Cola Company – Ballina, Ireland
- First Solar – Chennai, India
- Flex – Althofen, Austria
- Fortune Brands Innovations – Nogales, Mexico
- Haier COSMOPlat – Hefei, China
- Nestlé – Vila Velha, Brazil
- Western Digital – Prachin Buri, Thailand
- Unilever – Kilbourn, Chicago, USA
- Unilever – Pouso Alegre, Brazil
- Unilever – Poznan, Poland
- Unilever – Tianjin, China
- Schneider Electric – Chennai, India

Each company who participated shared their learnings and the impact from implementing talent-focused innovations. The following appendix summarizes the challenges they sought to overcome, their talent innovations and the impact of each innovation.

Talent spotlights

The authors would like to recognize three of the pilot participants who were selected by an independent expert panel as "talent spotlights". Their stories, innovations and overall impact were selected as exemplary examples of talent transformation. More information on their stories is available on the Frontline Talent of the Future webpage.

TABLE 1 **Haier COSMOPlat – Hefei, China**

Site	Change story	Talent innovations	Description	Impact
Haier COSMOPlat – Hefei, China	Haier Hefei faced significant challenges due to the expansion of its product range into diverse industries like automotive and health equipment. This expansion demanded new talent and added complexity to frontline employee management. Likewise, it increased the need for employee satisfaction. To address these challenges, Haier implemented a series of innovative solutions focused on talent development, process optimization and employee experience.	Personnel dynamic planning system	Creates customized work instructions based on employee skills and product requirements Improves efficiency, reduces operator workload and enhances employee satisfaction	– An increase of 25 percentage points in personnel matching degree – An increase of 21 percentage points in production line balance rate – A decrease of 4 percentage points in standard operating procedure (SOP) – Preparation time

TABLE 1 **Haier COSMOPlat – Hefei, China** (continued)

Site	Change story	Talent innovations	Description	Impact
Haier COSMOPlat – Hefei, China	Haier Hefei faced significant challenges due to the expansion of its product range into diverse industries like automotive and health equipment. This expansion demanded new talent and added complexity to frontline employee management. Likewise, it increased the need for employee satisfaction. To address these challenges, Haier implemented a series of innovative solutions focused on talent development, process optimization and employee experience.	Skill evaluation and development	Evaluates employee skills across job types and certification levels Combined with competitions and a digital skill matrix, encourages talent development and improves training effectiveness	– An increase of 27 percentage points in the proportion of high-skilled talents – A 30-day decrease in training period – A $12,000 decrease in total training cost
		Social platform for innovation	Encourages employees to share ideas and innovations Facilitates a culture of innovation and improves operational efficiency	– A 415% increase in cost savings – A decrease of 10 percentage points in time lost due to equipment breakdown
		Frontline employee salary accounting system	Provides transparency into salary calculations and enables employees to understand how to improve their performance	– An increase of 10 percentage points in employee satisfaction – A 28-day decrease in salary accounting cycle – A decrease of 3 percentage points in data error rate

TABLE 2 **Western Digital – Prachin Buri, Thailand**

Site	Change story	Talent innovations	Description	Impact
Western Digital – Prachin Buri, Thailand	Western Digital's Prachin Buri plant faced significant challenges due to a technological shift and a shortage of skilled labour. To overcome these challenges, the site embarked on a transformation journey focusing on automation, intelligent work redesign and employee upskilling.	AI-powered operational transformation	Transitions operators from repetitive manual tasks to managing automated processes and digital dashboards Increases job satisfaction and improves operational efficiency	– A 108% increase in the ratio of jobs redesigned and improved – A 34% decrease in quality alerts related to man-machine-method – A 75% increase in degree of work process automation
		Empowering the frontline workforce	Smart maintenance reducing equipment failure diagnosis time from two hours to 10 seconds Predictive maintenance shift from fixed-time schedules to performance-based maintenance, improving efficiency and employee engagement	– A 110% increase in degree of work analytics intelligence – A 99.9% decrease in time to slot failure diagnosis
		Empowering remote teams	Combined IIoT, agile practices and remote knowledge-sharing to create a flexible and efficient remote workforce	– A 100% increase in young talent retention

