Skills-First: An emerging approach to managing human resources for the new world of work

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Acknowledgements

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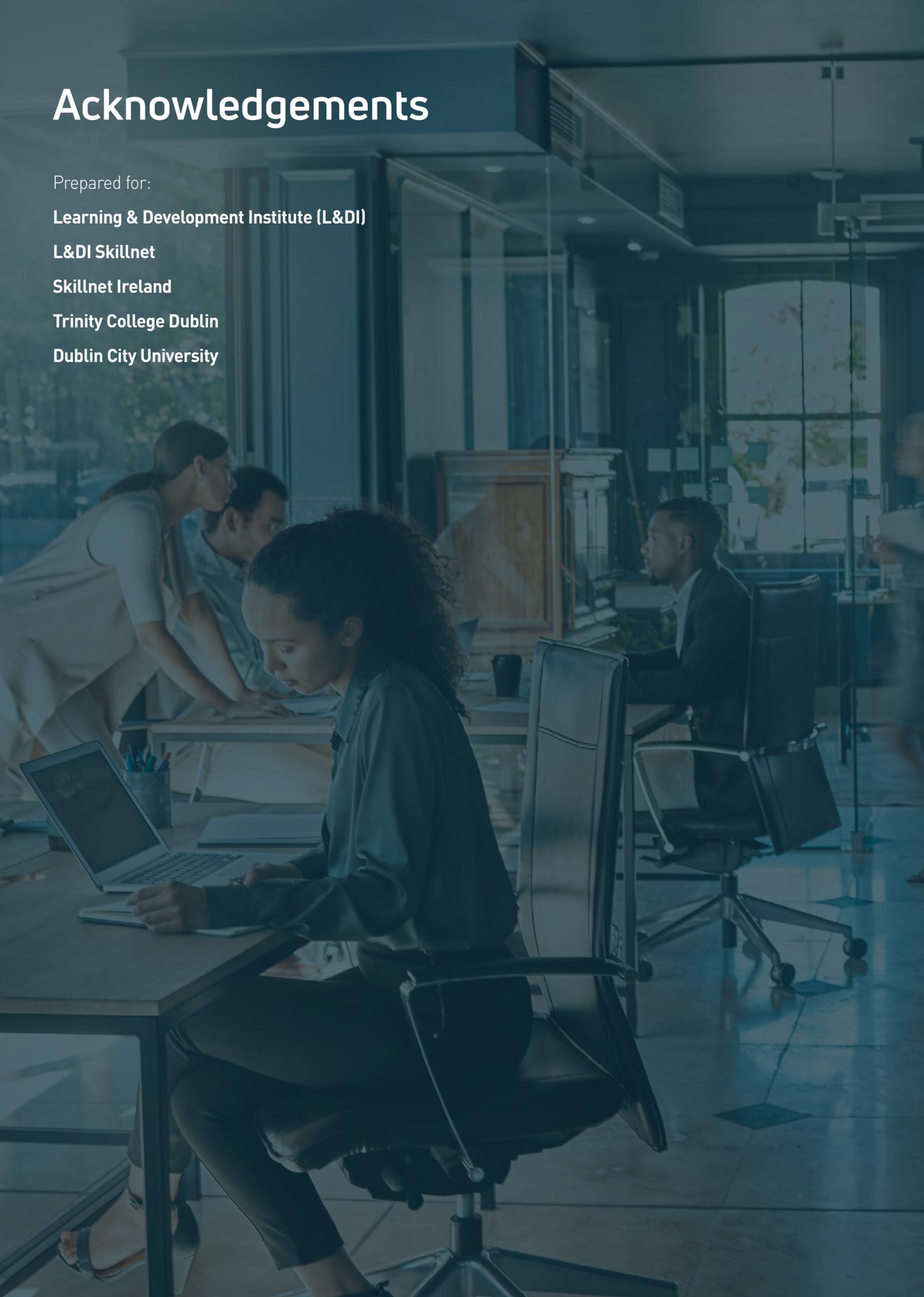
Skillnet Ireland Foreword

Irrespective of size or sector, businesses within Ireland and across the world are facing challenges in attracting and retaining workers with both the talent and skills they require. Many of these challenges are reflective of changing socio-economic patterns, increasing digitalisation and AI, climate change and the changing nature of work. Regardless of their cause, attracting workers with the appropriate skillset, in an era when the shelf-life of skills is continuing to fall, has become an increasingly significant challenge for all organisations.

This report commissioned by L&D Skillnet and Learning and Development Institute examines the extent to which traditional approaches to managing human resources are fit for purpose given the rapidly changing future skills needs of organisations. The research outlines the emerging area of skills-first human resources and demonstrates the need to align the supply of skills with organisational strategic goals emerged as a key driver of skills-first HR amongst Irish businesses. At its core, skills-first HR puts skills front and centre of an organisations' HR strategy.

The findings and recommendations from this research also offer insights into how organisations who were considering a shift to skills-first HR can begin their own journeys. Based around four building blocks, this study shows fundamental shifts in the way organisations need to position skills at the centre of their HR and broader business strategies and presents a practical roadmap for business leaders and HR professionals to effectively map current employee skills profiles to emerging skill demands. Ensuring senior leadership sponsorship, developing communities of practice across all business functions, as well as leveraging internal data has been recognised as a key enabling factor for implementing a skills-first approach throughout organisations.

On behalf of Skillnet Ireland, I would like to thank all the contributors who have generously given their time and expertise to this report. We would also like to thank the project steering group for their insights and support and the many company representatives of L&D Skillnet who participated in the research. Finally, I wish to acknowledge the support of the research partners for this report at Dublin City University and Trinity College Dublin, together with Sinead Heneghan, CEO of Learning & Development Institute and her team, for their excellent work in bringing the report to a successful conclusion.

We encourage all stakeholders to consider the many ways their organisations can support the development of a worldclass talent pool for business leaders and HR professionals across all sectors in Ireland.

Tracey Donnery
Director of Policy & Communications
Skillnet Ireland

L&DI Foreword

In today's rapidly evolving business landscape, organisations face unprecedented challenges and opportunities. As technological advancements reshape industries, and the global economy becomes increasingly interconnected, the need for a highly skilled and adaptable workforce has never been more critical.

As the demand for highly skilled talent continues to outpace supply, organisations that understand the skills necessary to advance their strategy, and know the skills and capabilities of their employees, will gain a competitive edge.

This research offers valuable insights into how HR departments can proactively address the skills gap and equip their organisations with the necessary tools for success in the future by adopting a 'Skills First' approach to managing human resources and future proofing learning and development.

This research finds that high performing organisations are leading the way in building skills databases and leveraging that information to deploy internal talent and opportunity marketplaces.

Workforces have a vast portfolio of skills and adopting a Skills-First approach enables organisations to harness them in very powerful ways. The development of a skills database which supports the internal talent marketplace fuels internal mobility and brings greater transparency and equity to opportunities for people than ever before by connecting jobs, roles, capabilities, competencies and skills.

Furthermore, the report will also explore the crucial role of employee engagement in skill development and building skills databases and will provide HR professionals with actionable insights and practical recommendations to navigate the complex landscape through the provision of a roadmap for the journey to Skills First HR.

L&DI and L&D Skillnet are grateful to Professors David Collings and John McMackin for completing this important research and bringing the findings and recommendations to the learning and development profession. We are very grateful to all those who contributed to the research and shared their insights. We are delighted to work with our colleagues in Skillnet Ireland and acknowledge their ongoing support and funding to deliver research and to ensure we collectively, through our partnership, continue to set the agenda for learning and development.

Sinead Heneghan
CEO L&DI

Executive Summary

▸ Organisations across the globe face prolonged and chronic shortages of the skills required to deliver on their strategic objectives. Three in four EU companies have difficulty in finding workers with the skills they need. The skills landscape is changing quickly, and the half-life of skills continues to fall. This means that building employee skills and capabilities is identified as the number one priority for HR leaders.

▸ Data from our survey and other research suggests that most organisations are poorly prepared for meeting these skills needs. Structural labour market changes combined with demographic changes mean that these challenges are likely to grow in the future.

▸ These trends motivated the current research. Our focus was on understanding whether traditional approaches to managing HR are fit for purpose for meeting the future skills needs of organisations. Specifically, we set out to explore the opportunities and challenges of implementing skills-first HR for organisations. We also provide a road map for business and HR leaders in implementing skills-first HR.

▸ Primary data for this study was gathered in two ways. We conducted 38 in-depth semi-structured interviews with L&D professionals, HR leaders and business leaders in 24 organisations globally. A subsequent online survey yielded some 151 responses from Learning and Development Institute (L&DI) members and HR professionals, and the researchers' personal networks.

▸ Our research suggests that skills-first HR is very much in its infancy. However, in our case firms, we did see some real momentum towards skills-first HR. While few firms felt that they had a mature or fully-operational skills-first model, most were experimenting with, or piloting, skills-first initiatives in critical areas of their business.

▸ Transitioning to skills-first HR is not without challenge and will require some reorientiation of HR teams. These challenges include the traditional siloed structure of HR organisations which places an emphasis on centres of excellence. Additionally, skills-first HR requires a change in the temporal orientation of HR teams towards a more future-oriented and proactive orientation. Skills-first HR requires an uplift in data quality, analysis and storytelling.

- The report also identifies key priorities for implementing a skills-first approach to HR. Implementation should be driven by and influence strategy, and the solution should be positioned as a business solution rather than a HR tool. Cross functional collaboration and communities of practice can help ensure that skills-first interventions operate across key functions and boundaries in the organisation. Piloting in critical areas of the business can add value by to building a minimum viable product and establishing a compelling business case.

- We develop a roadmap for the implementation of skills-first HR based on four building blocks identified in this research. These are skills taxonomies, skills audits, demand analysis and streamlining of job architectures.

- We provide some recommendations for Skillnet Networks in assisting the development of skills-first HR. We recommend the development of general training programmes to introduce the principles of skills-based HR to build awareness of emerging approaches. Tool kits could be developed to help organisations develop skills-based approaches to HR. We also recommend the development of programmes for HR professionals around data analysis and storytelling. Networks could research available skills taxonomies to inform companies' decision making around the most appropriate sources for their needs.

