



Bridging the Skills Gap Within Small and Medium-Sized Enterprises in Quebec

An Analytical and Empirical Analysis



Partners



The Diversity Institute conducts and coordinates multi-disciplinary, multi-stakeholder research to address the needs of diverse Canadians, the changing nature of skills and competencies, and the policies, processes and tools that advance economic inclusion and success. Our action-oriented, evidence-based approach is advancing knowledge of the complex barriers faced by under-represented groups, leading practices to effect change, and producing concrete results. The Diversity Institute is a research lead for the Future Skills Centre.



The Future Skills Centre (FSC) is a forward-thinking centre for research and collaboration dedicated to preparing Canadians for employment success. We believe Canadians should feel confident about the skills they have to succeed in a changing workforce. As a pan-Canadian community, we are collaborating to rigorously identify, test, measure, and share innovative approaches to assessing and developing the skills Canadians need to thrive in the days and years ahead. The Future Skills Centre was founded by a consortium whose members are Toronto Metropolitan University, Blueprint, and The Conference Board of Canada, and is funded by the Government of Canada's Future Skills Program.



Founded in 2017 by Professor Tania Saba, BMO Chair in Diversity and Governance at the University of Montreal is an interdisciplinary center of excellence for research and training on the theme of "living together." The objective of the Chair is to stimulate reflection on issues of equity and governance by studying the effects of changes in a constantly evolving world on work relations, individuals and organizations. The Chair's publications and media interventions reflect its commitment to improving working conditions and organizational practices and to influencing public policy. The Chair is associated with research centers, including the Diversity Institute at Toronto Metropolitan University, the Future Skills Centre, CÉRIUM, OBVIA and CRIMT. It represents the Quebec pole and Francophone communities in the federal government's Women Entrepreneurship Knowledge Hub project.

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The opinions and interpretations in this publication are those of the author and do not necessarily reflect those of the Government of Canada.



Authors

Tania Saba, PhD, CHRP Distinction Fellow
BMO Chair in Diversity and Governance
Professor - School of Industrial Relations
Université de Montréal

**Wendy Cukier, MA, MBA, PhD,
DU (Hon) LLD (Hon) M.S.C.**
Professor, Entrepreneurship and Strategy,
Ted Rogers School of Management
Director, Diversity Institute
Toronto Metropolitan University

Contributors

Simon Blanchette, M.Sc.
Senior Research Associate - Diversity Institute
and Future Skills Centre, Ted Rogers School of
Management, Toronto Metropolitan University

Jean Frantz Ricardeau Registre, PhD
Research Associate - BMO Chair in Diversity
and Governance

Christine Faulkner-Goyette, M.Sc.
Research Assistant - BMO Chair in Diversity
and Governance

Betina Borova, MA
Senior Research Associate - Diversity Institute
and Future Skills Centre, Ted Rogers School of
Management, Toronto Metropolitan University

James Walton, PhD
Research Assistant - Diversity Institute and
Future Skills Centre, Ted Rogers School of
Management, Toronto Metropolitan University

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Foreward

Bridging the Skills Gap Within Small and Medium-Sized Enterprises in Quebec: An Analytical and Empirical Analysis.

Skills gaps and labour shortages have been important issues for small- and medium-sized enterprises (SMEs) for many years. Technological, economic, and environmental transformation, including the COVID-19 pandemic have only exacerbated those concerns. Entrepreneurs, policymakers, business leaders, and job seekers are coping with those changes and the challenges of planning for the future under conditions of uncertainty and limited resources. What is the future of work and what skills will SMEs and workers need to thrive in the future?

Bridging the Skills Gap Within Small- and Medium-Sized Enterprises in Quebec: An Analytic and Empirical Analysis offers rich insights into the skill needs of SMEs and ways to support them in providing training to “upskill” and “re-skill” their employees to succeed in the future. Technical skills frequently become obsolete and need updating and the need for softer skills – such as creativity, critical thinking, collaboration, and adaptability –, is stronger than ever. This is especially true as we are navigating a still new reality where hybrid work is here to stay, which changes management methods and the skillsets required of both employees and leaders.

At the Future Skills Centre, we focus on helping Canadians gain the skills they need to thrive and employers with the talent needed to innovate and grow in a changing labour market. It is critical to ensure that everyone, especially under-represented groups, can access opportunities and resources to succeed and share in Canada’s prosperity. As part of our mandate, we emphasize the pressing need to address skills gaps and labor shortages, while being more inclusive and driving skills development transformation.

We thank our partners at the Diversity Institute and at the BMO Chair in Diversity and Governance at the Université de Montréal for convening this research. Planning is a perennial challenge for many and collecting disaggregated data on a large scale can contribute to our ability to create best practices that will help businesses thrive and foster concrete transformational changes for a more inclusive future. We also thank the Government of Canada for its support of a pan-Canadian future skills strategy that builds on evidence generation and practical delivery of skills training and assessment programs.

Pedro Barata
Executive Director
Future Skills Centre

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Executive Summary

Small and medium-sized enterprises (SMEs) are the backbone of Quebec's and Canada's economy.

Small and medium-sized enterprises (SMEs) are the backbone of Quebec's and Canada's economy. However, Quebec and Canadian organizations have long lamented the shortage of labour and skills and the lack of access to skilled workers as one of the most critical issues impacting their competitiveness and ability to grow.

In recent years, businesses have faced major challenges, particularly in terms of technological, economic and environmental transformations, as well as the COVID-19 pandemic. These challenges have had, or will have, a substantial impact on organizational systems, work organization, and skill needs. Macro-level factors such as technological innovations, changes in the global division of labour, changes in business organization, demographic shifts, and changes in consumption patterns, among others, are redefining the labour market and creating new challenges for businesses (OECD, 2017). These challenges and changing trends have created the need for new or different skill sets in all organizations.

The impact of these broader trends is already felt by businesses in Quebec. The overarching objective of this project is to understand skills gaps and needs in Quebec businesses, especially small and medium-sized enterprises (SMEs). We assess the level of preparedness of SMEs in Quebec for the post-pandemic years by examining their transformation strategies, skill priorities, training plans, and willingness to tap into a more diverse workforce.

This paper and its findings and recommendations are based on an analysis of the 331 employer representatives from Quebec who responded to the survey. Of the firms surveyed, 33% have fewer than 10 employees (micro-enterprises), 42% have 10–100 employees (small enterprises), 15% have 100–500 employees (medium-sized enterprises), and 10% have 500 or more employees (large enterprises). The firms surveyed operate in a variety of sectors, including manufacturing (16%), professional, scientific, and technical services (12%), and retail trade (9%).

Transformations affecting businesses

Technological, economic, and environmental transformations are forcing businesses to make significant changes to their strategic, operational, and decision-making processes, as well as in the organization of their employment systems. Of the transformations, changes in consumer demands, the introduction of new technologies, and market and demand growth ranked as the biggest challenges for 50% of the firms surveyed. Micro-enterprises place importance on all these challenges but give more importance to challenges posed by changing supply chains, environmental regulations, and increasing global competition.

Participants were asked to prioritize the organizational systems that require improvement in the coming years. The responses show that the larger the business, the more concerned it tended to be about the impact of transformations on its decision-making processes. On the other hand, medium-sized businesses, are more concerned about the impact of transformations on operational, administrative, and communication processes. However, most businesses express confidence in their ability to meet the challenges presented by transformations; nearly 74% of respondents believe that their business is adequately prepared.



63% report that labour shortages constitute their most significant challenge.

Labour & skills challenges

Businesses appear to be overwhelmed by labour needs. While 74% of firms surveyed anticipate a sharp increase in labour needs over the next few years, 63% also report that labour shortages constitute their most significant challenge, followed by rising labour costs (50%). One out of two firms report that they must implement new organizational practices to meet changing technological, environmental, and economic requirements. Businesses are also suffering from increased turnover, which exacerbates their need to recruit talent. Only 46% of the participating firms indicated that they were highly prepared to respond to labour market challenges.

Different skill sets are increasingly important. All the businesses surveyed indicated that they need to improve transversal skills. Increasingly, transversal skills are generally regarded described as indispensable to the world of work but are difficult to define. Essential transversal skills include

adaptability, creativity, collaboration, and problem-solving skills. These key skills are required to meet the new challenges arising from rapid changes transforming the organization of work. However, the skills that businesses intend to invest in are, in order of priority: technical, problem-solving, adaptability, and digital skills. Technical skills are usually the first to become obsolete when organizational systems must adjust to transformations.

Skills assessments and meeting skills needs

The increasing importance of transversal skills makes reskilling and skills enhancement strategies more vital than ever, but also more complex. A little over half (55%) of the firms surveyed said they regularly assess their employees' training needs, but despite operating in highly transformative environments, only 16% conduct skills assessments sporadically and 29% have never relied on assessments for measuring employee skills needs.

Paradoxically, more than 75% of the firms surveyed indicated a need to invest in training and retraining their workforce, without having taken or considered the preliminary step of assessing their skill needs. Despite being aware of the difficulties in recruitment and the current labour shortage, many businesses continue to focus on recruiting employees with the desired skills rather than developing them through other means.

Diverse learning systems can stimulate innovation. These include partnerships

between different labour market actors, which should be encouraged in order to create synergies and maximize learning. Medium-sized businesses appear to be the most invested in and willing to initiate partnerships with various organizations to accelerate internal skills development.

Attitudes to Equity, Diversity, and Inclusion (EDI)

Diversity management practices are among the most effective strategies for developing new transversal skills. Policies aimed at attracting people with diverse profiles and accelerating investments to target and develop the career paths of women are especially important. While 42% of businesses surveyed said they had implemented EDI measures, 28% said they had not and had no plans to do so. Approximately 6% had implemented measures in the past, but they are no longer in effect, and 7% of businesses said that they have not yet implemented any EDI actions but are considering it. The likelihood of having EDI programs in place is greater in larger firms, with 32% of micro-enterprises, 35% of small, and 21% of medium-sized businesses reporting that they have no concrete plans to establish such programs.

Attracting people from diverse ethnic backgrounds continues to be a strategy favoured by larger firms; however, our analysis shows that it is also gaining ground with micro-enterprises. Even though Indigenous Peoples, racialized people, and people with disabilities are directly

addressed in employment equity legislation, respondents do not seem to prioritize their representation. Participants were also asked about their willingness to accept more immigrant workers. Across all firm sizes, language differences, followed by difficulties in assessing foreign experience and credentials, are seen as the main barriers to hiring immigrants.

Recommendations

Based on the findings of this project, we provide several recommendations to improve the ability of Quebec businesses to meet transformations and labour and skills challenges:

- > Given the uncertainty caused by technological and organizational transformations that are difficult to anticipate, it is important to equip companies with resources and supports on skills training for employees, especially those in the early stages of growth, so that they can assess the impact of changes and undertake the necessary transformations.
- > To respond to changing business and work environments, firms must emphasize critical transversal skills like creativity, collaboration, problem-solving, and adaptability.
- > Firms need more support to cultivate continuous learning cultures and diversify their staffing sources.
- > Businesses need to be informed of new training processes and require assistance implementing practices that would improve transversal skills development.
- > Certification bodies, educational institutions, and chambers of commerce should develop and use shared platforms to offer customized skills development frameworks to assess needs and better assist businesses with training.
- > Businesses need access to shared services that enable them to develop, implement, remediate, and evaluate EDI action plans.