TABLE 2 **Western Digital – Prachin Buri, Thailand** (continued)

Site	Change story	Talent innovations	Description	Impact
Western Digital – Prachin Buri, Thailand	Western Digital's Prachin Buri plant faced significant challenges due to a technological shift and a shortage of skilled labour. To overcome these challenges, the site embarked on a transformation journey focusing on automation, intelligent work redesign and employee upskilling.	Developing digital leaders	Development of multidisciplinary curricula for Fourth Industrial Revolution manufacturing through university collaborations Enhanced workforce competency and labour productivity	– A 200% increase in hours invested in training per employee – A 49% increase in frontline workers trained in IIoT fundamentals and technology adoption – A 26.8% increase in the number of employees promoted due to upskilling and reskilling
		Building a strong talent pipeline	Enhanced talent attraction and onboarding through partnerships with universities and a focus on sustainability-related projects	– A 1,033% increase in internship applications – A 500% increase in number of events and engagement activities – A 16% decrease in time-to-fill days

TABLE 3 **Unilever – Kilbourn Chicago, USA**

Site	Change story	Talent innovations	Description	Impact
Unilever – Kilbourn, Chicago, USA	Unilever's Chicago site faced significant challenges due to a shift in consumer preferences, evolving workforce preferences and declining performance. To address these challenges, they embarked on a people transformation journey focused on improving culture, employee engagement and operational efficiency.	Performance-driven rewards and recognition	Rewards employees for meeting factory KPIs and demonstrating desired behaviours Encourages a culture of accountability and performance excellence	– A 48% decrease in absenteeism – A 16% increase in overall equipment effectiveness (OEE) – A 34% decrease in finished goods business waste
		Empowering employees through flexible scheduling	Mobile app that enables employees to access and manage their schedules, reducing scheduling errors and improving work-life balance	– A 100% reduction in grievances related to scheduling errors – A 75% decrease in work hours to schedule
		Adapting to change: a dynamic organization structure	Flexible organizational structure that is continuously evaluated and adjusted to meet the needs of the business	– A 600% increase in new positions created – A 33% increase in top talent retention
		Cultivating a culture of continuous improvement and engagement	Culture of continuous improvement that encourages employees to identify and address problems on the shop floor	– A 50% decrease in sampling waste – A 33% decrease in line C start-up loss – A 100% decrease in giveaway waste

Pilot participants

TABLE 4 **Aramco – Yanbu, Saudi Arabia**

Site	Change story	Talent innovations	Description	Impact
Aramco – Yanbu, Saudi Arabia	Aramco, a global energy leader, embarked on a transformative journey to address the challenges associated with the evolving energy landscape. The transformative journey focused on attracting and retaining skilled talent, along with enhancing operational efficiency while driving sustainability.	Digital upskilling programmes and citizen development	Implemented low-code/no-code platforms and targeted training to equip frontline engineers with digital skills Led to improved efficiency, reduced costs and increased innovation.	– A 553% increase in value creation and cost optimization initiative benefits – An increase of 60 percentage points in use cases developed by employees with no programming background – A 34% decrease in energy cost
		Gamified training programmes to enhance competency and skills	Immersive, multi-player training experiences to enhance skill development and engagement for young employees, resulting in improved competency, reduced training costs and increased efficiency	– An improvement of 11 percentage points in backlog in site maintenance queue – A 43% reduction in training OpEx – An improvement of 19 percentage points in training time (physical/virtual ratio)
		Young Leaders Advisory Board (YLAB)	A dedicated board to support talent development and engagement Motivates young employees to share ideas and contribute, leading to increased employee satisfaction, retention and innovation	– An increase of 14 percentage points in young employees retained – A 45% increase in overall Gen Z attraction – A 39% increase in overall satisfaction of Gen Z
		AI matching to optimize talent selection	AI-powered matching tool to streamline the hiring process and improve candidate quality. Identifies top talent, resulting in faster hiring, improved candidate quality and increased employee satisfaction.	– A 43% decrease in time to fill – A 36% increase in new hire satisfaction
		Meta brain genAI to enhance productivity	GenAI powered tools to empower frontline workers by assisting with complex tasks, leading to increased employee productivity, satisfaction and retention	– An increase of 59 percentage points in employee productivity (time savings) – A 33% increase in employee satisfaction
		Innovation portal to encourage frontline ingenuity	Platform to submit, discuss and implement innovative ideas Facilitates a culture of innovation and recognizes employee ideas, leading to increased innovation, cost savings and employee engagement	– An increase of 85 percentage points in the percentage of innovation ideas implemented – A 25% increase in ROI of innovative ideas implemented – A 71% increase in number of patents graduated from portal