Introduction

Introduction

Organisations across the globe face prolonged and chronic shortages of the skills required to deliver on their strategic objectives. For example, in the EU, more than three quarters of companies report difficulties finding workers with the skills they require [1]. This challenge is amplified by the dynamic global environment in which these firms are operating, which requires different skills from those of the past. Indeed, the pace of skills change is a significant challenge for organisations and employees alike. The World Economic Forum predicts that by 2025 some 85 million jobs will be displaced, owing to automation and technology such as artificial intelligence (AI). An analysis of 15 million US job postings since 2016 by BCG and the Burning Glass Institute/EMSI concludes that jobs are more disrupted today than ever before owing to the acceleration in the pace of change. Their analysis suggests that 37% of the top 20 skills requested for the average US job have changed since 2016 and more than one in five of the top skills requested currently (22%) are new in that time [2]. Illustrative of these challenges, building critical skills and competencies was the number one priority for HR leaders in a recent Gartner survey [3]. Similarly, the EU has classified 2023 as the European Year of Skills, highlighting the importance of the skills agenda to the European Union.

The risks from these challenges are stark. Almost 40% of respondents to PWC's recent CEO pulse survey felt that their business would not be viable in 10 years if it continued on its current path. Labour and skills shortages were second to regulatory changes in the threats to the profitability that these CEOs identified [4]. The following quote from the Managing Director of a software organisation in our study starkly captures the challenge of responding to the skills challenge.

> The ability to adapt your skills, reinvent yourself and your capabilities is pretty close to a Darwinian survival skill, right? An existential imperative, you might call it because the ... world is evolving so rapidly, that whatever skills you had five years ago, if you haven't updated those, then you're borderline obsolete.

However, we know little about how prepared organisations are to meet these challenges and how they can best prepare their workforces to cope. As shown in Figure 1, our survey data suggests that preparing for the future of work is a priority for 70 percent of organisations (compared with 66 percent in 2019, when we asked the same question). This highlights the growing importance of these questions for organisation leaders.

FIGURE 1 ▶ Future of Work as a Priority for your Organisation (n= 140 2019, 115 2023)
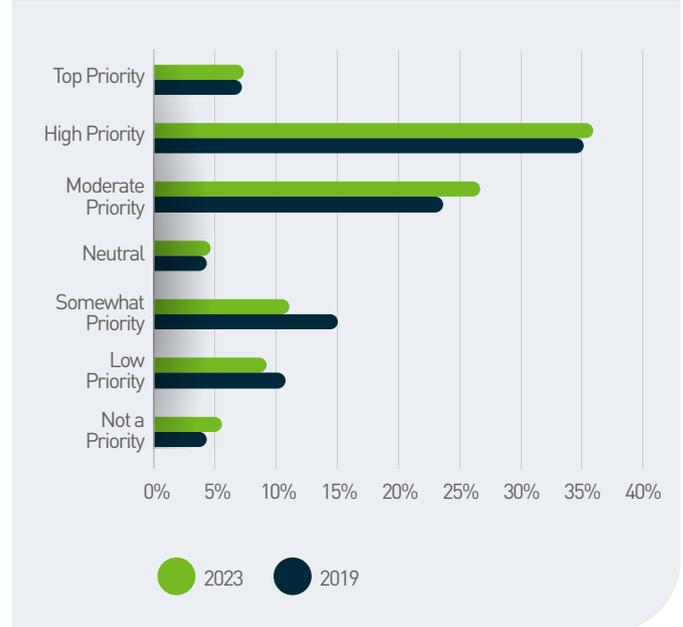
We argue that the ability to understand what skills an organisation currently has, and will need in the future, combined with the ability to develop and deploy those skills to where they are most needed by the business to realise strategic objectives, is of immediate and growing importance. As structural labour market changes and demographic trends are set to limit the availability of key skills in external labour markets for the foreseeable future [5], employers face an urgent need to become more adept at predicting and developing what skills they will need to meet strategic and growth targets. In the past, many organisations have relied on accessing additional skills from the external labour market to support growth by filling skills' gaps as they arise. Post-pandemic, global labour markets have experienced unprecedented tightness, with job vacancies currently at record levels in most developed economies. Supporting, retaining and reskilling current employees with the skills to meet those needs will therefore be critical.

This raises questions about the extent to which traditional approaches to managing human resources are fit for purpose. Indeed, shortcomings of the traditional "job-based mindset" in addressing these needs have recently been exposed [6]. For example, complex job descriptions, which rapidly become outdated, are at best an unwieldy basis for deploying/redeploying skills at the pace demanded by rapidly changing markets. While we believe that predictions of "the end of the job" are somewhat overstated, the argument for a shift to a skills-first approach is compelling. We argue that a skills-first approach to HR does not require the deconstruction of jobs advocated in some of the literature on this topic. However, the limitations of a job-based mindset in meeting organisations' skills needs have been spotlighted by the combination of a rapid increase in the pace of skills change and unprecedented tightness in global labour markets. Organisations are faced with unique challenges to ensure that they have the skills they need to deliver on their strategic intentions, when and where they need them. HR leaders charged with delivering a response to these challenges are increasingly recognising the value of a skills-first approach.

These trends motivated the current research. Our focus was on understanding whether traditional approaches to managing HR are fit for purpose for meeting the future skills needs of organisations. Specifically, we set out to explore the opportunities and challenges of implementing skills-first HR for organisations. We provide a roadmap for business and HR leaders seeking to implement skills-first HR.

We draw on a research design comprising 38 interviews in 24 organisations conducted for this report, as well as the results of our survey of 151 HR and L&D professionals to shed light on this important topic. We also conducted a review of available reports and academic literature on the topic. Our research design allowed us to explore how the early movers towards skills-first HR were adapting their HR processes and organisations to address these pressing challenges.

Our report is structured as follows. We begin by defining key terms which are central to our report. We then outline our methodology, followed by the section containing the key findings from our report. Each of the key themes in the findings section concludes with a summary of key messages from that section. We conclude by outlining some recommendations around how to implement skills-first HR and provide a roadmap for the journey to skills-based HR.

Key Definitions

Introduction

Given our focus on skills-first HR, we begin by considering how skills should be defined and how they differ from key constructs such as competencies and capabilities. We also define skills-first HR, which is core to this research.

Skills

Skills have long been a focus in academic research on work, and that research emphasises several key characteristics of skills. Skills are considered as a learned ability [7] and are generally directed towards the achievement of goals (personal and organisational). We adopt Proctor and Dutta's [8] widely cited definition of skill as:

Goal-directed, well-organised behavior that is acquired through practice and performed with economy of effort.

The reduction over time in the amount of cognitive effort required by skilled practitioners to perform tasks with speed and accuracy is also captured in this definition, while the emphasis on 'well-organised behaviour' points to the reality that performance on many workplace tasks requires the application of a blend of skills, which can most effectively be developed through experience.

Competencies and Capabilities

It is important to differentiate skills from analogous concepts such as competencies and capabilities. We view competencies as a broader concept than skills, though both research and practice have been fraught with ambiguity concerning the meaning of these terms, which are often used interchangeably in organisations. Competencies encompass the knowledge and behaviours an individual deploys in the workplace. We define a competency as: [9]

the sum of knowledge and behaviours an individual possesses and enables individuals to be successful in a job (e.g. problem solving).

Relative to skills, capabilities usually refer to groups of skills which are domain specific: "often unique, specific and proprietary to a company" [10]. Thus, capability is also often used to refer to organisational or function level aggregate skills rather than individual attributes. Some argue for the development of a capability framework to sit on top of your skills analysis as it may provide more insight into how skills are deployed. For example, one vendor defined over 90 business capabilities for HR professionals, each of which requires many detailed skills [11].

Skills-First HR

The focus of the current report is on skills-first HR. We view skills-first HR as a counterpoint to traditional approaches to HR, which have tended to be relatively rigid and hierarchal, as evident for example in organisation charts which represented hierarchical promotion opportunities and rigid job descriptions, which typically focus on qualifications and experience rather than skills and capabilities. Our research suggests that these traditional HR approaches may not be fit for purpose in the dynamic and challenging environments in which organisations must now operate. We are not the first to consider skills-based HR. For example, IBM is an organisation that has adopted skills-based thinking for over a decade [12]. More recently, leading proponents Ravin Jesuthasan and John Boudreau [13] introduced the idea of a new work operating system that, they argue, frees work and workers from the traditional boundaries of work embedded in jobs and worker capabilities embedded in jobholders. While we believe their proposed solution of 'the end of jobs' and the complete deconstruction of work may be a step too far, the underlying arguments for more agile deployment of talent and greater alignment between skills and work are compelling. While job deconstruction may be a part of skills-first HR, we argue that it is not necessary. Rather, skills-first HR brings skills to the fore as the currency for delivering on an organisation's strategy and offers the opportunity for more agile matching of employees with work and career opportunities. Agility is core to a skills-first approach. It focuses on individual skills required to complete key work projects and aims to break down traditional boundaries such as overly restrictive job hierarchies and job descriptions. Matching skills to demand across the organisation is thus key.

We define skills-first HR as:

> An approach to enabling an organisation's strategy that positions skills at the centre of HR strategy. It offers a more agile approach to matching worker skills with available and potential opportunities. Skills-first HR values skills over education and experience, while data and technology enable mapping of current employee skills profiles to emerging skill demands.

Table 1 provides an overview of some key differences between traditional approaches to HR and a skills-first approach to HR.

TABLE 1 ▶ Comparing Traditional and Job-Based HR		
	Traditional HR	**Skills-first HR**
Core unit of analysis	Job description	Employee skills profile (skills passport)
Criteria for selection/hiring	Knowledge (education and qualifications); abilities (experience), personality	Skills (developed through practice)
Job design	Hierarchy, job families	Broad, open (guilds)
Mobility/careers	Generally through a job hierarchy structure, upward career trajectory	Fluid, aligned with career aspirations and work demand
Employee agency/career management	Low to medium	Medium to high
Talent planning	Critical roles, succession planning	Analysis of skills data using AI to understand current and changing availability and demand
Filling talent gaps	Primarily external hiring, some development	Primarily internal, redeployment, development, some external hiring

Methodology

Introduction

Data for this study was gathered in two ways:

‣ 38 in-depth semi-structured interviews with L&D professionals, HR leaders and business leaders in 24 organisations globally

‣ An online survey with 151 responses from L&DI members and HR professionals.