While 42% of businesses surveyed said they had implemented EDI measures, 28% said they had not and had no plans to do so.





Introduction

Quebec and Canadian organizations have long lamented the shortage of labour and skills. Small and medium-sized enterprises (SMEs) are the backbone of the Canadian economy. SMEs comprise 88.3% of Canada's private sector employment and 86.1% of private sector employment in Quebec (Innovation, Science and Economic Development Canada, 2021). However, SMEs report the lack of access to skilled workers to be one of the most critical issues impacting their competitiveness and ability to grow. Simultaneously, SMEs have fewer available resources than large corporations to invest in human resources and training (Saba et al., 2020). Consequently, in addition to recruiting, SMEs face challenges in retaining as well as training and upskilling their workforce, especially in a landscape dramatically impacted by the COVID-19 pandemic where skill needs and the organization of work are evolving (Saba et al., 2020; Saba et al., 2021). The pandemic and the response to it have also highlighted that skills related to managing learning, communication, and worker interaction are lacking (Adediji et al., 2022). There is a need for a more granular understanding of what specific skills SMEs truly need in order to develop actionable and useful practices and processes.



SMEs report the lack of access to skilled workers to be one of the most critical issues.

New digital technologies and artificial intelligence (AI) are called “disruptive technologies” because they replace existing technologies, introduce new ways of doing things, open new markets, and sweep away others (Bower & Christensen, 1995; IFC, 2018, 2019; Manyika et al., 2013). Automation and AI are also contributing to eroding employment and will eventually replace entire jobs (Khanna et al., 2022). The organizational transformations they will bring about and their impact on employment systems, working conditions, and future skills needs are still difficult to predict. However, research shows that automation and AI are likely to aggravate existing skills gaps; the changes they generate may also

occur too quickly for the education system to adapt accordingly unless more concrete actions are taken (Cukier, 2019). The rapidly changing labour market is also amplifying the importance of soft skills, which are paramount to navigate rapid changes and to ensure a strong recovery from the COVID-19 pandemic (Cukier et al., 2015; Kim et al., 2021; Gyarmati et al., 2020). Concerns about how to leverage new technologies in workplaces and how to mitigate the risks of exacerbating existing labour market inequalities merit further study, including through a diversity and inclusion lens (Cukier, 2019; Furr & Shipilov, 2019; Ng et al., 2021; Saba et al., 2021).

In this context, our research project examines future skills needs through multidisciplinary modelling. It examines the impact of economic, environmental, and technological transformations on the evolving need for skills and the means of acquiring them by focusing on underlying organizational and social dynamics.

This study has three interrelated objectives. The first is to outline the landscape of SMEs in Quebec to better understand how technological, economic, and environmental transformations are reshaping the workplace, and to what degree. More specifically, we consider SMEs'

organizational strategies, level of confidence in their ability to make the technological shift, environmental awareness, and evolution of their investments in digital assets; we also consider the time horizon of the anticipated impacts on employment and recent changes in working conditions. Once the contextual parameters have been established, the second objective is to identify future skills needs based on the size of SMEs and the organizational transformations they face. The third objective is to identify strategies and actions aimed at developing future skills, as well as potential obstacles to their development. We also examine the predisposition of firms to engage in initiatives aimed at broadening talent pipelines through equity, diversity, and inclusion measures, as well as possible barriers to such initiatives and concrete changes to remove the latter.





Methodological Approach

Project objectives

Using data generated from a survey, the overarching objective of this project is to understand skills gaps and needs, as well as approaches to training in SMEs by assessing:

- > The level of preparedness of SMEs in Quebec for the post-pandemic years ahead, by presenting transformation strategies according to the different SME profiles.
- > Skills priorities in SMEs, by analyzing them in relation to transformation strategies and SME profiles.
- > Training and skills development strategies to address anticipated shortfalls.
- > The predisposition of SMEs to broaden their skill sets by tapping into the potential of a more diverse workforce.

Of the firms surveyed, 33% have fewer than 10 employees.

Profile of the firms that took part in the study

Our findings and recommendations are based on an analysis of the 331 employer representatives from Quebec who responded to the survey.

- > Of the firms surveyed, 33% have fewer than 10 employees (micro-enterprises), 42% have 10–100 employees (small businesses), 15% have 100–500 employees (medium-sized businesses), and 10% have 500 or more employees (large businesses). The latter group served primarily as a control group in our comparative analysis of SMEs and large organizations.
- > It should be noted that the businesses surveyed appear to make very little use of temporary workers; more than half (56%) have fewer than 10 temporary workers.
- > The data suggests that a large proportion of the firms surveyed are at an advanced stage of development. Nearly 39% are growing and 55.6% are mature. Less than 6% of these businesses are in a startup or pre-startup phase. About 11% of the micro-enterprises and 3% of the small businesses are in the startup phase.

- > The vast majority of the businesses surveyed (85%) are commercial enterprises that provide services to other businesses or to consumers.
- > Almost 42% of the respondents are corporations and 20% are not-for-profit organizations. Registered businesses make up 16% of the sample.
- > The firms surveyed operate in a variety of sectors, including manufacturing (16%), professional, scientific, and technical services (12%), and retail trade (9%).







Transformational Strategies in SMEs: Impacts on Working Conditions and Skills

Macro-level factors such as technological innovations, changes in the global division of labour, demographic shifts, and changes in consumption patterns, among others, are creating new challenges for businesses (OECD, 2017).

In this section, we analyze the various economic, environmental, and technological factors that have been identified as potential influences on the future of business. First, we examine business challenges. Then, we present the respondents' assessment of their level of preparedness for these challenges and, finally, we analyze workforce challenges.

Technological, economic, and environmental transformations and their impact on firms

In recent years, businesses have faced major challenges, particularly in terms of technological, economic, and environmental transformations, which have an undeniable impact on organizational systems, work organization, and skill needs.

First, we examine employers' perceptions of the importance of economic and environmental transformations and their potential organizational impacts. Given the economic impacts of the COVID-19 pandemic in 2020 and 2021, we also look at the ability of businesses to cope.

Technological, economic, and environmental transformations are forcing businesses to make significant changes in their strategic, operational, and decision-making processes, as well as in the organization of their employment systems (i.e., organizational policies and practices). A review of the literature has identified the most important

transformations affecting the functioning of firms and necessitating the search for skills to meet new challenges and make the necessary changes (OECD, 2021a). They are shown in Figure 1 below.

Of these transformations, changes in consumer demands, the introduction of new technologies, and market and demand growth were ranked of highest importance for 50% of the firms surveyed.

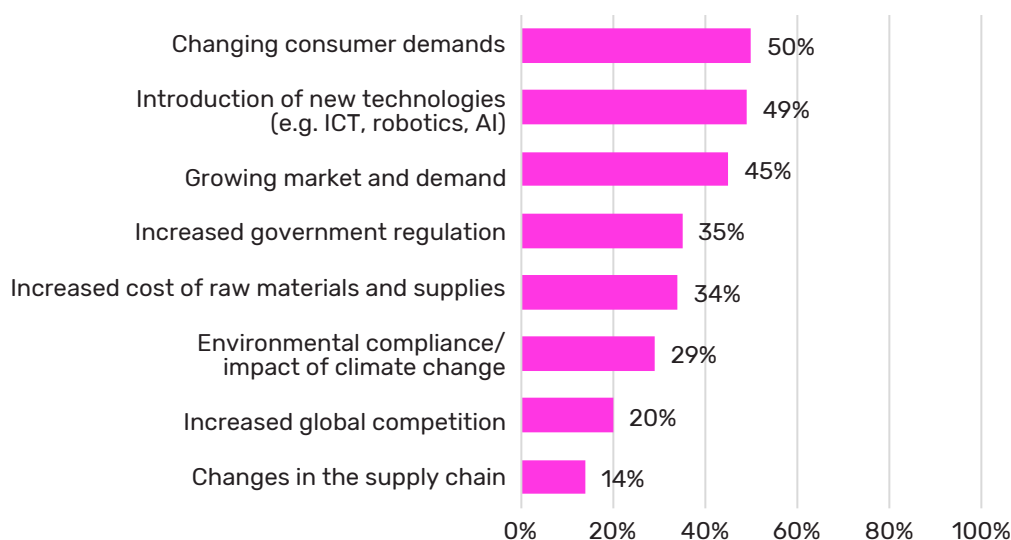
FIGURE 1

The main transformations influencing the functioning of companies



FIGURE 2

Distribution of companies according to the importance given to the different changes (n=331)



Micro-enterprises (fewer than 10 employees) appear to place importance on all these challenges, but they differ from larger firms such that they assign more importance to three particular challenges: changing supply chains, environmental regulations, and increasing global competition.

IMPACTS OF THE COVID-19 PANDEMIC

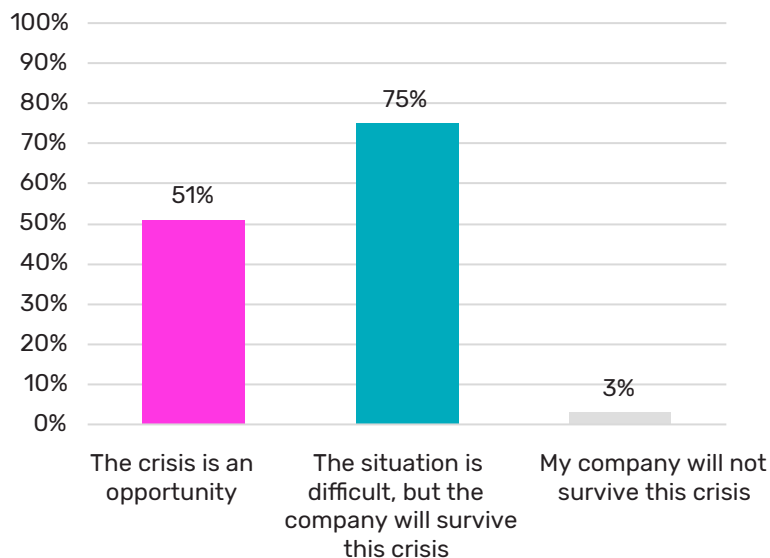
Given that the data collection started in November 2020, the COVID-19 pandemic was one of the major factors affecting the operations of firms of all sizes. Most firms surveyed (90%) reported they will survive

the crisis and 82% reported they will not have difficulty doing so. About 51% of respondents even saw the COVID-19 crisis as an opportunity for growth. Despite this strong confidence in their ability to weather the crisis, 75% of respondents report that their business has faced significant operational difficulties.

90% of the firm surveyed reported they will survive the crisis.

FIGURE 3

Distribution of respondents according to their perception of the impact of the pandemic on their company (n=214)



Micro-enterprises are more likely to report difficulty in weathering the crisis (10%), compared to small (5%), medium (4%), and large (7%) businesses. In contrast, firms with more than 500 employees held a more positive outlook, with 82% of large enterprises reporting that the business will survive the crisis.