TABLE 5 | **Flex – Althofen, Austria**

Site	Change story	Talent innovations	Description	Impact
Flex – Althofen, Austria	Flex Althofen, a leading manufacturer of medical devices, recognized the need to adapt to an increasingly competitive market and evolving technological landscape. To remain competitive, they embarked on a transformative journey focused on talent development, process optimization and digital innovation.	Building a strong talent pipeline	Year-round programme training apprentices in various technical and business areas Over 1,000 graduate apprentices ensuring a pipeline of skilled talent	– A 20% increase in the number of hired apprentices
		Trainee to technician	A six-month programme to develop employees into highly qualified technicians Enhances career prospects and strengthens the future workforce	– A 28% increase in the number of trainees – A total of 82% of candidates who rate the candidate journey positively – A 60% decrease in attrition
		Efficient talent acquisition	Collaborative applicant tracking system streamlining the hiring process, allowing for quicker decision-making and a better candidate experience	– A 267% decrease in time to fill – A 600% decrease in time to react to candidates – A 40% increase in candidate satisfaction
		Nurturing future business leaders	Partnership with a local high school to offer industry-specific training, improving time-to-fill and reducing the need for external training	– A 30% increase in the number of students in the industry high school
		Strategic workforce planning	Competency model promotes continuous development by tracking skills and providing targeted training to meet current and future needs	– An 11% increase in customer satisfaction
		Creating a positive and inclusive workplace	Supportive community to develop managers and boost employee satisfaction and retention Encourages knowledge sharing and provides mentoring and coaching Offers workshops for personal and professional growth and specialized training for new managers to help them succeed	– A 7% increase in the rating of direct managers – A 44% increase in women in leadership roles

TABLE 6 **Fortune Brands Innovations – Nogales, Mexico**

Site	Change story	Talent innovations	Description	Impact
Fortune Brands Innovations – Nogales, Mexico	Fortune Brands Innovations' Mexico plant faced challenges related to culture, talent development and operational efficiency. To address these challenges, they implemented a series of initiatives focused on creating a positive work environment, upskilling employees and improving operational performance.	Developing future leaders	Programme that provides training and development opportunities for employees, including a job board to facilitate career progression and Lean Six Sigma training to improve problem-solving skills	– An 88% decrease in attrition
		Cultivating a safety-first culture	Safety culture initiative that involves all employees in accident prevention and investigation	– A 100% decrease in safety incidents
		All associates process preparation (3P)	Initiative that involves all employees in the development and improvement of processes	– A 14% increase in OEE
		Creating career pathways	Clear career path for hourly associates, with defined training and expertise requirements for each level	– A 71% increase in internal promotions

TABLE 7 **Nestle – Vila Velha, Brazil**

Site	Change story	Talent innovations	Description	Impact
Nestlé – Vila Velha, Brazil	Nestlé's Brazil factory faced the challenge of integrating deaf employees into its workforce. To address this, they implemented a comprehensive approach focused on inclusive communication, training and development.	Inclusion of deaf and hard-of-hearing employees	Nestlé's Brazil factory, Garoto, has hired a sign language specialist to implement a training programme for hearing employees to learn sign language. Additionally, they have developed a comprehensive training curriculum for deaf employees that includes courses in basic Portuguese, mathematics and financial management.	– 234 people trained in Brazilian sign language – 0 voluntary attrition among deaf employees – 16 percentage point increase in successful performance evaluations
		Chocolates University	The programme trains employees annually in chocolate technology, ensuring the retention of technical expertise within their operations while supporting employees' professional development.	– A total of 306 students trained including, five being deaf and hard-of-hearing students – A 34% increase in certified students A250% increase in certified deaf students
		Quality Champion Garoto	The programme encourages employees to participate in food safety and quality excellence initiatives throughout the factory.	– Launched in 2023 with certification of four deaf employees – A total of 81 projects implemented by students
		Gender balance initiative	Targeted initiatives and programmes, such as the "Empowered" initiative, prepare women for leadership roles and create equal opportunities for employees of all genders.	– A 26.4% increase in gender neutral workstations – A 36.5% increase in women in leadership roles