Semi-Structured Interviews

The objective of our semi-structured interviews was to get a deep understanding of the extent to which organisations are shifting to skills-first approaches to HR, what is driving that shift, and how organisations are translating this into practice. Additionally, we wanted to understand the key challenges in moving to skills-first HR in order to offer guidance to others who aspire to make this shift.

Our interview schedule was developed based on the trends and themes that were unearthed in our literature review. This is presented in Appendix A.

We began by selecting target firms which represented a range of sectors and industries. Our sample was purposeful in that we aimed to identify organisations at different stages of the journey of implmenting skills-first HR. We did however bias our sample towards firms likely to be further along the journey of skills-first HR. We obtained agreement for participation from 24 firms in sectors as diverse as aviation, agribusiness, automotive technology, financial services, health sciences, insurance, medical devices, pharmaceuticals, professional services, research/data analytics, software development, software as service, sports betting/entertainment, technology, manufacturing and telecoms. These organisations are headquartered in a number of countries including Germany, Ireland, Sweden, Switzerland, and the USA.

We conducted up to three interviews in each firm, while in a number of cases we completed a single interview owing to availability. In total, we completed 38 interviews. Our interviews included CEOs, COOs, CHROs, VPs,

Directors, as well as L&D and HR leads. The interviews were conducted with individuals based in Ireland, the UK, Germany, Switzerland, and the USA and many of our interviewees had global or regional remits.

Interviews were conducted between June 2022 and January 2023, with an average duration of 45 minutes. Most were conducted via Zoom, with a small number conducted in person. All were recorded, with the participants' consent, and transcribed for accuracy.

Survey

The second stage of our data collection was a survey of L&D and HR professionals. The aim of this survey was to validate some of our initial findings amongst the wider L&D and HR community. The survey was distributed electronically to the Learning and Development Institute's members and researchers' personal networks. We received 151 responses. After cleaning the data we were left with 116 usable responses. A demographic profile of survey partipants is summarised in Table 2.

TABLE 2 ▸ Survey Participant Demographic Summary		
Gender	Female 66%	Male 32%
Age	< 35	9%
	35-55	72%
	55+	19%
Number of employees	<100	30%
	100 to 999	37%
	1000 to 4999	19%
	5000+	14%
Role/Job Title	Senior HR	22%
	Other HR	4%
	Head of Learning and Development	18%
	Learning and Development Manager	19%
	Other L&D	14%
	Other (not specified)	23%

Participants included people working in more than 13 economic sectors, with educational services (19%) public services (14%) professional, scientific and technical (14%), and finance/insurance (10%) most strongly represented.

Findings

Skills-First HR is in its Infancy

A key starting point for our research was to understand how pervasive thinking about skills-first HR was. Our survey data indicates that skills-first HR is aspirational for the majority of organisations.

FIGURE 2 ▶ Extent to which your Organisation has been Exploring Skills-First Approaches to HR (n= 116)


This is consistent with wider research on this topic. For example, a recent Deloitte study found that **98 percent of business executives said they plan on moving to become a skills-first organisation**. However, the same study found that fewer than one in five were adopting skills-first approaches across their organisations in a clear and repeatable way [14].

However, given that we explicitly sought out firms who were further along the skills-first journey in our interviews, we saw some real momentum towards skills-first HR in many of the firms we studied. While few of our interviewees argued that they had a mature and fully operational skills-first HR model, most were experimenting with or trialling skills-first approaches in areas of their businesses. In these firms we began by asking our interviewees what motivated their shift to skills-first HR.

Drivers of the Shift to Skills-First HR

Our research identified several key drivers of a shift to skills-first HR. In order of priority these were: alignment with organisational strategy, the pace of change in skills, digitisation, reskilling/upskilling, lack of skills supply, DEI and sustainability.

FIGURE 3 ▶ Key Drivers of Skills-First approaches to HR in your Organisation? (n=116)
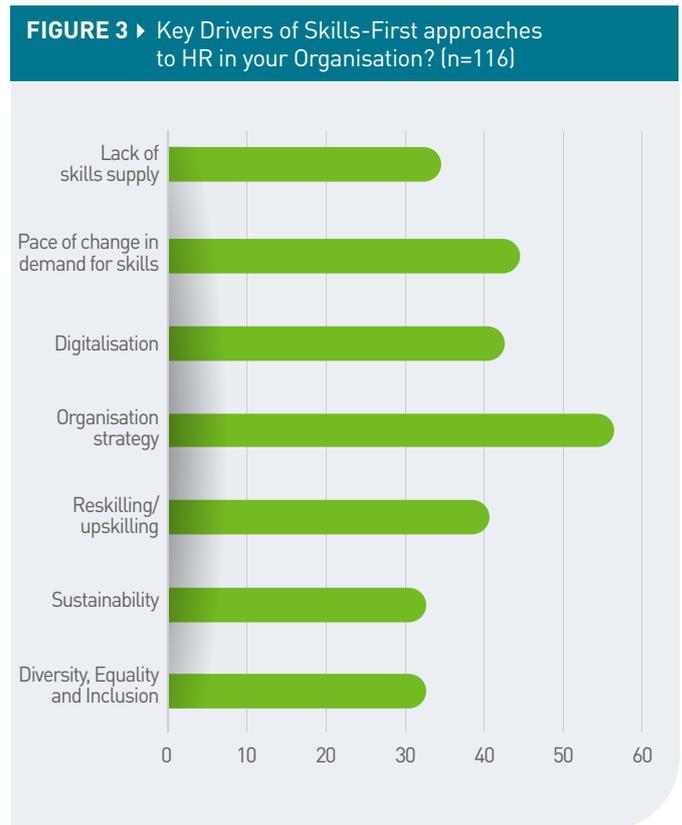
Consistent with our survey results, the need to align the supply of skills with organisational strategic goals emerged as a key driver of skills-first HR in our case interviews. The HR lead for a global biotechnology business outlined this approach in his organisation:

> We're really clear on what strategies lead the three businesses. And then critically, you don't stop there. You're going to have to get into … what we would call future skills needs, right … What is it actually we're going to do to deliver that strategy or to achieve it? What capabilities and why they are required to deliver the actions and in turn, deliver the strategy.
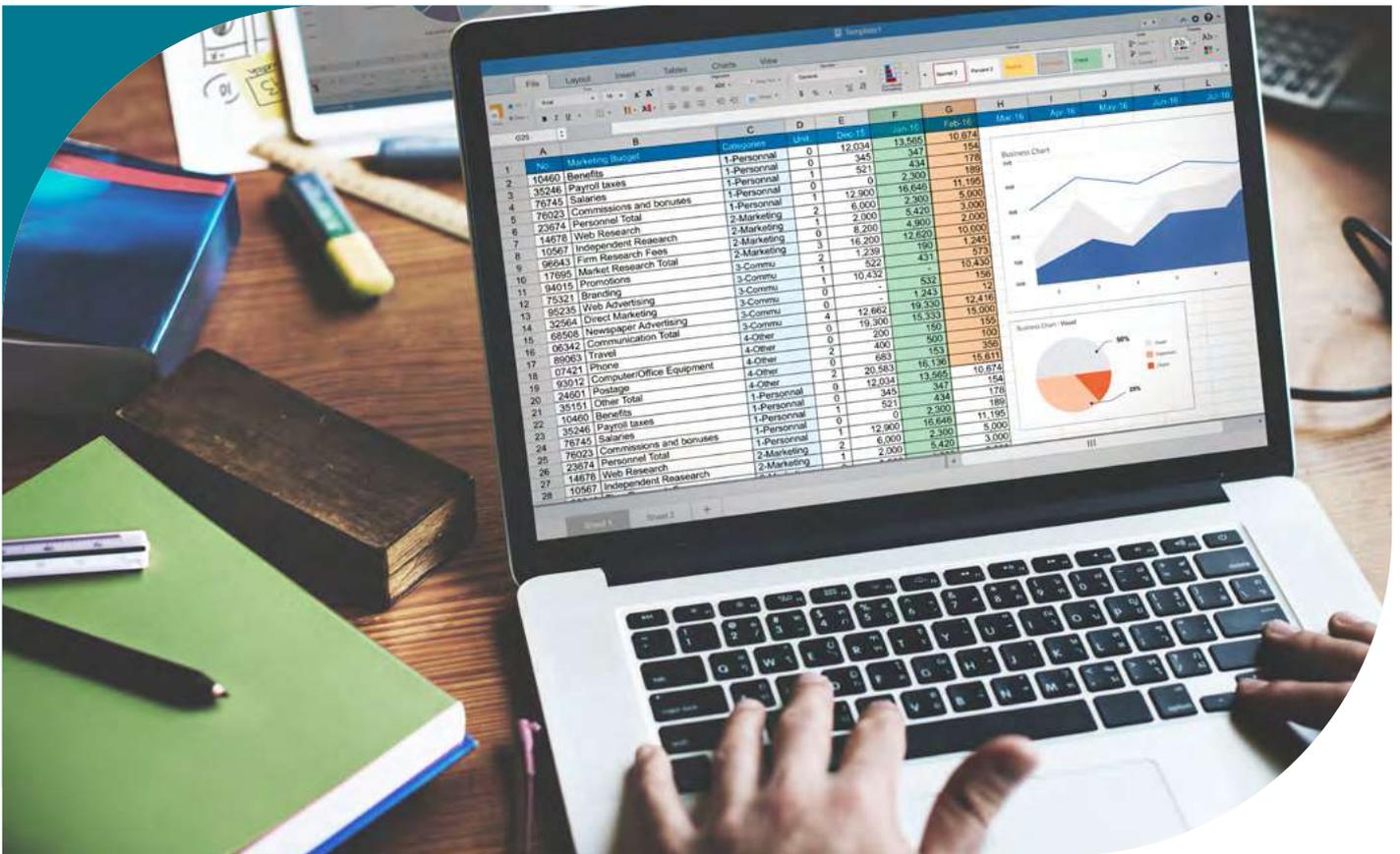
Our interviewees identified how a move to a skills-first approach was responsive to other major strategic pressures, including digitalisation and related technological developments. While the impact of these changes varies depending on the sector and business model, every organisation we spoke with acknowledged their dependence on attracting and retaining technology, data and digitalisation skills to realise their strategic potential.

The frenetic pace of change in the technology, analytics and AI space was cited by many respondents as a driver of the need for the greater speed and flexibility that skills-first HR could potentially deliver. This was summarised by the leader of a technology industry body:

> There were literally things now on the path for software developer....(that) hadn't even been mentioned a year ago.... I suppose, you know, you would have said a few years ago that the half-life of tech skills is kind of about three to four years. I'm wondering where that is now.