FIGURE 4

Distribution of respondents' perceptions of the impact of the pandemic (strongly agree) by firm size (n=214)



Firms' adaptability to business challenges

The adaptive capacities of businesses were examined by analyzing the business processes affected by transformations. This analysis enabled us to identify the types of transversal skills that need to be developed to give businesses the capacity to revise processes or to implement new ones. The study then examined the reported level of preparedness to respond to organizational challenges.

BUSINESS PROCESSES AFFECTED BY TRANSFORMATIONS

Organizational and management processes are defined as tasks and activities that together—and only together—transform inputs into outputs (Garvin, 1998). These inputs and outputs vary and include materials, information, and people. Common examples of processes include new product development, order fulfillment, and customer service.

This study examined eight typical organizational and management processes, which are shown with their definitions in the Figure 5 below.

Participants were asked to prioritize the organizational systems and processes that require improvement in the coming years. As showed in Figure 6 below, companies of all sizes are most concerned about the impact of transformations on operational, administrative, and communication processes.

FIGURE 5
Organizational and management processes adapted from Garvin (1998)

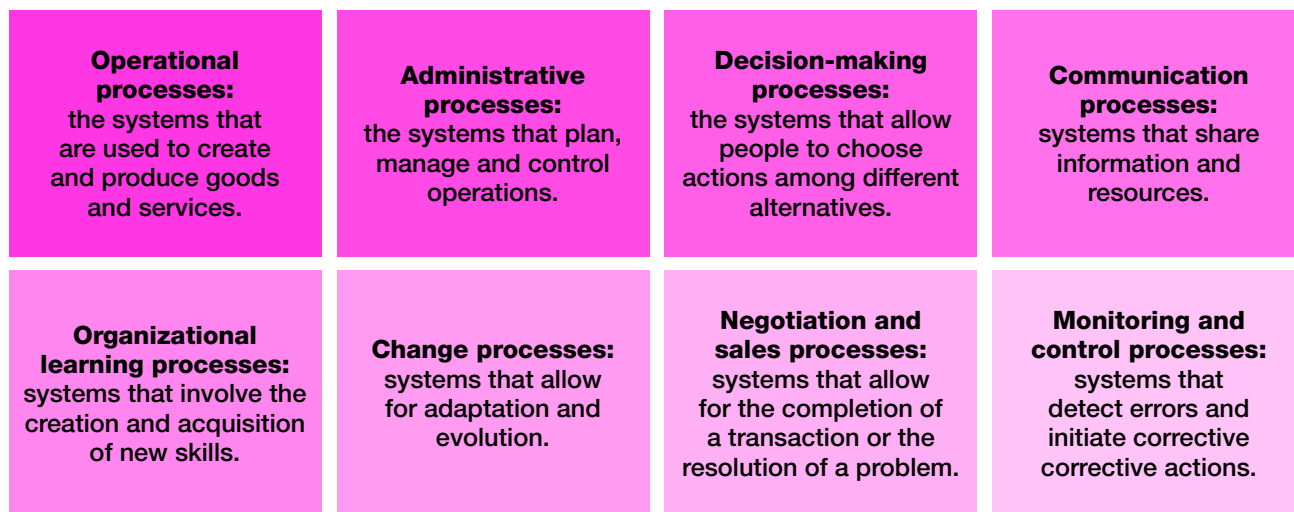
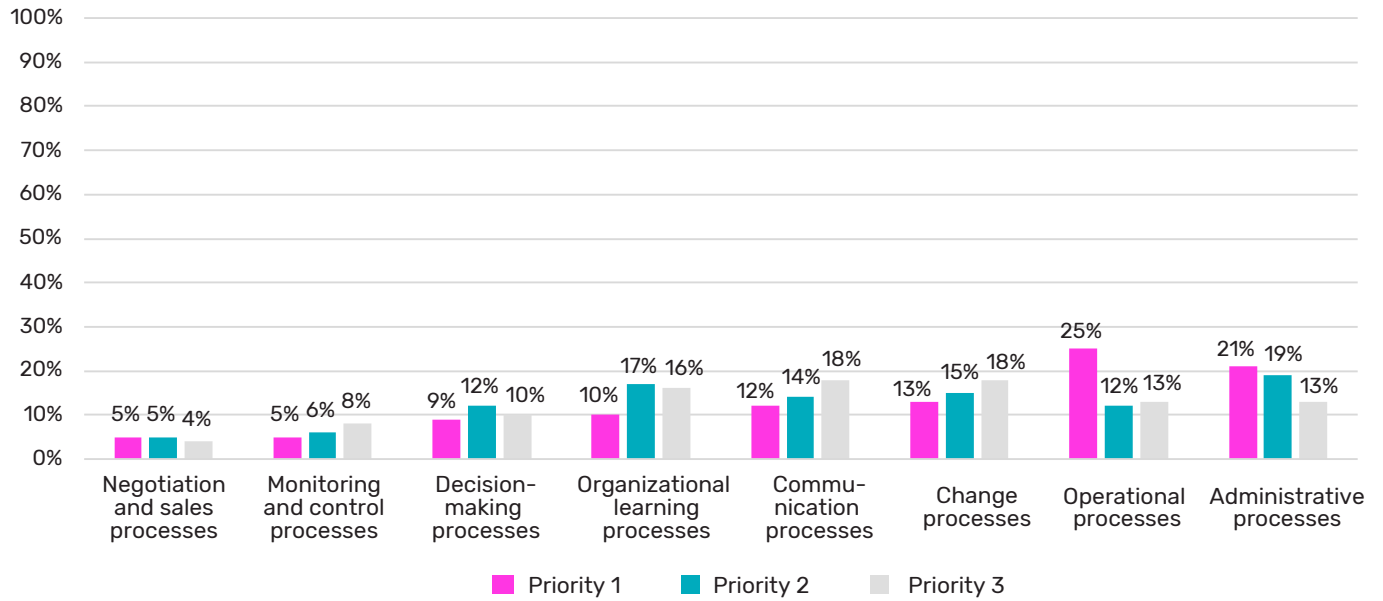


FIGURE 6

Distribution of respondents according to the organizational systems that need to be improved as a priority over the next few years (n=302)



Further analysis reveals that, overall, the larger the company, the more concerned they are about the impact of transformations on their decision-making processes.

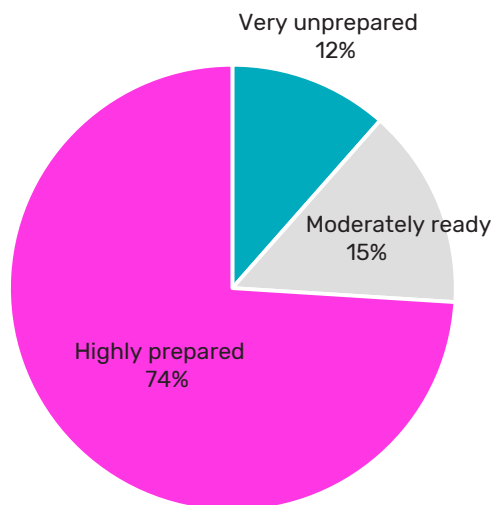


LEVEL OF PREPAREDNESS OF FIRMS TO FACE MACRO-LEVEL TRANSFORMATIONS

Nearly 74% of respondents believe that their business is adequately prepared to face anticipated transformations and upcoming changes.

FIGURE 7

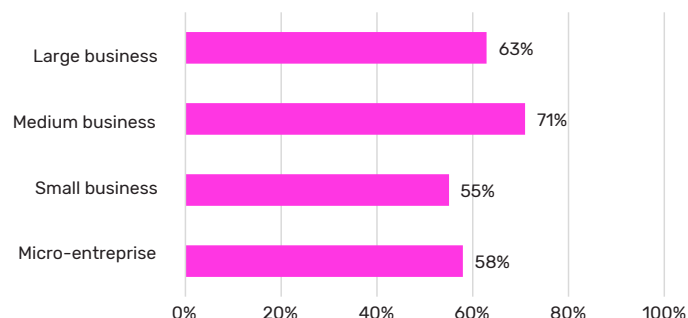
Distribution of firms by perceived level of preparedness in dealing with economic change (n=304)



Overall, when faced with the prospect of economic challenges, the size of the firm does not appear to make a significant difference in its perceived level of preparedness; however, compared to other firms, a slightly higher percentage of medium-sized businesses indicate that they are prepared to face economic challenges.

FIGURE 8

Distribution of respondents who believe their firm is ready to face economic challenges, by size (n=304)



Labour Market Challenges

Changes in the labour market are increasing pressure on firms to attract workers with the required skills. In Canada, it is becoming clear that the growing mismatch between workers' current skills and those required in an ever-changing world of work represents one of the most pressing challenges (OECD, 2019). In this section, we analyze the challenges that firms face in finding the right skills. We also examine changes in the labour market, the availability of skills in the firms' sectors, and the organizational capacity to retain skilled employees.

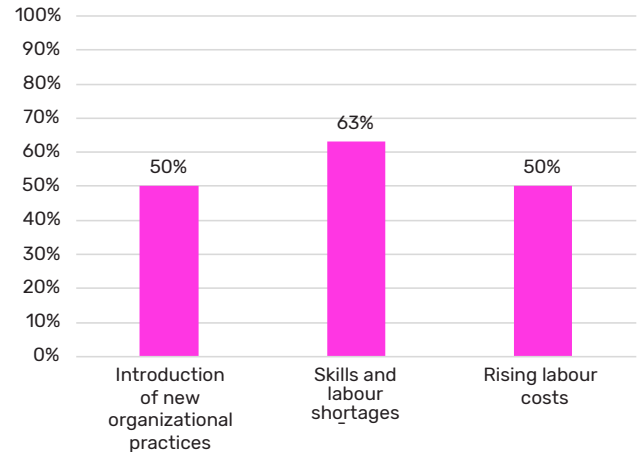
ORGANIZATIONAL CHALLENGES

The labour market situation seems to be creating several challenges for businesses. For example, one in two firms believe that rising labour costs and the introduction of new organizational practices are the most significant challenges they face in the labour market.

Nevertheless, the most significant challenge in the labour market remains skills and labour shortages, which is ranked highest by 63% of the firms surveyed.