TABLE 8 | **Schneider Electric – Chennai, India**

Site	Change story	Talent innovations	Description	Impact
Schneider Electric – Chennai, India	Schneider Electric's Chennai plant faced challenges in attracting and retaining talent, particularly in specialized roles like methods, maintenance and automation. To overcome these challenges, they implemented a comprehensive talent strategy focused on upskilling, reskilling and employee engagement.	Empowering talent development with data-driven insights	A digital platform that assesses and develops employees based on standardized processes and future skill requirements	– A 30% increase in technical competencies – A 41% increase in digital competencies – A 30% decrease in cost of poor quality
		Developing future leaders from the frontline	A programme to identify and develop frontline operators for white-collar roles Addresses talent scarcity and boosts internal mobility	– A 38% increase in employees who moved to white-collar roles – An 8% decrease in attrition
		Cultivating a culture of internal mobility and growth	A platform that connects employees with open positions across the company, facilitating internal mobility and career development	– A 220% increase in exported talent – A 20% increase in imported talent
		Accelerating technical careers	A programme that enables employees to pursue specialized technical careers Involves a rigorous assessment process and focuses on developing talent with high potential to generate global impact	– 56% less attrition among technical experts compared with rest of population
		Driving innovation and engagement through digital platforms	Programme that encourages employees to participate in continuous improvement initiatives through the "Idea + See I Do" scheme Promotes a culture of innovation and empowers employees to contribute to the company's success	– A 16% increase in cost savings – A 2.6% decrease in velocity of feedback

TABLE 9 | **Unilever – Tianjin, China**

Site	Change story	Talent innovations	Description	Impact
Unilever – Tianjin, China	Unilever's Tianjin plant faced challenges in attracting and retaining talent, particularly in a context of rapid business growth and digital transformation. To address this, they implemented a series of innovative talent solutions focused on career development, employee engagement and digital transformation.	Future-fit career journey	A comprehensive career development plan that includes leadership development, cross-functional upskilling and well-being initiatives	– A 12% increase in employee satisfaction survey score – An increase of 26 percentage points in employees promoted through programmes
		AI-powered talent acquisition	A digital recruitment platform that uses AI to streamline the hiring process and improve candidate experience	– A 567% increase in candidate attraction for annual recruitment plan

TABLE 9 | **Unilever – Tianjin, China** (continued)

Site	Change story	Talent innovations	Description	Impact
Unilever – Tianjin, China	Unilever's Tianjin plant faced challenges in attracting and retaining talent, particularly in a context of rapid business growth and digital transformation. To address this, they implemented a series of innovative talent solutions focused on career development, employee engagement and digital transformation.	Dynamic digital capability enhancement	A comprehensive training system that uses digital tools to enhance employee skills in data analysis, visualization and interpretation	– A 100% increase in training hours per FTE per year – An increase of 35 percentage points in certified digital engineers
		Tailor-made new hire onboarding booster	Initiative aimed to improve the new employee onboarding experience by addressing orientation insufficiencies and plain onboarding experiences Consisting of three projects: "Doraemon Buddy-up", "Line Manager Bible" and "All-in-One Toolkit"	– An increase of 19 percentage points in new employee retention rate within one year – A 7% increase in satisfaction survey score for line managers
		Industry-wide talent acceleration ecosystem	A global talent ecosystem that facilitates internal mobility and career development across the organization	– An increase of 48 percentage points in vacancy fulfilment from internal pipeline – A 100% increase in new employee satisfaction survey score for onboarding programme