In the introduction we also noted how employers' traditional reliance on the external labour market to fill emerging skills gaps is proving unsustainable in the face of global skills shortages. While this is primarily driven by tight labour markets and upward pressure on wages, research also points to the challenges which external hires face in transitioning into new organisations. Briefly, research confirms that external hires are paid up to 20 percent more than internal hires and often struggle to replicate performance levels displayed in past firms in their new organisation [15]. These combined pressures are leading organisations to focus on addressing strategic skills needs by improving organisational effectiveness at retaining, reskilling and upskilling current employees. An insurance organisation has taken their strategic approach to retention a step further by setting specific targets for the percentage of roles to be filled internally:

> the single metric we're concerned with is that internal hire, and specifically, the ambition is that three out of every four jobs should be filled internally, so that's the ambition ...that we strive for between now and 2025.

Retaining employees is increasingly recognised as necessary but not sufficient to meet emerging organisational skills needs. It must be matched by enhanced visibility of upskilling and reskilling opportunities for the current workforce within the organisation. Providing employees with timely, high-quality information that enables them to recognise internal career opportunities, and how they can take advantage of them, is essential to realise the benefits of skills-first HR. An example of this in practice has been reported by Mastercard, who has worked with Gloat to create an internal talent marketplace they call Unlocked. Unlocked seeks to match employees more effectively to high priority tasks, while also providing their employees with greater agency in managing their own career development. Launched in 2021, Unlocked has already been rolled out to Mastercard's 21,000 employees globally. Notably, Unlocked has been led by Mastercard's CEO and Executive Leadership Team (ELT), with the platform rollout aligned with culture change initiatives including mentoring programmes [16].

This need to empower employees to actively manage their own careers by making personalised real-time information about internal opportunities available to them was a recurring theme among our respondents. Making the information available must be matched by change in culture and leadership behaviours if the potential value for organisations and employees is to be realised. As one HR lead put it:

> This is going to be the way of unlocking some fantastic opportunities for people. AI enabled, right, so the opportunity comes to them rather than them looking for it.., Obviously, there's a huge amount of change management that has to happen to support that because the system isn't geared up for really giving people as much agency as they should have, they will have. But, you know, that's the work.

Consistent with our survey results, a number of our interviewees referenced the potential benefits of skills-first HR for key areas of sustainability and diversity, equity and inclusion as further drivers of a move to skills-first HR. [17] Organisations such as Mastercard have publicly embraced the sustainability and DEI benefits of a shift to skills-first HR. Several firms cited the attractions of a skills-first focus on retention in terms of sustainability of employment. Others also cited the potential DEI benefits of skills-first HR in talent acquisition in terms of reduced effects of access to educational opportunities, and in reducing unconscious biases in the allocation of development opportunities through more data-driven HR skills development processes, providing greater employee agency.

Key Messages

- Skills-first HR is in its infancy. While 98% of respondents to one survey aspire to become skills-first organisations, fewer than one in five are doing so in a systematic and repeatable way.

- These trends were reinforced by our interviews, with few respondents arguing that they had a mature and fully operational skills-first HR model. Rather, firms were more likely to be trialling or piloting skills-first initiatives in areas of the business.

- We identified a number of key drivers of the shift towards skills-first approaches. These included alignment with organisational strategy, the pace of change in skills, digitisation, as well as challenges in skills supply, diversity, equality and inclusion, and sustainability.

Navigating the Transition to Skills Based HR

Embarking on the journey towards skills-first HR can seem to be an intimidating undertaking for many leaders. However, skills-based approaches have been in use in many areas of business for a long time. IBM built skills taxonomies and developmental frameworks, which aided new hires in building skills, as long ago as the early 1980s [18]. As Josh Bersin rightly notes, what has changed is not recognition of the value of skills but technology, which, through AI is transforming the potential application of skills data in a more integrated way to add value in recruitment, development, internal mobility, and reward. This should provide a degree of reassurance as well as motivation for leaders considering a shift to skills-first HR.

Nevertheless, shifting to skills-first HR presents significant challenges in practice. We have seen in our findings how a major aspect of the challenge is that the baseline of knowledge about employee skills in most organisations is quite low, and rarely systematised. Equally, many leaders are poorly prepared in terms of predicting the talent and skills they will require in the future. Here we summarise some of the key challenges in adopting skills-first HR practices that emerged from analysis of our case studies.

HR Structures

Perhaps the greatest challenge to emerge from our cases is that many HR functions are set up in a relatively 'siloed' way, where centres of Excellence lead key areas of HR practice, such as talent attraction, learning and development, or reward. In contrast, the skills value chain should cut across these traditional HR silos. The challenge for many organisations in pivoting to this skills-first approach is that people processes, and in particular the structure of their HR organisation, is at odds with that. For HR leaders this highlights the importance of reflecting on the structure and reporting relationships in their HR organisation, and identifying potential roadblocks to embracing skills-first approaches to HR.

Temporal Orientation of HR Teams

A skills-first approach to HR also requires a shift in the temporal orientation of HR teams. Take the example of a traditional approach to identifying and addressing skills needs in a business. Typically, the business comes to the L&D team with an identified need and requests a programme or solution to address that need. This is a reactive and relatively cumbersome approach to skills development. A skills-first approach requires a more proactive approach in which the HR team becomes more embedded in the business. The point of departure for identifying skills needs is the organisational strategy, by developing a clear shared understanding between HR and the business about the skills required to deliver on that strategy. This proactive approach aims to put organisational capabilities on the front foot and proactively build skills to enable the strategy.

Mastering Data

Data is also core to skills-first HR. This is another area where traditional HR structures are likely to run counter to skills-first HR. The siloed nature of traditional HR structures rarely lends itself to delivering the data driven, evidence-based insights required by skills-first HR. Data often remains siloed in legacy systems in different centres of excellence, creating real challenges around building organisational level data insights. Several of our respondents referenced the fact that their HR teams were ill-prepared for the shift to data-based HR. Growing expectations concerning high quality people data analytics from HR teams highlight important skills gaps in HR functions. HR teams face interrelated challenges when it comes to data and skills. First, in having and using the data to understand the skills of employees, and then ensuring that the HR teams have the skills to use that data to inform decision making by employees, HR and the wider business.

Many organisations also described the challenges of dealing with data drawn from multiple systems. This issue was particularly acute in organisations that had grown through acquisitions or that were managed in quite decentralised ways, and created a real challenge in identifying a single source of truth in the data. In many instances, manual intervention was required to clean the data and render it usable. This quote from a medical devices company is typical of this experience.

One of the challenges is the multitude of systems … where you can kind of gather that data as well. So …we've invested in platforms like Eightfold…which is doing talent acquisition, and talent management, or internal mobility based upon skills. We've got Degreed… and then Workday. And so we're still a little bit in this messy middle trying to figure out, you know, amongst the multiple technologies, which one is, or should be, I guess…or any of them, right, the source of truth to aggregate that data.

As organisations develop their capability in skills data and analysis, some are moving towards creating centralised data repositories, or data lakes. This is of course not without challenge, and data teams must navigate layers of complexity in collating and using this data. Having the various data sources housed in a central location can facilitate the types of analysis that skills-first approaches to HR demand. One pharmaceutical firm developed what they termed a skills operating system to enable their wider skills project. This focused on identifying the types of data that should be collected, and the technology that would be required to enable this data collection.

Senior Leadership Buy-in

Transitioning to a skills-first approach to HR requires careful planning, reflecting the investment required and the changes it implies for traditional ways of thinking and working. Senior leadership sponsorship is vital for the success of any change initiative of this scale, and we found in our cases that socialising the principles of skills-first HR at senior leadership level was an important first step. Early adopters in our study identified the initial business case as key to gaining the investment and leadership sponsorship required to enable the transition to skills-first HR. Positioning the investment in skills-first HR as responding to a business challenge rather than as a HR intervention has proved critical to success. For one medical devices company, the business case focused on demonstrating the ROI on talent redeployment, when some areas of the business contracted while other parts of the business were growing and experiencing skills shortages. The focus was on highlighting the tangible benefits in terms of cost

savings and retention of talent, by redeploying people with skills to where they could support growth, rather than losing them to the market. We saw a similar initiative in an insurance organisation, where the motor insurance business was exceptionally quiet during the worst of the COVID-19 pandemic, enabling reskilling of that team to assist in other areas of the business where demand was higher. This focus on educating business leaders about the benefits of skills-first HR required the use of data and effective storytelling.

Pilot and Learn

Organisations in our sample that were further along the skills journey recognised the importance of initially experimenting and piloting skills-first approaches in critical areas of the business. These may be areas where the nature of the work makes it easier to experiment with more agile approaches, or more often areas which are critical to the business and with the potential for generating additional value, for example those facing acute shortages of key skills. In an insurance organisation, the initial focus was on underwriting. A healthcare organisation identified critical projects which represented proposed major investments in the future for the organisation as their focus. In a software as service (SAS) organisation, sales roles were their initial focus.

Sales is what we're about… [They are] the first cohort that we deal with, they're the ones that are customer facing, they're the ones that are revenue generating. So, they're the kind of the most important…category of employees. So, it's important that we get that right first, and then I think you take the learning from doing that with that group. And you can apply some of the learnings from developing your skills progression strategy for other groups along that way.

For others, skills initiatives were piloted in technology divisions, reflecting the global challenges of sourcing those key skills from external markets.

Organisations embarking on a skills-first HR journey can manage risk and make efficient use of resources by

identifying strategically important areas of their business in which to invest their initial efforts. This will offer opportunities to pilot initiatives, validate approaches, and learn and iterate before scaling up to the wider organisation. Such smaller interventions also provide a proof of concept for building the business case for the required investment in a wider organisational intervention.

planning and talent intelligence. Learning then assumed responsibility for the downstream activities of how to build the required skills and the learning solutions to deliver against those objectives.

We turn next to what we term the building blocks of skills-first HR. These are some of the key interventions required to enable the shift to skills-first HR.