FIGURE 9

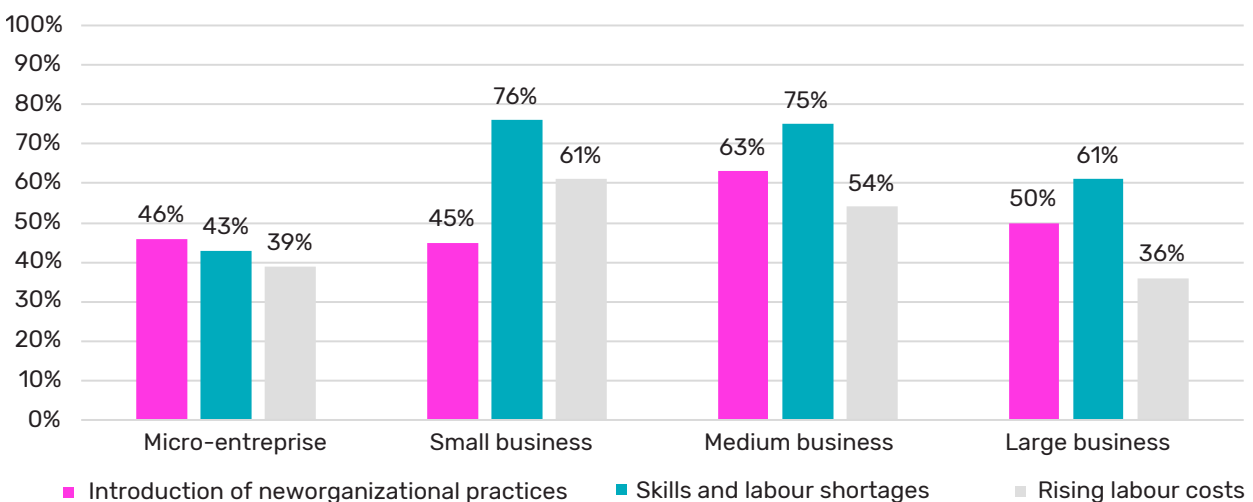
Distribution of firms by the most important challenge they face in the current labour market situation (n=331)



As shown in Figure 10, labour market challenges appear to affect micro-enterprises to a lesser extent; however, they have a more significant impact on small and medium-sized businesses.

FIGURE 10

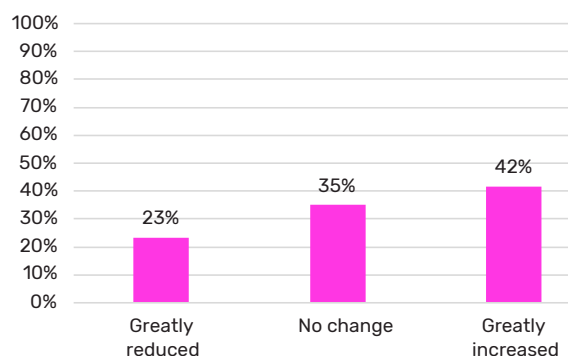
Distribution of respondents by firm size and anticipated influence of labour market challenges (n=331)



TURNOVER RATE AND LOSS OF SKILLS

Businesses report facing higher turnover rates than in the past. Approximately 42% of respondents believe that employee turnover has increased significantly in recent months. This holds true across different business sizes.

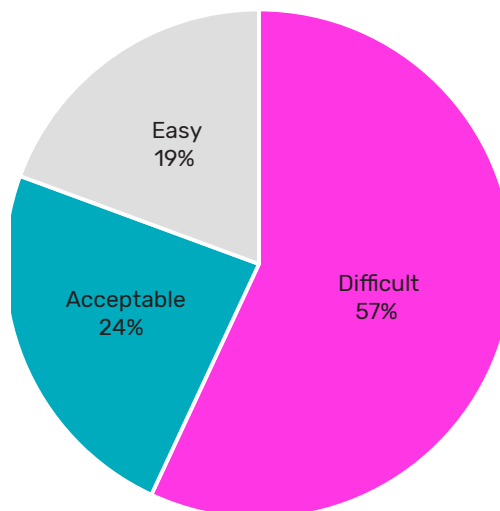
FIGURE 11
Distribution of firms by reported turnover rate (n=331)



LABOUR SHORTAGE

Worryingly, businesses seem to be overwhelmed by their workforce needs. More than half of firms surveyed (57%) are facing difficulties in recruiting employees with the skills that are essential to their mission and development.

FIGURE 12
Distribution of firms by difficulty in recruiting essential skills (n=300)



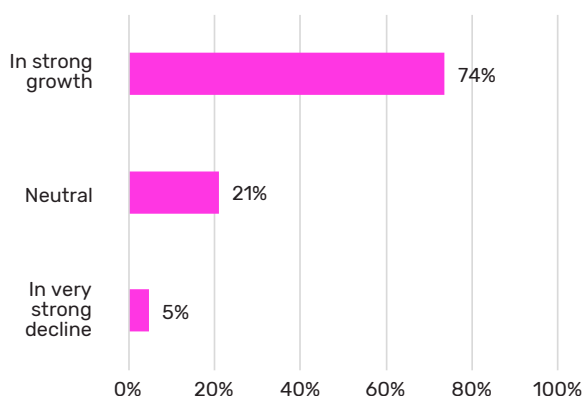
Difficulties in recruiting skilled employees are more pronounced in some industries. Firms facing the most difficulties include those in the manufacturing; professional, scientific and technical services; construction; and public administration sectors. It should be noted that recruitment problems affect businesses to similar degrees regardless of the size of the firms in our sample.

57% of firms surveyed are facing difficulties in recruiting employees with the skills that are essential to their mission and development.

Increasing turbulence in the labour market is forcing businesses to seek out new skilled workers. Approximately three out of four firms anticipate a significant increase in workforce needs over the next few years.

FIGURE 13

Distribution of companies according to their need for new skills (n=316)



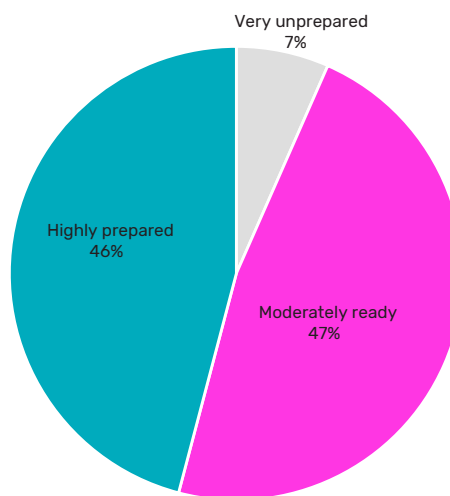
Only 46% of the participating firms indicated that they were highly prepared to respond to labour market challenges.

The ability of firms to respond to labour market challenges

Only 46% of the participating firms indicated that they were highly prepared to respond to labour market challenges. A similar proportion of respondents said they were moderately prepared to respond to the challenges posed by labour shortages, new practices, and rising wage costs. Firms of various sizes show comparable levels of preparedness in facing labour market challenges.

FIGURE 14

Distribution of respondents by whether they feel they have the right skills to meet labour market challenges (n=331)







Transversal Skills in SMEs: Validation of a Taxonomy and SMEs' Needs

Transversal skills are defined as personality traits, educational skills, or personal qualities (Gallagher & Clement, 2013). Although they have been described as indispensable to the world of work, they are nevertheless difficult to define (OECD, 2005). They are said to be transversal because they are not anchored in one profession or discipline; instead, they “cut across” (Saba & Dolan, 2021). Transversal skills are composed of multidisciplinary abilities and common to most job categories (Scharnhorst & Kaiser, 2018). They are referred to as a “complex know-how” that empowers individuals to mobilize and effectively combine a variety of internal and external resources to respond to varied and unexpected situations (Tardif, 2006). Some examples of transversal skills often mentioned include complex problem-solving skills, social skills, skills related to the use of information and communication technology (ICT), cognitive skills, as well as process-related skills such as active listening and critical thinking (WEF, 2018).

Transversal or multi-functional skills

In 2020, Employment and Social Development Canada issued a new skills taxonomy on which we have drawn heavily to update our own skills categorization.¹ Although this categorization has evolved since November 2020, we believe that we have retained most of the transversal skills that are useful for jobs of the future. The categorization we tested with employers includes eight dimensions, shown in the figure below, and defined further defined in Figure 16. All dimensions meet reliability standards and are consistent.

1 We opted to update the skill dimensions as recommended by ESDC Canada. Although we were aware that we were measuring skills differently between workers and employers, we felt it was important to work with updated dimensions. We considered these differences in our recommendations, which were ultimately quite minor.

FIGURE 15

Transversal and multi-functional competencies defined along eight dimensions

Basic skills	Creativity skills	Communication skills	Technical skills
Digital skills	Problem-solving skills	Collaboration skills	Adaptability skills

FIGURE 16

Indicators for measuring the eight dimensions of transversal or multi-functional competencies, adapted from ESDC's Skills and Competencies Taxonomy

Basic skills

- > Understand continuous text, graphics, and electronic text.
- > Compose texts to communicate information and ideas.
- > Use, research, interpret, and understand quantitative information or numbers in various types of documents.

Digital skills

- > Use digital devices, systems, networks, applications, and software.
- > Understand the protection of computer equipment and data.
- > Capture, access, evaluate, organize, integrate, communicate, and apply digital information.
- > Create new digital content.
- > Determine the information needs of the business.
- > Understand, use, and develop mobile applications, social media platforms, artificial intelligence, blockchain technology, virtual reality, cloud computing, etc.

Creativity skills

- > Be open-minded and open to experiences.
- > Be open and receptive to new and diverse perspectives and incorporate input and feedback from others.
- > Demonstrate originality and inventiveness at work, understanding the real-world limitations to adopting new ideas.
- > Appreciate that the creativity and innovation are a long-term cyclical process, made of small successes and frequent mistakes.

Problem-solving skills

- > Apply logical thinking to break down complex problems or ideas into their component parts to better understand them.
- > Analyze and evaluate an issue objectively to form a judgment.
- > Gather information, use multiple methods regarding a particular topic or topics.
- > Stay focused on different tasks and use time, mental capacity, and physical space effectively and efficiently in order to achieve the desired result.

Communication skills

- > Speak so that others pay attention and understand.
- > Understand local and global perspectives, societal and cultural contexts, and communicate using a variety of media in an appropriate, responsible, and safe manner.
- > Ask effective questions to gain knowledge, listen to understand all points of view, express own opinions, and defend ideas.
- > Communicate effectively in a variety of environments (including multilingual).

Collaboration skills

- > Recognize and manage your own and others' emotions to adapt to different work environments.
- > Demonstrate kindness and care for others and their well-being.
- > Work in a team with with people of diverse backgrounds, respect their opinions, and adapt to different needs of people.

Technical skills

- > Examine the relative costs and benefits of potential technologies to select the most appropriate.
- > Determine how a system should operate and how changes in conditions, operations, and environment will affect results.
- > Perform routine maintenance on equipment and determine the type of maintenance that is require.
- > Repair machines or system.
- > Perform tests and inspections of products, services, or processes to evaluate quality or performance.
- > Identify technology or adapt equipment to meet user needs.
- > Determine the causes of operating errors and decide and decide on the measures to be taken.

Ability skills

- > Demonstrate the ability to control anxiety and calmly solve problems.
- > Demonstrate positive expectations of self and life in general.
- > Deal effectively with work-related changes and problems.
- > Participate in an ongoing development proces.
- > Identify one's own learning style and know how to access resources to develop one's skills.