TABLE 10 | **Unilever – Pouso Alegre, Brazil**

Site	Change story	Talent innovations	Description	Impact
Unilever – Pouso Alegre, Brazil	Unilever's Brazil plant faced challenges in attracting and retaining talent, especially in a competitive market with evolving consumer needs. To address these challenges, they implemented a series of innovative talent solutions focused on employee development, engagement, and diversity and inclusion.	Developing future leaders	A programme to develop senior operators into team leaders, focusing on soft and hard skills Aims to increase autonomy and reduce the workload of the leadership team.	– A reduction of 20 percentage points in operational tasks previously handled by leaders – All team leaders received training
		Elevating team performance	A programme to improve team performance by focusing on discipline, prioritization and time management Based on Stephen Covey's book, *The 7 Habits of Highly Effective People*, aiming to enhance decision-making, communication and teamwork	– An increase of 3 percentage points in employee engagement survey
		Enhancing technical expertise	A programme to train technical operators in three key areas: technical development, operational procedures and cybersecurity Aims to improve operational efficiency and reduce reliance on maintenance teams	– A reduction of 35 percentage points in transfer activity from maintenance to technical operators

TABLE 10 **Unilever – Pouso Alegre, Brazil** (continued)

Site	Change story	Talent innovations	Description	Impact
Unilever – Pouso Alegre, Brazil	Unilever's Brazil plant faced challenges in attracting and retaining talent, especially in a competitive market with evolving consumer needs. To address these challenges, they implemented a series of innovative talent solutions focused on employee development, engagement, and diversity and inclusion.	Black Panther: promoting diversity and inclusion	A programme to promote diversity and inclusion by hiring people from vulnerable groups, involving a complete overhaul of hiring processes to ensure true inclusion	– An increase of 33 percentage points in hiring of underrepresented groups – An increase of 25 percentage points in hiring retention – An increase of 15 percentage points in internal promotion rate
		Healthier U: promoting employee well-being	A programme to promote healthy habits and raise awareness about chronic diseases and risk factors Supports nutrition and promotes physical and mental well-being	– A 44% increase in the percentage of people being active
		Destaques programme: recognizing and rewarding excellence	A transformative initiative that recognizes and rewards employees who excel in leading projects Promotes a culture of innovation and continuous improvement	– A 160% increase in project savings

TABLE 11 **Unilever – Ponznan, Poland**

Site	Change story	Talent innovations	Description	Impact
Unilever – Poznan, Poland	Unilever Poznan in Poland faced challenges in attracting and retaining top talent, especially in a competitive market with evolving consumer needs. To address these challenges, they implemented a series of innovative talent solutions focused on employee development, engagement, and diversity and inclusion.	Empowering through internal expertise	Applies internal expertise to design and deliver training programmes Facilitates a culture of knowledge sharing and empowers employees to develop their skills	– A 7% decrease in attrition – An increase of 15 percentage points in career development rate of shop floor workers – An increase of 25 percentage points in career development rate of office workers
		Data-driven decision-making	Engages Microsoft Power BI to create data-driven insights and optimize work processes Improves operational efficiency and employee satisfaction	– A 14% increase in OEE – A 36% decrease in waste per ton of produced product – A 15% decrease in energy use per million pieces

TABLE 11 | **Unilever – Ponznan, Poland** (continued)

Site	Change story	Talent innovations	Description	Impact
Unilever – Poznan, Poland	Unilever Poznan in Poland faced challenges in attracting and retaining top talent, especially in a competitive market with evolving consumer needs. To address these challenges, they implemented a series of innovative talent solutions focused on employee development, engagement, and diversity and inclusion.	Harnessing AI to optimize workflows	Uses automated solutions to free up employees' time for higher-value tasks and equip them with future-ready skills through AI solutions	– A 56% reduction in cleaning-in-place (CIP) operation time on focus area – A 29% decrease in water usage per CIP cycle on focus area – A reduction of 5 percentage points in unplanned downtime
		Talent transformation: single to multi-skilled	Focuses on developing a multi-skilled workforce by providing multiple career paths and training opportunities for employees	– An increase of 22 percentage points in the ratio of multi-skilled operators – An increase of 43 percentage points in the ratio of multi-skilled technicians

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