Cross Functional Collaboration

Organisations that were fundamentally data driven in their wider business operations were positioned to leverage that wider capability in shifting to skills-first HR. One particularly innovative example from an insurance company involved the development of a 'data war room' where actuaries put their data skills to use to help the HR team uncover interesting insights from the data. Their CHRO describes this initiative:

> So, after years and years of disconnected people data..., we've now connected it all, you know, the whole lifecycle recruitment, onboarding, performance ... D&I data, and have been building approaches over the last year or so ... So actually, we've brought some actuaries into HR on a rotation basis, and said to them, you do this better than we do ... tell us what our data is trying to tell us. [We created a] data War Room, where once a quarter interested people, not people I prescribe, but people who are interested in the topic will come together. And we'll get together, we'll sort of be amongst our data, and the dashboards and stuff around the room and progress projections and all that kind of stuff.

This example illustrates how a shift of the magnitude required by a transition to skills-first HR can generate collaboration among communities of practice, which transcend formal organisation structures. Cross discipline collaboration within the HR function is also essential to realise the benefits of skills-first HR. One pharmaceutical company spoke of the partnership between the learning and talent management teams, with talent management owning the more upstream elements of the initiative, including strategic workforce

Key Messages

▸ Embarking on the journey to skills-first HR can seem an intimidating undertaking. There are some key challenges which must be overcome to enable the shift.

▸ These challenges include the traditional structure of many HR organisations which often emphasises centres of excellence, which can be a barrier to realising the potential of a skills-first value chain. Skills-first HR also requires a shift in temporal orientation of HR with a greater focus on the future. Given the key role of data, overcoming limitations of drawing data from multiple systems and limitations in HR capability is key.

▸ We identified key enablers of the transition to skills-first HR. These include:

- Senior leadership buy in and sponsorship. This is key in positioning skills-first HR as a business tool rather than a HR intervention.

- Piloting in critical areas of the business. Using this to refine, develop use cases and business cases for the investment in skills-first HR.

- Cross-functional collaboration. Drawing on expertise across the organisation was key in developing tools and insights but also in building buy-in with organisational stakeholders.
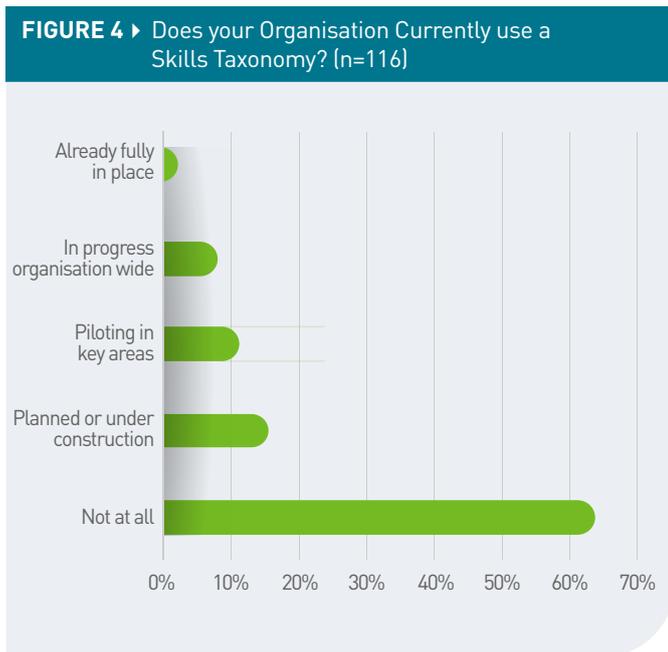
The Building Blocks of
Skills-First HR

The Building Blocks of Skills-First HR

Building a skills-first approach to HR is not without challenges and there are several interrelated building blocks required to enable this transition. We highlight four - a skills taxonomy, skills audits, external analysis and job architecture.

Skills Taxonomy

One of the key challenges faced by organisations in transitioning to skills-first HR is developing a shared language and framework to capture skills across the organisation. Broadly defined, a taxonomy is "the study of the general principles of scientific classification" [19, 20]. The value of a skills taxonomy lies in creating a shared language for describing skills across the organisation. At scale, technology and AI play a key role in the development and use of skills taxonomies. Skills taxonomies are an essential building block towards realisation of some of the most important benefits of skills-first HR practices, including enhanced mobility, career opportunities and the opportunity to redeploy relevant skills to where they are most needed.

FIGURE 4 ▶ Does your Organisation Currently use a Skills Taxonomy? (n=116)

Perhaps unsurprisingly, only 22% of organisations in our study are currently using skills taxonomies to any significant degree, with a further 17% considering their use. Given that this is an essential building block for skills-first HR, this is a key limitation.

One reason for the lack of progress in the rollout of skills taxonomies is they can be complex and challenging to develop. This means that a key consideration for any organisation evaluating their introduction is understanding the trade-offs between building and buying a skills taxonomy. Developing a bespoke skills taxonomy is a major undertaking, with the additional challenge of ensuring that the taxonomy remains up to date and reflects the emergence of new skills. Given that there are some relatively advanced and user-friendly taxonomies available in the marketplace which offer a viable option, we saw a preference for external sourcing of skills taxonomies in a majority of firms in our study. Key factors considered in this decision included relevance, timeliness, and cost.

It is important to highlight that introducing skills taxonomies is not without challenge. A number of respondents reported tensions, highlighting the cultural challenges involved in gaining widespread agreement on a taxonomy, with several reporting push-back from stakeholders. Interestingly, there was a perception in some organisations that introducing a taxonomy was an attempt to centralise power over key areas of the organisation, while others reported a perception that non-expert HR professionals were imposing standards on experts in areas (such as tech) that they didn't understand. This highlights the importance of framing the project as a business response rather than a HR project. Bringing technical experts on board emerged as key. Developing pilots in key areas again facilitated the transition.

Nonetheless a skills taxonomy is a key enabler for skills-first HR and these tensions must be navigated to manage this transition.

Skills Audit

Having agreed a skills taxonomy and created a shared language to frame the skills conversation, a key next step for organisations is to develop a baseline understanding

of the skills they currently have in the organisation. This process is commonly referred to as a skills audit or skills inventory. Some 36 per cent of respondents to our survey were already piloting skills audits or had completed them in areas of the business. A further 35 percent were planning to conduct skills audits or at least were considering them.

FIGURE 5 ▸ Has your Organisation conducted a Skills Audit of Current Employees? (n=116)
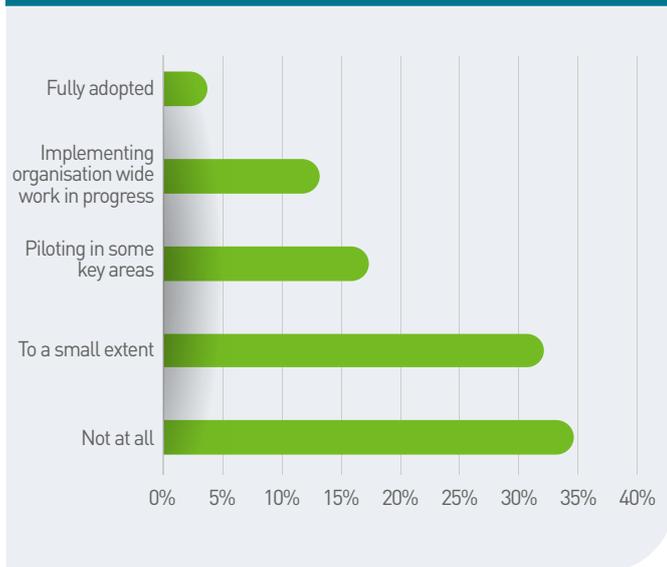
Skills audits often emerged as a roadblock for organisations who struggled in their ambitions to perfect data quality. Indeed, a recent McKinsey report identified validating skills, competencies and references as their biggest hiring challenge, confirming that this issue is wider than a skills-first HR issue [21]. This is an area where we argue that perfection can be the enemy of the good, and highlight the importance of building good enough data to get the skills project up and running. Most of the organisations in our study began with a reliance on employee self-assessments, in some cases supported by discussions with line managers, in building their initial skills data. Logistically, getting employees to complete skills self-assessments could be a major challenge, especially with large numbers of geographically dispersed employees. However, research suggests that employees are willing to share their skills data. For example, one Deloitte study found that almost 80 percent of workers were willing to share their skills data to help their organisations make decisions such as matching them to work. Another 14% are willing with some caveats around how the data is used responsibly, and the perceived benefits [22].

One technology firm in our study had developed a talent card to help employees record their skills. This digital resource provides employees with skills prompts based on their business unit and they select which ones they feel they possess.

> [The talent card] presents to the team member, hey, now it's time to update your skills, click into the skills, you can see the categories, look at what's appropriate for your business unit, select up to 25 skills in that. So we've got about 11 or 12 categories overall. And that's … one for each business unit, there's a couple that are identified, like, you know, general [corporate], like colour code skills, and then they're divided by subcategories within each one.

Similarly, an insurance organisation had piloted a skills passport with a similar objective.

This is another area where beginning by focusing on a critical area of the business can help the organisation build expertise in the process and develop use cases and business cases for the project. Respondents were cautious around the limitations of audits based on self-assessment of skills. The perceived risks of making strategic commitments based on self-assessed skills audits weighed on respondents, but many participants reported that in practice this is a necessary step in the shift to skills-first organisation. We argue for the value of getting projects up and running and being aware of these limitations. Of course, leadership should be cognisant of the relative risk of the work being undertaken and should calibrate the verification of skills accordingly.

Beyond self-assessment, participants described a variety of practices in which employee skills self-assessments were validated by their line managers in some way. In many cases, it was deemed critical that employees retain ownership of their skills profile to retain their trust. In these instances, skills validation processes were described in terms of conversations to produce 'alignment' rather than as a form of top-down evaluation. Several participants envisaged the integration of this alignment with performance management/development processes over time.

As approaches to collecting data evolve and mature, we envisage a greater reliance on AI and technology to enable that process. Indeed, the impact of AI is likely to be significant. For example, Unilever found in a pilot analysis that workers typically greatly underestimate their skills. They estimated that AI assessment can triple the identified skills by uncovering hidden skills [23]. Additionally, 54% of respondents to a Deloitte survey believed that using AI to identify hidden and adjacent skills would help them to reskill employees and to retain workers displaced by technological and other advances [24].