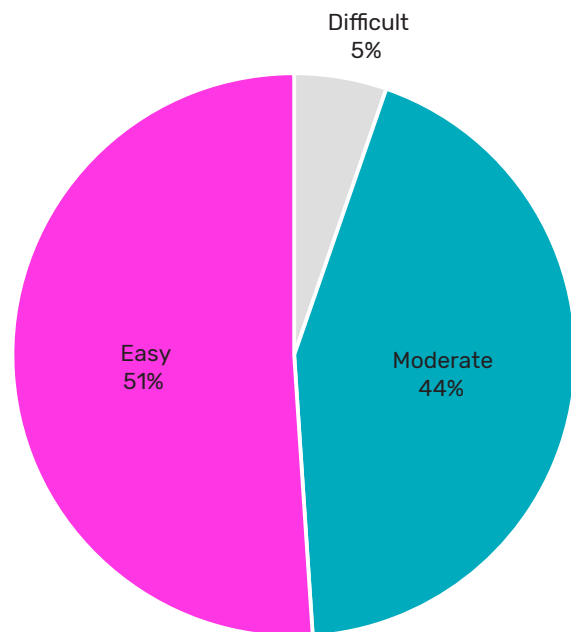
SME skill needs

According to the respondents, recruiting employees with skills essential to accomplishing the mission of the organization is one of the most important challenges in responding to business transformations.

Overall, 51% of respondents indicated that it was easy to recruit employees with the skills needed to deal with anticipated changes. Small and medium-sized businesses show a comparable distribution regarding their confidence in having the essential skills to deal with anticipated changes.

FIGURE 17

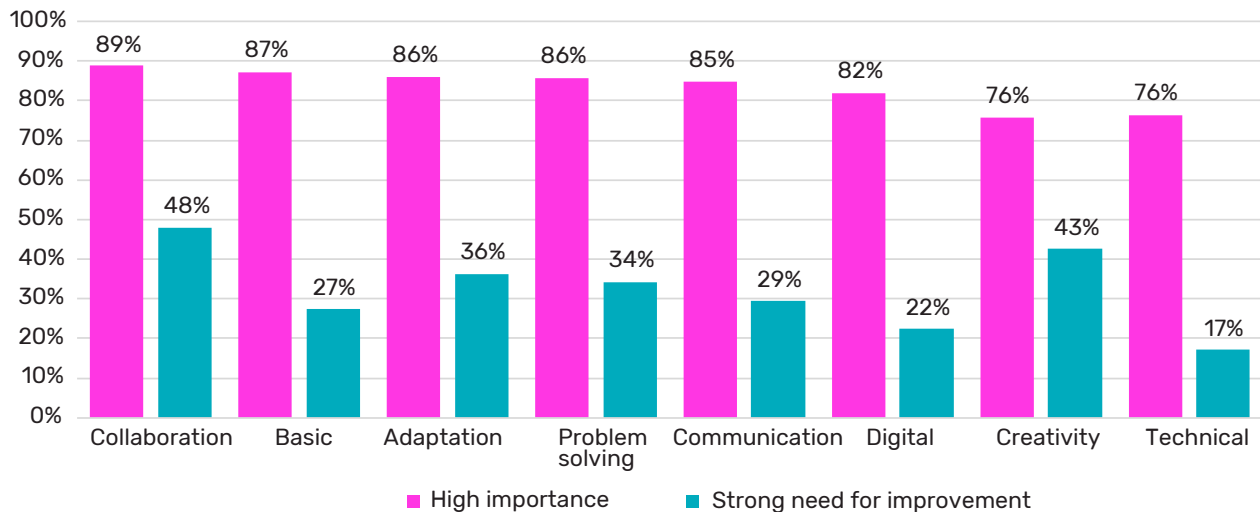
Distribution of respondents by ease of recruiting people with the right skills (n=300)



Overall, the firms surveyed indicated that it is important or very important that employees in mission-critical positions have the transversal skills identified in Figure 15.

FIGURE 18

Distribution of firms according to the importance given to the eight dimensions of transversal skills and the need to improve them (n=297)



In addition, most transversal skills need to be enhanced so that businesses can continue to fulfill their mission. These include creativity skills, collaboration skills, problem-solving skills, and adaptability skills.

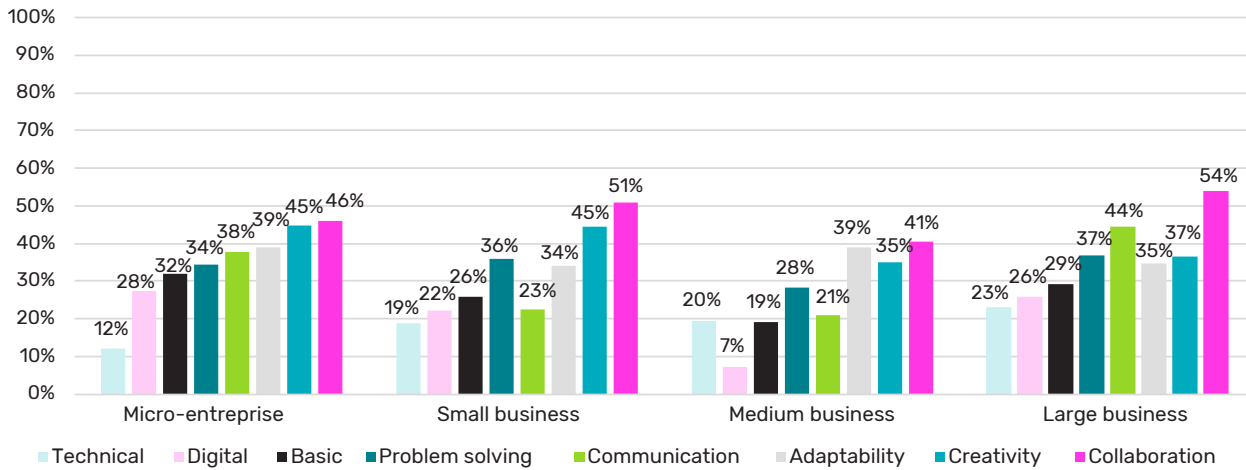
It is interesting to note that the skills traditionally known as “generic skills,” which are basic technical skills needed to get the job done, require less upgrading than the skills needed to support the organizational changes caused by rapid socio-technical transformations. It should also be noted that 22% of firms consider it a priority to improve

digital skills. The need to have and upgrade basic skills was found to be greatest in the manufacturing; professional, scientific, and technical services; retail trade; and health care sectors.

Overall, the need for improvement in the eight skill dimensions is more or less evenly distributed across firms of different sizes. Additionally, the rising importance of transversal skills – collaboration, creativity, adaptation, communication, and problem-solving skills – is well represented in Figure 19 below.

FIGURE 19

Distribution of respondents by importance of transversal skills development (n=297)



All businesses surveyed indicated that the need to improve all transversal skills is linked to changes in the business environment. Our analysis suggests that the introduction of new technologies, changes in consumer demand, and increased global competition have intensified the need to improve transversal skills in businesses. The findings show adaptability and collaboration to be two of the most important and sought-after skills needed to meet the full range of challenges organizations are facing.

The introduction of new technologies, changes in consumer demand, and increased global competition have intensified the need to improve transversal skills in businesses.

Increasing global competition requires firms to improve basic, digital, and communication skills and requires employees to be more adaptable to new trends. Moreover, technical skills associated with specific positions have shown to be less important in turbulent environments; this is because acquired technical skills are the first to become obsolete when organizational systems must adjust to transformations.

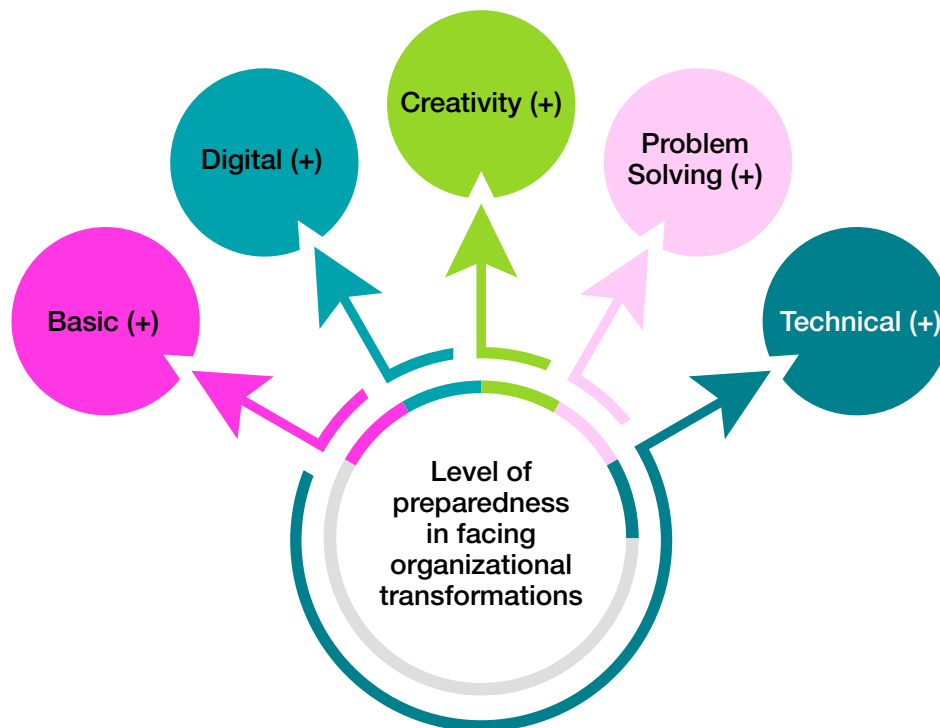
For all respondents, the need to improve transversal skills is strongly linked to changes in the labour market. The analysis suggests that the introduction of new organizational practices (e.g., telecommuting and redesigning the organization of work), labour shortages, and rising labour costs are increasing the need for firms to upgrade transversal skills.

Our analysis of the survey data shows that firms are more confident in their ability to deal with business and labour market challenges when they have successfully strengthened certain skills, as shown in Figures 20 and 21. The level of preparedness in facing business challenges is dependent on improvement of six of the eight transversal skill dimensions. While adaptability and collaboration do not have as strong of an influence on business preparedness, they are considered most important when it comes to implementing solutions and taking action to address business challenges.

Businesses facing strategic transformations will place greater emphasis on improving digital, technical, creativity, problem-solving, and communication skills, at least during the initial stages. The shift towards improving adaptability and collaboration often occurs at later stages when businesses are in the process of implementing the strategic and organizational changes caused by macro-level transformations.

FIGURE 20

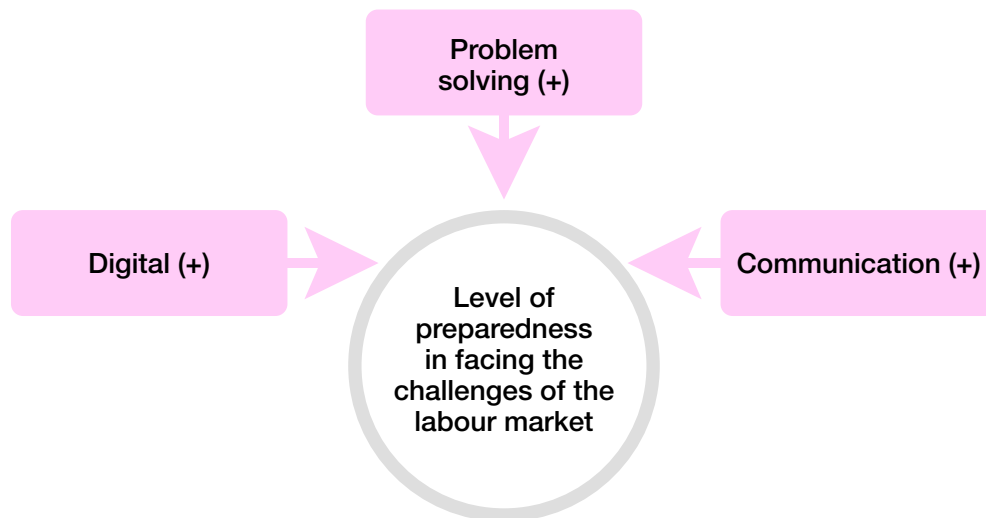
Transversal skills that would strengthen firms' confidence in their preparedness for business challenges (n=297)



When looking at meeting the challenges of the labour market specifically, businesses are more concerned about the development of digital, problem-solving, and communication skills.

FIGURE 21

Transversal skills that would strengthen firms' confidence in their preparedness for labour market challenges (n=297)







Training and Development Strategies to Address Skill Gaps: An Analysis by Firm Size

The future world of work will require organizations to strengthen their capacity by increasing and improving transversal skills within their workforce (Ellingrud et al., 2020). To this end, reskilling and skills enhancement strategies play a critical role in the development of these skill sets (OECD, 2018; Saba et al., 2021).

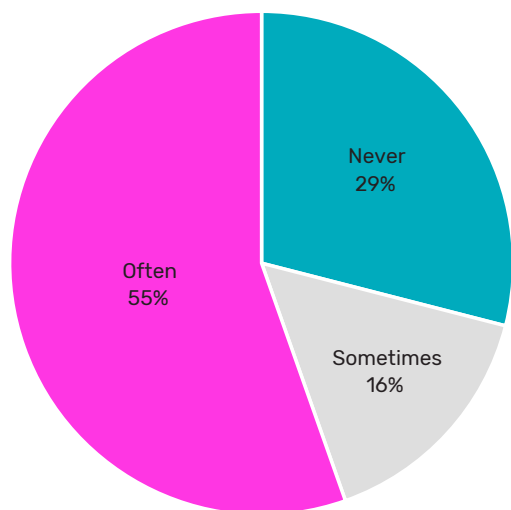
In this section, we analyze the approaches used by businesses to reduce the skills gap, focusing on frequency of needs assessments conducted and investments made in training. The frequency of needs assessments is an essential preliminary step for businesses to assess the situation and establish evidence-based strategies. The extent of investment in training is an important indicator of the financial capacity available to implement the strategies and is also a good indicator of the organizational predisposition to establish, invest in, and promote a culture of continuous learning.

Frequency of needs assessments and magnitude of training investments

Assessing training needs is an essential step in implementing a skills development strategy. Approximately 55% of the firms surveyed reported that they assess the training needs of their employees on a regular basis, while 29% reported that they had never conducted such assessments. About 16% indicated that they do so sporadically. No differences can be attributed to firm size.

FIGURE 22

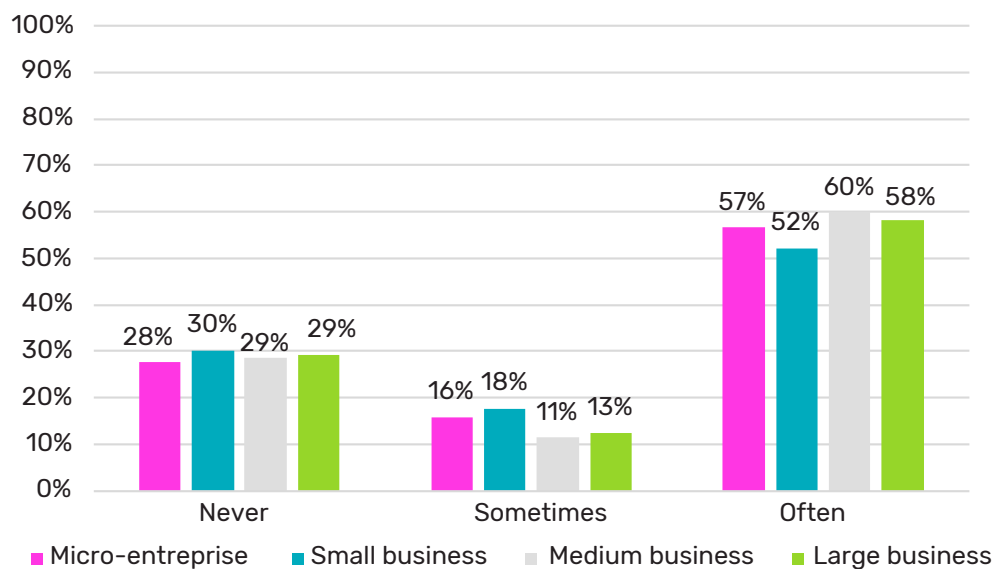
Distribution of respondents by frequency of workforce training needs assessments (n=231)



The importance of investing in employee training is even more pressing for small and medium-sized enterprises.

FIGURE 23

Frequency of training needs assessments by firm size (n=231)

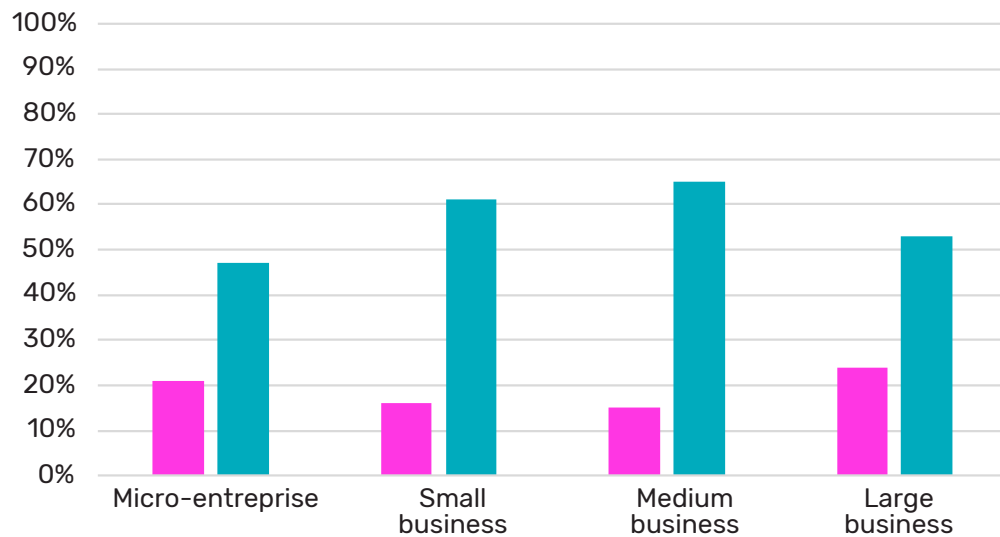


Paradoxically, a large proportion of the participating firms stated that they invested in training and retraining their workforce without having taken or considered the preliminary step of assessing their skill needs. The results therefore suggest that many training initiatives may not be

grounded in evidence and are unlikely to be targeting the correct skill needs. Our analysis shows that the importance of investing in employee training is even more pressing for small and medium-sized enterprises compared to micro or large enterprises.

FIGURE 24

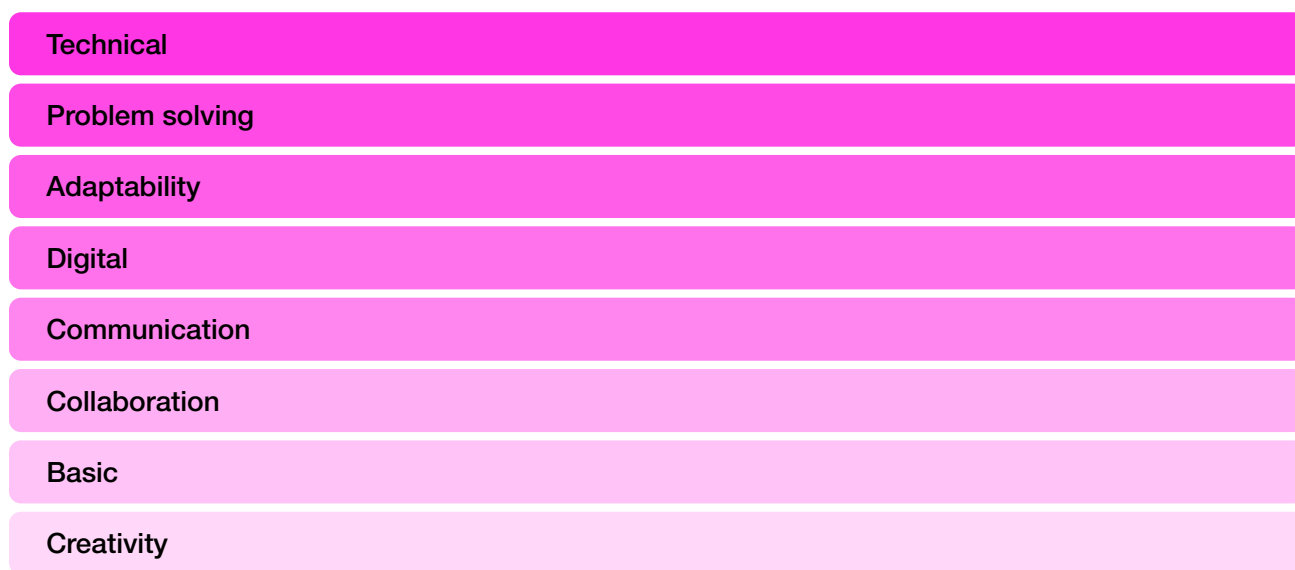
Likelihood of investing in retraining and education of current employees by firm size (n=230)



The likelihood of investing more in workforce reskilling and training is even greater when it comes to developing, in order of importance, the following skills:

FIGURE 25

Top skills identified for training by firms, ordered from most to least important (n=230)



Seven reasons are generally cited by businesses for their reluctance to invest in training. One of the most common reasons is that firms prefer recruiting employees who already possess the skills needed rather than developing these skills among their current employees. The second most noted reason is attributed to lack of time for training. Both these rationales indicate