Demand Analysis – Demand Modelling

While skills audits focus on supply of skills internally, a skills-first approach also requires an understanding of demand trends. This analysis can inform the identification of skills 'pinch points' over time and provide insights into how to address them through a blend of development, redeployment and external hiring. Our interviewees described a range of skills-first actions under this heading, ranging from strategic workforce planning to externally sourced expert analyses of geographic patterns of demand and supply of key skills in global labour markets.

While many of the workforce planning processes described to us were impressively rigorous and driven by strategic priorities, they also made clear how skills-first HR processes, using high quality current internal skills data and analytics, can significantly reduce the dependence on external labour markets to achieve strategic objectives.

We saw evidence that the sophistication of skills trends analysis is increasing dramatically. For example, one insurance organisation has invested significantly in developing evidence-based predictions about skills trends in their workforce. They partnered with a specialist vendor, and the resulting analysis became a key input to their talent strategy. While the analysis highlighted some gaps around analytics and technology that they would have already been aware of, the analysis also highlighted a number of other areas in which skills gaps would emerge if action was not taken. This analysis identified 15% of jobs that would become redundant owing to technological advances and a future 50% that would be disrupted over the coming five to 10 years. This in turn provided insights

into which skills were falling in demand, and which were becoming more vital. This gave the organisation a valuable head start in realigning skills development and acquisition plans to avoid these skills barriers to strategic growth.

However, understanding internal data on skills and capabilities was only part of the requirement for true skills-first HR. As organisations develop higher levels of sophistication in data insights around skills, external data becomes an increasingly important tool. Our study suggests that the potential of this external data is yet to be fully realised in many firms, with our survey data indicating that fewer than three in 10 organisations are collecting skills data from the external market, with a further 30 percent considering it.

FIGURE 6 ▸ Do you Collect External Data around Skills Trends in the External Market? (n=116)
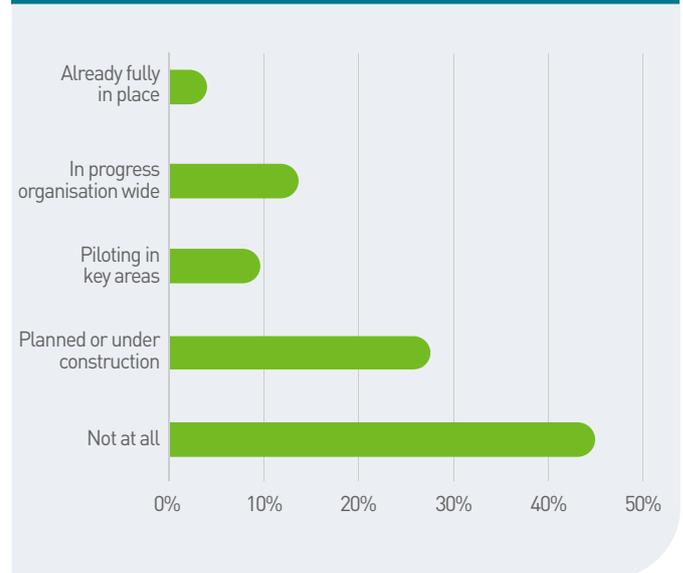
We did see evidence, in a minority of organisations, of an increasingly structured approach to assessment of external labour market data. This was particularly evident in larger global organisations with significant resources. There are a growing number of specialist providers of this type of data. We saw evidence of external data influencing key decisions, such as where to locate critical work, to align with skills availability. Such data can also inform investment decisions by highlighting skills which are growing in importance versus those in decline. Providers such as Burning Glass and Coursera are building richer insights and in-depth understanding of a skill's value to the organisation, the

time it takes to build those skills, and their longevity; such analyses will potentially assist organisations in decisions around whether to build or buy skills [25].

Job Architecture

Job architecture has been described as a potential "brick wall" in the transition to skills-first HR [26]. Traditional approaches to work design emphasise a job-based architecture which is structured around hierarchical organisational charts and can be relatively rigid. The tension is clear -- a traditional job-based architecture in which careers unfold within geographic and/or functional divisions, and progression is primarily vertical through those hierarchies, is at odds with the goal of enhanced mobility and agile redeployment of skills to where they are most needed by the wider organisation.

Research by Deloitte points to widespread changes in how jobs are designed. 79% of HR respondents to their research reported the expansion of roles to be bigger and more integrated, often embedding adjacent job functions. 43% of respondents reported reducing the number of job levels and layers and 34% reported a reduction in the number of job types [27].

A clear example of a more agile and skills-first approach can be seen in the Mastercard example referred to earlier in this report. They have reported a move to a

more broad-based architecture as a key component of the people side of their sustainability strategy [28]. All roles in the organisation are attached to one of just 11 'Guilds' (for 33,000 employees) each of which is supported by a Learning Academy. The goal is to provide sustainable career opportunities for employees by enabling career mobility within and between Guilds.

Another global technology organisation is transitioning to a more broad-based structure. They have streamlined their structure by reducing the number of job families and roles. Equally important though, in maintaining this structure, has been a strong governance structure, which ensures that any proposal to create a new job profile or family must go through multiple reviews to ensure it is warranted.

While the logic of the shift to more broad-based architectures may be clear, we did identify several challenges for those seeking to make such a shift. For example, one global pharmaceutical organisation described that while they recognised the desirability of broader structures from a skills and mobility perspective, this had to be balanced against the very rigorous legal and compliance standards in their industry. This example highlights the importance of job descriptions and job hierarchies as standard operating procedures in those industries. Others commented on the cultural and behavioural change challenges of gaining managerial support for any move towards more broad-based architecture.

Key Messages

▸ Transitioning to skills-first HR requires the development of four key building blocks to enable the transition

▸ Skills taxonomies are critical in developing a shared language for describing skills and levels across the organisation. At scale, technology plays a key role in the development and use of such taxonomies. The complexity of developing and maintaining taxonomies means that externally developed options are preferred in many organisations. Only 22% of respondents to our survey are currently using skills taxonomies, with a further 17% contemplating their adoption.

▸ Skills audits provide a baseline understanding of the skills an organisation currently has. Collecting and validating this skills data is challenging, and organisations often struggle with deciding how to run skills audits. Many begin with employee self-reporting. Despite some limitations, this is a reasonable way to get skills-first initiatives up and running. These skills can be validated by managers in performance management or other processes. Learning systems can also provide insights into skills, while AI is likely to play an increasing role in inferring skills from work undertaken.

▸ Demand analysis are critical to how skills-first HR is likely to evolve in the future. These analyses can inform the development and implementation of business strategy. High quality demand analyses can also inform decisions about organisational interventions to build, borrow or buy the skills they require for the future. More sophisticated skills-first demand analyses combine internal insights and external data to predict emerging skills needs and how they can be met.

▸ Finally, traditional rigid and hierarchical approaches to job design were identified as a challenge to skills-first HR. We saw some rich examples of organisations moving from rigid job descriptions, which emphasised qualifications and experience, to a greater focus on skills in hiring. This was reflected, for example, in the use of apprenticeships as an entry route for areas that would traditionally have required bachelors' degrees. Additionally, we saw several organisations simplifying their organisational structures by reducing the complexity of job families and hierarchies. This was intended to ease career transitions and support more agile deployment of skills in the organisation.

Recommendations

The Skills-First Implementation Journey – Guidelines for Practice

In this final section we summarise what we see as the key insights from this research in terms of advice for practitioners seeking to undertake the journey to skills-first HR. These are captured below under two headings: **Critical success factors** based on lessons learned at our case companies, and **a roadmap for the journey highlighting how to build skills-first HR**.

The experience of our case organisations makes clear that for most organisations, the shift in practice to skills-first HR has all the characteristics of a transformational change programme. Recognising this can help position HR leaders for success in making this transition by applying core principles of transformational change management [29] – gaining top leadership buy in, piloting and learning from smaller scale initiatives and embracing the cultural and structural changes needed to realise the benefits of the significant investments involved. While the transition to skills-first HR will present many technical and technological challenges, our analysis suggests that the success or failure of organisations in navigating this transition will ultimately depend on many of the same factors that determine the fate of most transformational change initiatives – leadership, culture and change management skills.

This research was designed to assess the implications of a shift to skills-first HR for business, HR and L&D professionals, employees, and other stakeholders. This concluding section reviews the key insights from our research and combines elements from the report to derive a set of recommendations for practice for those considering or already embarked on a journey towards skills-first HR.

In line with our earlier report on Enabling the Workforce of the Future [30], we find that organisations continue to be relatively poorly prepared to proactively deliver on the skill requirements for the future of work, and the trend indicated by comparing our 2019 and 2023 survey data is a cause for concern.

As Figure 7 illustrates, the proportion of respondents rating their organisation as poor or very poor at meeting the future skills needs of the business has increased from 18% to 23% since 2019, while those rating their organisation very good or better declined from 31% to 23%.

Nationally, there has been increasing awareness of, and investment in, preparing the workforce for the future in Ireland. Many of these initiatives relate to an increasing challenge of meeting skills needs and adapting to the sheer pace of change of skills demands. We point to the Expert Group on Future Skills Needs, the Future Jobs Ireland initiative, the work of Skillnet Ireland, and IBEC's Smarter Work campaign as key examples in this regard. In Europe the designation of 2023 as the European Year of Skills by the EU is illustrative of widespread recognition of the need to support organisations to address skills shortages within the EU. That initiative's emphasis on promoting a mindset of reskilling, upskilling and quality jobs is commendable. However, evidence to support the translation of a skills focus into tangible practices for organisations remains limited. Given the acknowledgement at National and EU levels that skills shortages represent a significant threat to the competitiveness of organisations, and ultimately key areas of industry nationally, evidence-based advice for organisations seeking to tackle this is both urgent and important.

Our research raises questions around the suitability of traditional approaches to managing human resources for meeting the current and future challenges organisations face in ensuring they have the skills required to deliver on their strategic agenda. We propose that a shift to skills-first HR is urgently needed and offer a roadmap highlighting key challenges for organisations seeking to make that transition.

FIGURE 7 ▶ How would you Rate your Organisation at Meeting its Future Skills Needs?