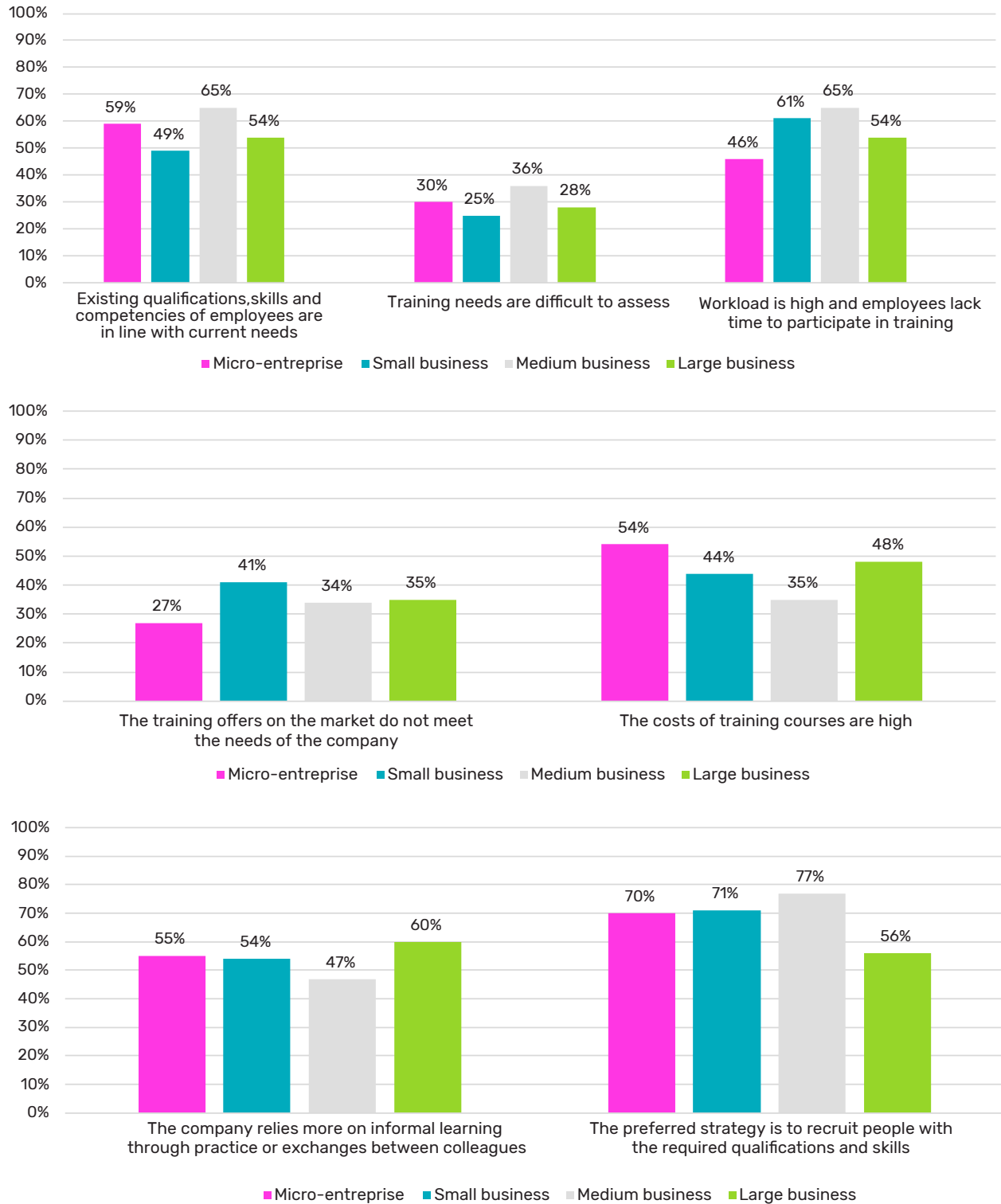
Firms prefer recruiting employees who already possess the skills needed.

low interest in developing a learning culture within organizations. Other reasons for not investing in training include the assumption that their employees have the required

skills as well as the perception that informal learning through practice or employee interaction are sufficient sources for skills development.

FIGURE 26

Reasons for limiting training investments by firm size (n=236)



Practices for closing skills gaps or developing new skills

We identified 10 forms of practices used to close skills gaps in order to determine what organizations prioritize. These are shown in Figure 27 below. We then examined the links between the various practices and their capacity to improve the eight transversal skills previously identified.



FIGURE 27

Ways to close the skills gap

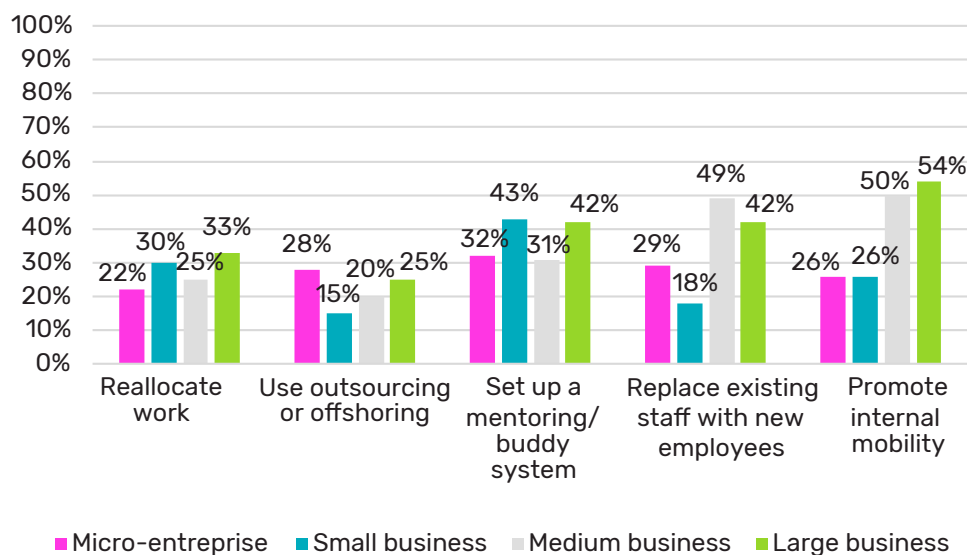
Implement a mentoring/ buddy system	Provide feedback to employees	Automate production	Increase performance monitoring	Replace existing staff with new employees
Use subcontracting or outsourcing	Implement training programs	Change work practices	Offer internal mobility (mobility within the organization)	Reassign work

The use of certain practices differs according to firm size. For example, the smaller firms strongly favour the use of subcontracting. In contrast, firms with 50 to 200 employees prefer to address knowledge and skills gaps

through labour market recruitment. The largest businesses, given their capacity to diversify career paths within the organization, make greater use of internal mobility.

FIGURE 28

Prioritization of different practices for addressing skills gaps by firm size (n=248)



Firms with 50 to 200 employees prefer to address knowledge and skills gaps through labour market recruitment.

Large businesses make greater use of internal mobility.

Figure 29 below shows the different practices used by employers to address skills gaps according to firm size. The two main strategies prioritized by all firms are implementing training programs and

providing feedback to employees to track and correct performance gaps. These are followed by increasing the monitoring of employee performance and changing work practices to leverage and share skills within firms.

FIGURE 29

Distribution of firms by size regarding prioritization of various strategies to address skills gaps (n=248)

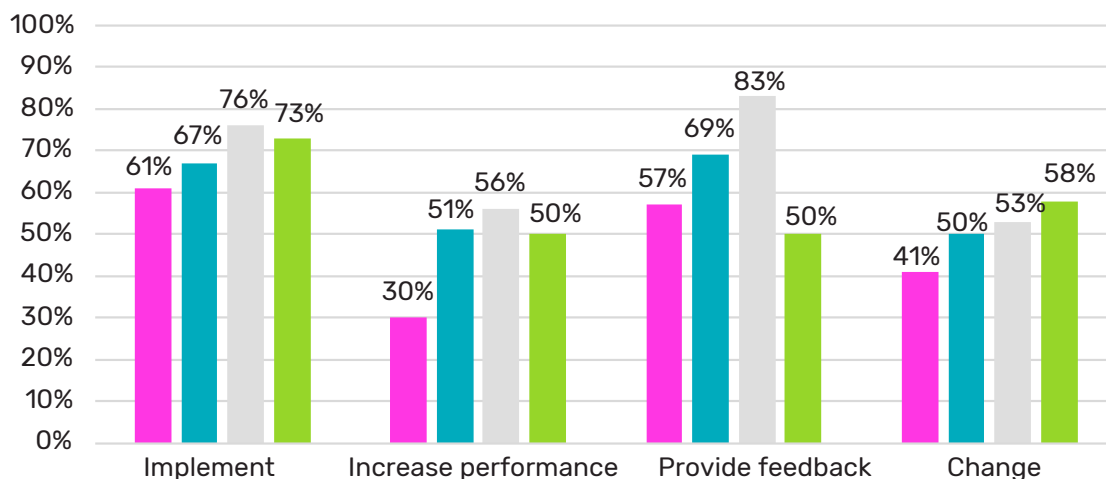


Table 1 below identifies significant relationships ('+' sign) between the strategies used to close skill gaps and the type of transversal or cross-cutting skills that firms seek to improve.

TABLE 1

Association between strategies to close the skills gap and types of transversal skills to be improved (n=248)

	Basic	Digital	Creativ-ity	Problem solving	Communi-cation	Col-labo-ration	Tech-nical	Adapt-ability
Establish a mentoring/ buddy system					+			
Provide feedback to employees				+				+
Automate production		+					+	
Increase performance monitoring					+		+	+
Replace existing staff with new employees						+	+	+
Use of subcontracting or offshoring	+	+			+			
Implement training programs		+	+	+	+		+	+
Changing work practices			+	+	+	+	+	+
Offer internal mobility (mobility within the organization)		+		+	+	+	+	+
Reallocate work		+		+	+	+	+	+

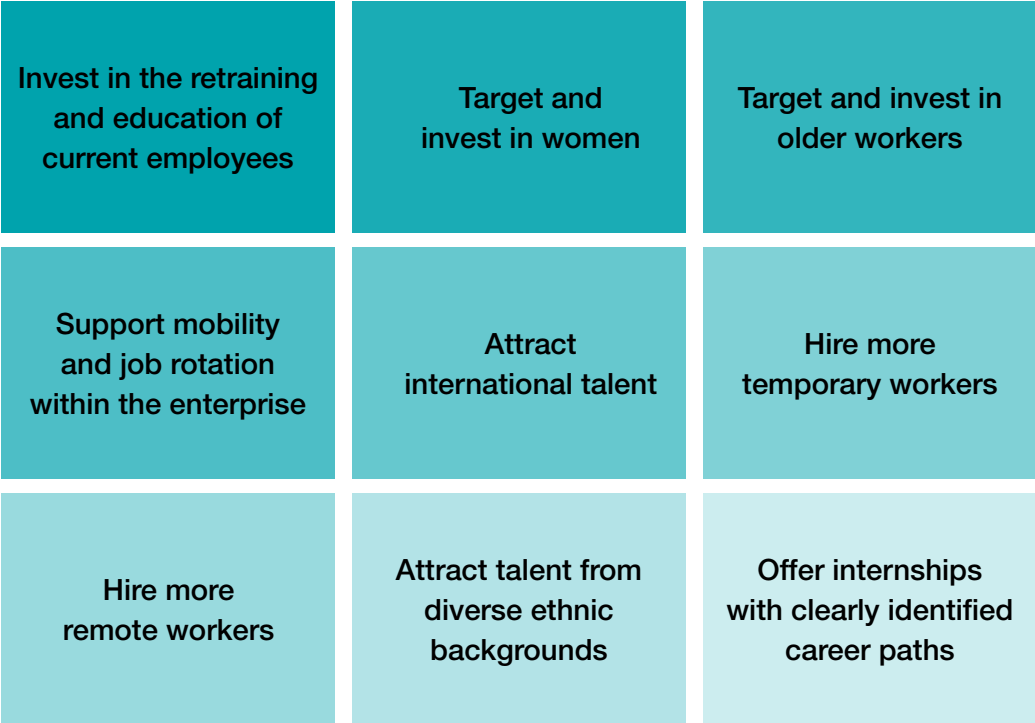
Larger businesses make more use of internal mobility and work reassignment than smaller ones, which seem to provide them with an opportunity to bridge numerous skill gaps; however, this strategy does not help develop creativity.