(n=116 2023, 130 2019)

2023   2019
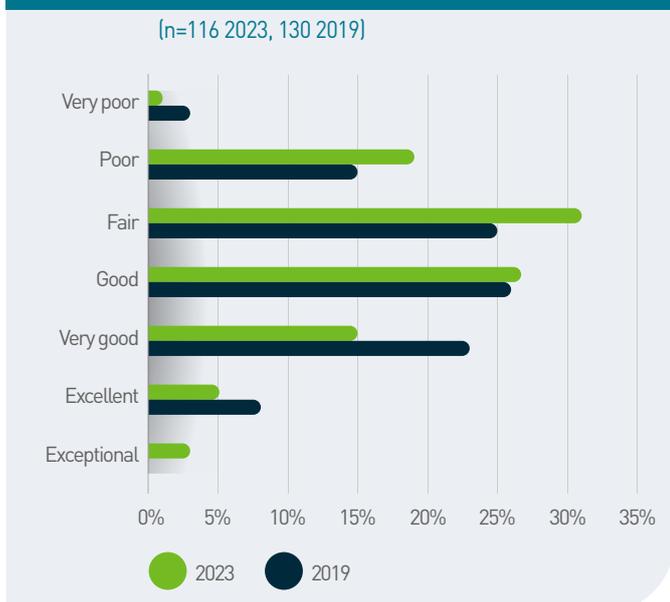
Critical Success Factors

Be Driven by and Influence Strategy

Skills-first HR enables a much more proactive and strategic approach to meeting skills needs. It involves a shift from reactively responding to skills demands to proactively contributing to the development of organisational strategy and enabling the implementation of this strategy. One European headquartered insurance organisation placed sustainability at the core of its strategy for example. This translated into a people agenda which was committed to developing employee skills internally for job opportunities rather than external hiring. Additionally, enhancing employee skills in key locations was prioritised over outsourcing. Several organisations identified a set of core skills which they saw as critical across all employees, regardless of role. These skills cut across key areas of the business strategy. These and other initiatives placed skills front and centre in the organisational strategy. In other organisations, skills data played an increasingly influential role in business decisions such as where to locate new

operations to best access required skills. In more mature organisations we see skills being critical to strategic decision making.

It is important to recognise the change in skill required by HR organisations to deliver on this agenda. Specifically, HR teams need to embed themselves in the business in which they operate to truly understand business objectives and emerging priorities. It requires HR professionals to think beyond traditional silos, such as centres of excellence, and to operate across these functional areas of HR. They also need to become increasingly comfortable with data, technology and evidence-based decision making in the organisation.

Position Skills as a Business Solution rather than a HR Tool

A key lesson learned by a number of organisations in our study was that, if skills-first interventions were viewed as yet another HR innovation, they could generate resistance

from line managers and executives. Our interviewees pointed to examples of skills-first interventions struggling to get traction in the context of previous failed HR interventions. In contrast, teams who reported greater success on the journey to skills-first HR referenced the positioning of skills-first HR as responding to a business need, and hence as a business tool. Piloting skills-first HR approaches was an approach adopted in several organisations as a proof of concept of the value of such approaches. One CHRO spoke of HR fading into the background and allowing senior organisational sponsors to drive the skills discussion in the business, to maintain strategic momentum. Data and storytelling skills in the HR team proved especially valuable in building business cases. This highlights the importance of framing and of senior leadership sponsorship in enabling the journey.

Encourage Cross Functional and Collaboration and Communities of Practice

Building on the theme of ensuring that skills-first approaches are positioned as business solutions rather than HR initiatives, we also identified the importance of cross-functional collaboration or communities of practice. We cited the example of the 'HR Data war room' in which analytics experts from the actuarial team of an insurance business worked with the HR team to add value through wider people data, including skills data. This type of cross-functional collaboration is very much in the spirit of skills-first working, and "communities of practice" [31] have been shown in organisations such as Spotify to have very beneficial impacts on culture and productivity. They should be actively encouraged as a feature of the journey to skills-first working.

Pilot in Critical Areas of the Business

Time and again we heard about the value of piloting skills initiatives in critical parts of the business. This allows the development of a minimum viable product in terms of the framework we have just outlined to learn from and iterate. Thus, it helps create the mindset changes required for skills-first HR and to build the internal capabilities

required to deliver on the agenda. It also aids in building the business case for the investment required for an organisation-wide initiative. We strongly advocate for the value of piloting.

Constantly Check and Assess

Given that key drivers of skills-first HR included the pace of change in skills demands and wider external dynamism, it is important not to underestimate the importance of constantly checking and assessing to ensure that the alignment with strategy is maintained. This ensures that the strategic direction of skills initiatives is appropriate. It will also contribute to regular checks on demand analysis to highlight internal factors driving skills demand. Equally, monitoring external data trends will ensure planning reflects wider labour market and industry trends are integrated into demand analysis.

One of the biggest challenges is ensuring that employee skills data is up to date and accurate. Clearly employees develop their skills over time and acquire new ones. How can the system track and validate these skills on an ongoing basis? This is a key question for those leading skills-first initiatives. At scale, the use of AI is likely to play an increasing role in this regard. Ultimately the key is to think about skills-first HR as a dynamic process and to be ready to course correct when required.

We now outline a roadmap for the journey towards skills-first HR.

A Roadmap for your Journey to Skills-First HR

Our research highlights the fundamental changes required to enable the transition to skills-first HR. Having presented the business case and secured sponsorship from senior organisational leaders, it is vital to develop a structure to enable the skills-first journey. Figure 8 illustrates the key elements of a framework which captures the insights from our research in terms of the key steps in the journey to skills-first HR.

FIGURE 8 ▸ Skills-first HR Roadmap
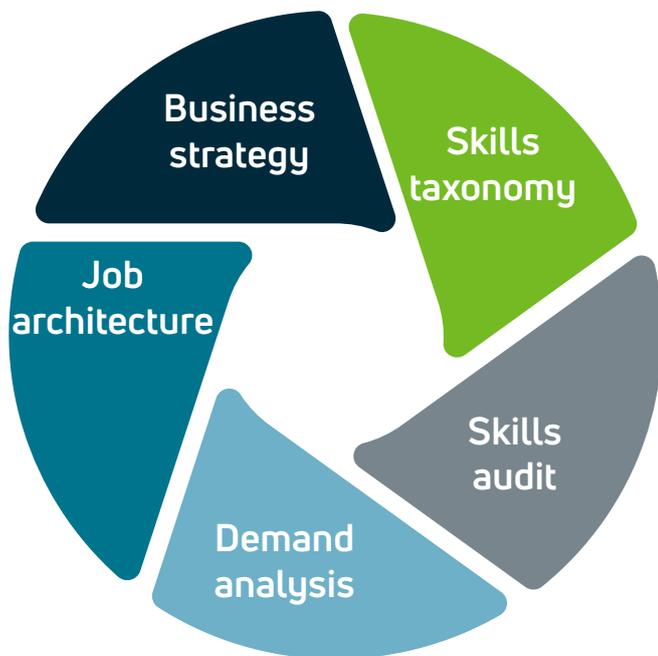
Business Strategy

The importance of alignment with business strategy for skills-first HR has been outlined in detail above. The business strategy provides the direction for any investment in skills-first HR. The circular nature of our framework is intended to illustrate that insights from skills-first HR interventions should equally inform business strategy. This is reflected in the recommendation to pilot skills-first approaches in critical areas of the business.

Skills-Taxonomy

Developing a shared language to describe skills across the organisation is critical, and we have presented compelling examples supporting the case that a skills taxonomy is an essential building block towards the realisation of the benefits of skills-first HR. A key decision for organisations is whether to build or buy the taxonomy upon which to base their skills strategy. Only a minority of our case firms had the resources to develop taxonomies in house, and most reported finding an externally developed taxonomy which met most of their requirements. We suggest that identifying an external provider has benefits in terms of speed of progress to maintain project momentum, and in terms of ensuring that the taxonomy is regularly updated and refreshed. One note of caution is that the choice of taxonomy may lock the organisation into a particular platform for their entire HR systems, although this may make sense as a deliberate strategy for some organisations. Some of our case organisations also decided to narrow the range of skills on which they captured data, to ensure the taxonomy was as meaningful as possible to business leaders. We do not advocate for any provider, and it will be important for organisations to invest in identifying the taxonomy that is the best fit for their needs.

Skills Audit

It was very clear from our research that most organisations begin with a relatively low baseline of knowledge about the employee skills they already have. Certainly, skills data of this type was rarely collected in any systematic way in traditional HR operations. Even when skills taxonomies were in place, a key sticking point for organisations was how to capture data on skills capabilities currently available. Understanding current skills profiles is key to enabling skills-first HR, with such data feeding into tools such as internal talent marketplaces, to provide direction for development and enable mobility. Such data is also vital in terms of understanding trends in skills lost or gained when employees join or leave the organisation.

Developing a minimum viable product in terms of an approach to collecting this data was widely cited as key to gaining momentum on skills-first HR. Most

organisations began with employee self-assessments, sometimes in discussion with line managers. However, getting employees to engage with this process was reported as a challenge by some organisations, especially where employees were geographically dispersed. Again, piloting in critical areas of the business was an effective way of gaining some momentum learning about ways to encourage engagement with the process.

The limitations of employee self-reporting of skills were widely recognised. The requirement for manual entry of skills, combined with the lack of validation mean that such data could be considered inaccurate at best. An early first check could be line-manager validation of skills but again this manual intervention had limitations in terms of engagement and may also raise concerns about employee perceived ownership of skills assessment. A more formalised approach involves integrating skills validation into the performance management process, but this practice was only in use in a minority of our case organisations.

Technology is central to the collection and validation of skills data. At its most basic, learning platforms can provide data on completion of learning which can be tagged to particular skills. More sophisticated systems provide some validation of skills levels through assessments embedded in the platform. Longer term, there seems to be real value in using AI to infer skills from an individual's work activity, though we acknowledge a range of potential issues around this.

Demand Analysis

Organisations are often poorly prepared in terms of predicting the talent and skills they will require in the future based on evidence-based assessment of external trends in skill demand and availability. However, demand analysis is critical in shifting the orientation towards a more strategic and future oriented approach to HR planning. Effective demand analysis requires a clear understanding of business strategy combined with expert analysis of external labour market trends. Key questions around the evolution of roles in organisations provide key insights in terms of emerging demands. Providers such as Burning Glass and Coursera are building in-depth

understanding of a skill's value to the organisation, the time it takes to build those skills, and the longevity of these skills which potentially assists organisations in decisions around whether to build or buy skills and timelines around this process. When such data is paired with external data on skills demand projections or global market analyses to identify suitable future locations with skills availability, the impacts are potentially powerful.

In more mature organisations, we saw increasing application of sophisticated data analytics and modelling techniques to build dynamic models that project demand for key skills taking account of business strategy and labour market trends. This is illustrative of a truly data driven approach to planning.

Job Architecture

A final key element of enabling structure which we highlight is job architecture. Rather than something which happens at the end of the cycle, this is often something that happens in parallel with skills audits. In essence the challenge is that traditional job-based architectures rely on more structured and hierarchical organisational designs, with jobs progressing along such hierarchal lines. Such approaches were also associated with expansive lists of job titles and complex structures which can be difficult to understand and navigate. Opportunities for redeployment across relatively narrow boundaries tend to be limited by information deficits as well as power, politics, and cultural challenges. A skills-first approach requires greater flexibility and broader structures to be effective.

Reorienting job architecture for skills-first HR generally involves a simplification of structures and job families. We referenced Mastercard's broadening of their architecture to just 11 guilds within which all 33,000 employees now fit as a means of developing sustainable career opportunities and easing mobility within the organisation.

Once the architecture is in place, high level role descriptions specifying skills and other requirements for the role can be developed. Providing hiring managers with discretion to make some minor amendments to these can aid in maintaining the integrity of the architecture while allowing some agility to meet local requirements.

Recommendations for Skillnet Networks

Our findings have several implications for Networks in supporting their members in adopting skills-first approaches to HR. We summarise here some key interventions that we would recommend for consideration based on this research.

1. The development of general training programmes to introduce the principles of skills-based HR to build awareness of emerging approaches could be highly beneficial to members.

2. Networks could develop tool kits to assist members in adopting skills-first approaches to HR. These could include tools for conducting skills-audits, developing internal demand analysis, building business cases etc.

3. Given the general recognition of the importance of data and storytelling skills in developing data-based insights around skills, the development programmes for HR professionals around data analysis and storytelling would appear to offer significant potential value for members

4. As there will generally be some commonality in the requirements of members within Networks, Network leaders could add value by researching available skills taxonomies to inform members' decision making around the most appropriate sources for their needs.

Conclusion

This research was undertaken to understand whether traditional approaches to managing HR are fit for purpose for meeting the future skills needs of organisations. Our conclusion is that in some instances, traditional HR approaches may indeed be outdated. We identify skills-first HR as an important emerging alternative for managing people in the volatile and challenging environment currently faced by many organisations. We believe the findings presented here offer a compelling business case for organisations to begin their journey to skills-first, if they have not already done so, and for those who have already begun, to persevere despite the many obstacles they must overcome. We have distilled what we hope will prove to be useful guidelines for HR professionals in making that journey. The potential rewards for those successfully making this transition appear considerable in terms of sustainability of employment, empowerment of employees and even the viability of many businesses.

APPENDIX

Interview Schedule

Opening

How well do you think your organisation is meeting current skills needs?

How well are you prepared for meeting future skills needs?

How well suited do you feel traditional approaches to HR are for addressing future talent needs?

1. **What do we need?**

   a. How well aligned is your talent strategy and business strategy?

   b. How central are skills in that alignment?

   c. Who is responsible for this?

   Has your organisation clearly articulated its business strategy? Have the skills implications of that been assessed? How and by whom? What does that look like?

2. **What data do you have/workforce planning**

   a. Have you conducted a skills audit of current employees?

   b. Do you collect data from external market? Demand- supply etc?

   c. Who is primarily responsible for collecting/ collating skills data?

   d. Do you use skills taxonomies?

   i. What are the challenges of skills taxonomies?

   e. How is skills data used in organisation? Business case, hiring plans etc.

3. **HR life cycle**

   a. Have there been or are you planning any changes in how work is allocated? (jobs or skills)

   b. Staffing – traditional employees, contractors

   i. To what extent do skills feature in job descriptions?

   ii. Are there any changes in how jobs are designed to allow for more agility?

   iii. What do you hire for- skills or experience?

   iv. Do you see any changes in how work is allocated?

   c. Performance management

   i. Focus on performance, capabilities, both?

   ii. What skills data do you capture? Where does that data go?

   d. L&D

   i. What is driving L&D strategy in the organisation? (current/future skills needs)

   ii. Who is responsible for the L&D agenda

   iii. How do you balance current v future skills needs?

   iv. How much of a priority is upskilling/reskilling?

   v. How do you capture skills data from L&D?

   e. Reward/recognition

   i. Are there any explicit links between skills and reward?

We are really interested in the idea of a skills first approach to HR, have you any other examples of skills-first approaches or any thoughts on the direction of travel for skills-first approaches to HR.

What are the key challenges to a skills-first approach to HR?

Some commentators predict an end of jobs as work becomes much more fluid through this skills lens. What do you think?

REFERENCES

References

1   European Commission. "European Year of Skills 2023."
Available https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/european-year-skills-2023_en

2   Sigelman, Matt et al. Shifting Skills, Moving Targets, and Remaking the Workforce. Boston: Boston Consulting Group, 2022. Available https://www.bcg.com/publications/2022/shifting-skills-moving-targets-remaking-workforce

3   Gartner. "Top 5 Priorities for HR Leaders in 2022." Published 13th December 2021.
Available https://www.gartner.com/en/documents/4009421

4   PWC. 26th Annual Global CEO Survey – Irish Analysis: Winning Today's Race While Running Tomorrow's. Online: PWC. Available https://www.pwc.ie/reports/ceo-survey.html

5   Shin, Y. "Is the Tight Labor Market Due to Fewer Workers – or Fewer Hours Worked?" Harvard Business Review, February 16 2023.
Available https://hbr.org/2023/02/is-the-tight-labor-market-due-to-fewer-workers-or-fewer-hours-worked

6   Jesuthasan, R & Boudreau, J. "Work Without Jobs." MIT Sloan Management Review, vol. 62(2), 2021, pp. 1-5

7   For a discussion, see Southwick, D. et al. "The Trouble With Talent: Semantic Ambiguity in the Workplace." Organisational Behavior and Human Decision Processes (2023), Vol. 174, Issue C.

8   Proctor, Robert W. and Dutta, Addie. Skill Acquisition and Human Performance. Thousand Oaks, CA: SAGE Publications, Inc., 1995, p. 18.

9   Chalutz Ben-Gal, H. "Person–Skill Fit: Why a New Form of Employee Fit is Required." Academy of Management Perspectives, vol. 0:ja. (2023). Available https://journals.aom.org/doi/10.5465/amp.2022.0024

10   The Conference Board, "Transitioning to a Skills-Based Organization: The First Steps." September 13, 2022. Available https://www.conference-board.org/topics/future-of-work/transitioning-to-a-skills-based-organization-overview

11   Bersin, Josh. "Building a Company Skills Strategy: Harder (And More Important) Than It Looks." Josh Bersin. February 4th 2022. Available https://joshbersin.com/2022/02/building-a-company-skills-strategy-harder-and-more-important-than-it-looks

12   Ammerman, C., Groysberg, B. & Rometty, G. (2023). The New-Collar Workforce. Harvard Business Review, 101(3-4), 96-103.

13   Ammerman, C., Groysberg, B. & Rometty, G. "The New-Collar Workforce..."

14   Cantrell, Sue, et al. "Building Tomorrow's Skills-Based Organization: Jobs Aren't Working Anymore." Available https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Deloitte-Skills-Based-Organization.pdf. (Online: Deloitte)

15   Bidwell, M. (2017). Managing talent Flows Through Internal and External Labor Markets, in D.G. Collings, K. Mellahi & W.F. Cascio (Eds). The Oxford Handbook of Talent Management, Oxford, Oxford University Press.

16   Bidwell, M. "Managing Talent Flows Through Internal and External Labor Markets." In The Oxford Handbook of Talent Management, (eds.) D.G. Collings, K. Mellahi & W.F. Cascio. (Oxford: Oxford University Press, 2017).

17   Gloat. "How Mastercard Created Priceless Career Development Opportunities." Gloat.com.
       Available https://gloat.com/resources/mastercard-customer-success-story

18   Bersin, Josh. "Building a Company Skills Strategy…"

19   Merriam-Webster. "Taxonomy." Last updated 20th April 2023.
       Available https://www.merriam-webster.com/dictionary/taxonomy

20   For a practice-focussed discussion, see: Santa María, Anthony. "What is a Skills Taxonomy and Why Do You
       Need It?" Published January 7th, 2022. Available https://www.linkedin.com/business/talent/blog/learning-and-
       development/what-is-a-skills-taxonomy-and-why-do-you-need-it

21   McKinsey & Co. "Taking a Skills-Based Approach to Building the Future Workforce." 15th November 2022.
       Available https://www.mckinsey.com/capabilities/people-and-organizational-performance/our-insights/taking-a-
       skills-based-approach-to-building-the-future-workforce

22   Cantrell et al, "Building Tomorrow's Skill-Based Organization."

23   Whiting, Kate. "This is How AI Can Unlock Hidden Talent in The Workplace." Published June 2nd 2021,
       https://www.weforum.org/agenda/2021/06/jobs-work-skills-future-automation-ai

24   Cantrell et al, "Building Tomorrow's Skill-Based Organization."

25   Coursera and Burning Glass Institute. Skills Compass Report 2023: Strategic Skills Planning for Upskilling and
       Reskilling the Workforce, Coursera and Burning Glass Institute, 2023.
       Available https://www.burningglassinstitute.org/research/2023-skills-compass-report

26   Bersin, Josh. "Building a Company Skills Strategy."

27   Cantrell, et al. "Building Tomorrow's Skill-Based Organization."

28   MasterCard. Sustainability Report, 2021.
       Available https://www.mastercard.com/content/dam/public/mastercardcom/na/global-site/documents/mastercard-
       sustainability-report-2021.pdf

29   Kotter, John. P. "Leading Change: Why Transformation Efforts Fail." Harvard Business Review. March–April, 1995.

30   Collings, D.G. & McMackin, J. (2019) Enabling the Workforce of the Future: The role of learning and development,
       Dublin: Skillnet Ireland, 2019. Available https://www.skillnetireland.ie/wp-content/uploads/2019/12/trainers-
       learning-Skillnet-report-Enabling-The-Workforce-Of-The-Future.pdf

31   Smite, D., Moe, N.B., Levinta, G. and Floryan, M., 2019. Spotify guilds: how to succeed with knowledge sharing in
       large-scale agile organizations. Ieee Software, 36(2), pp.51-57.

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