In addition, firms seem to be less concerned about the internal development of basic skills and, instead, fill these gaps by outsourcing. This explains several offshoring strategies to certain countries with lower levels of education and less skilled jobs. The use of automation requires digital and technical skills.

Figure 30 below lists the practices considered most effective in getting employees to learn and acquire new skills.

FIGURE 30

The most effective practices for the development of new skills

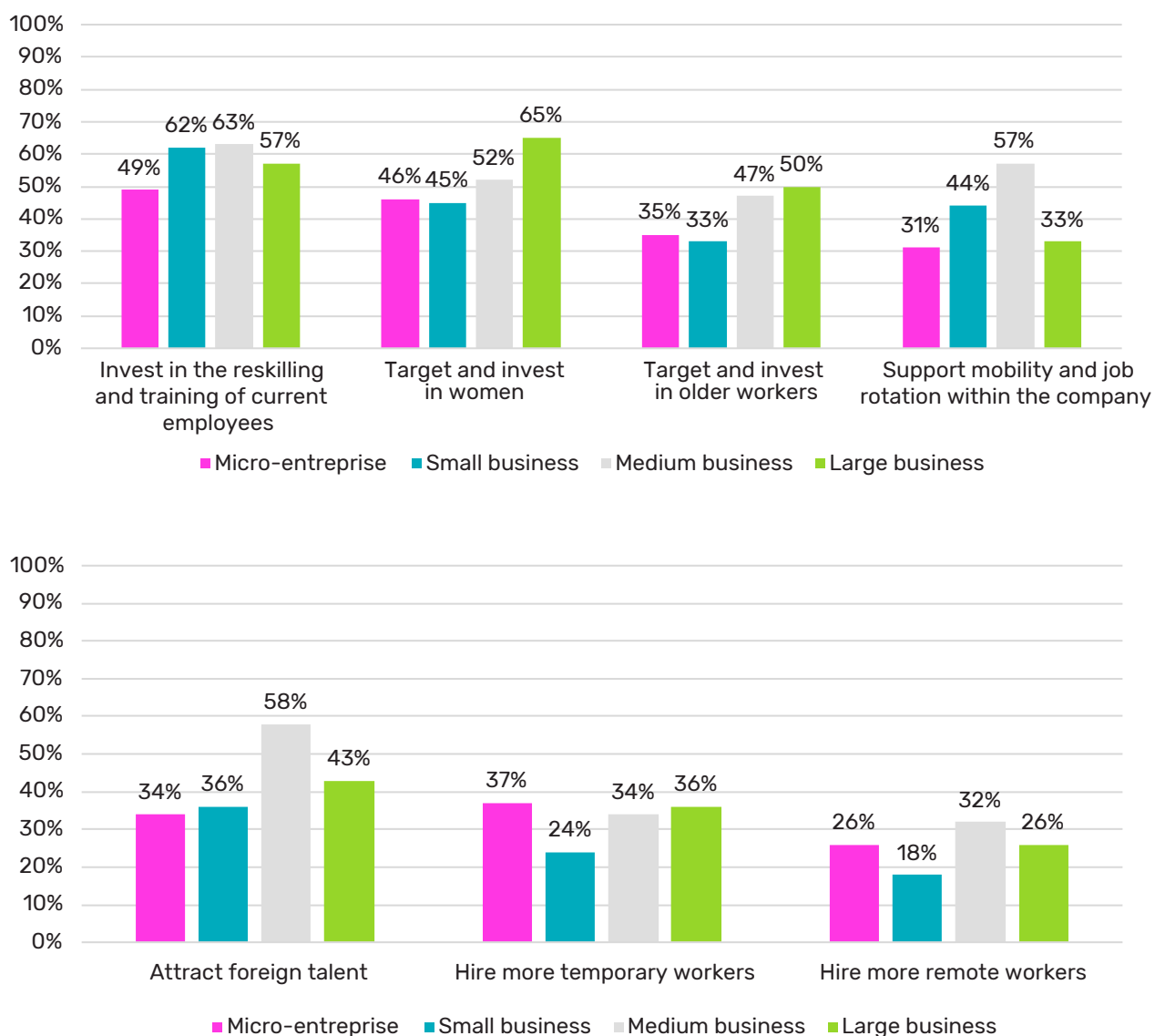


Practices that address the need to improve transversal skills in firms of all sizes are shown in Figure 31. These practices include reskilling and training initiatives, but also practices that seek to diversify human resource talent pools, including targeting

women, older workers, and immigrants. Some mobility practices that support the development of career paths are also noted. Firms also use teleworking to meet the need to acquire new skills.

FIGURE 31

Distribution of respondents according to firm size and whether they place high or very high importance on strategies to develop new skills (n=230)

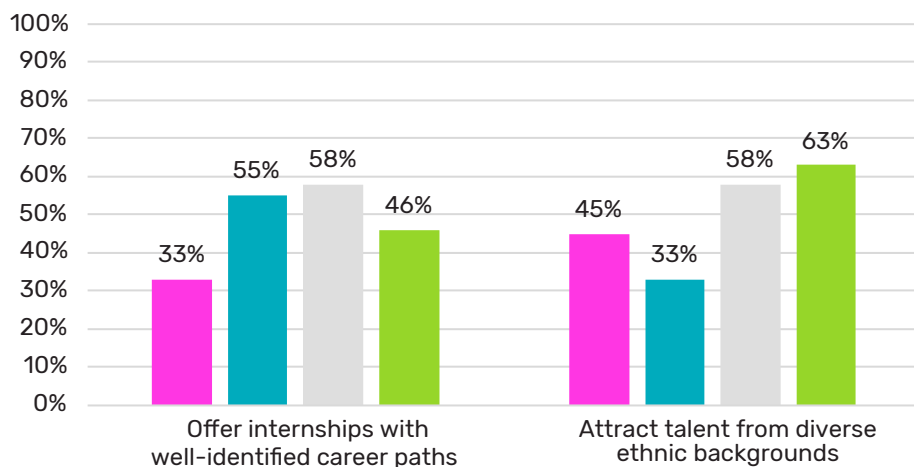


Practices that differ by firm size are listed in Figure 32. Small and medium-sized businesses seem to favour offering internships as a career pathway. Attracting

people from diverse ethnic backgrounds continues to be a strategy favoured by larger firms; however, analysis shows that it is also gaining ground with micro-enterprises.

FIGURE 32

Distribution of respondents according to firm size and whether they place high or very high importance on strategies to develop new skills (n=230)



Attracting people from diverse ethnic backgrounds continues to be a strategy favoured by larger firms; however, analysis shows that it is also gaining ground with micro-enterprises.

The most effective strategies for developing new skills are listed in Table 2 (significant relationships are indicated by the '+' sign). Among the practices associated with the development of the greatest number of transversal skills are diversity management

practices, which attract people with diverse profiles by investing in targeted recruitment and career development pathways. Labour scarcity is also increasing firms' interest in attracting the skills of international workers.

TABLE 2

Association between skill acquisition strategies and types of transversal skills to be improved (n=230)

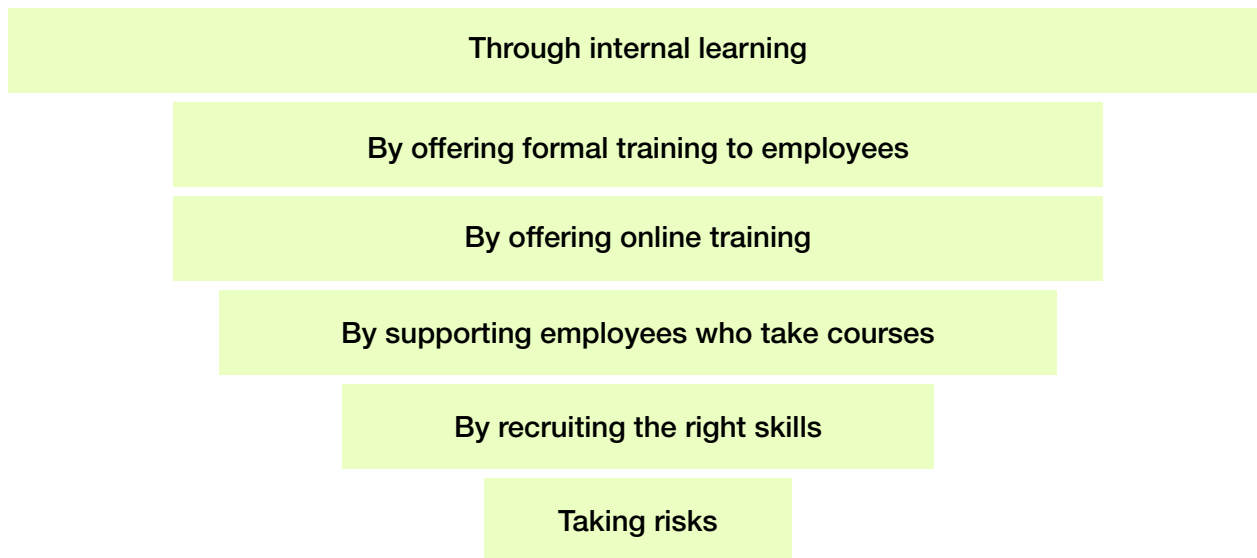
	Basic	Digital	Cre- ativity	Prob- lem solving	Com- muni- cation	Col- labo- ration	Tech- nical	Adapt- ability
Invest in the retraining and education of current employees	+	+		+	+		+	+
Target and invest in women		+	+	+	+	+	+	+
Target and invest in older workers					+		+	
Support mobility and job rotation within the firm		+		+	+		+	+
Attract international talent		+	+	+	+	+	+	+
Hire more temporary workers		+			+	+		+
Hire more remote workers	+	+		+	+	+	+	
Attract talent from diverse ethnic backgrounds	+	+	+	+	+	+	+	+
Offer internships with clearly identified career paths		+			+		+	+

Respondents were asked to comment on ways in which they could be assisted in developing new skills, if given the opportunity. Figure 33 below ranks these actions in order of importance based on the comments of respondents from various firm sizes. Regardless of firm size, establishing an internal learning culture and strategy ranks first. Offering formal in-person training and

providing online training rank second and third respectively. Given the time and effort required to acquire new skills, providing support and encouragement to employees who take courses ranks fourth. External recruitment ranks fifth. Firms of all sizes identify risk-taking to be the lowest priority.

FIGURE 33

Practices considered most important for developing new skills, ranked in order of importance



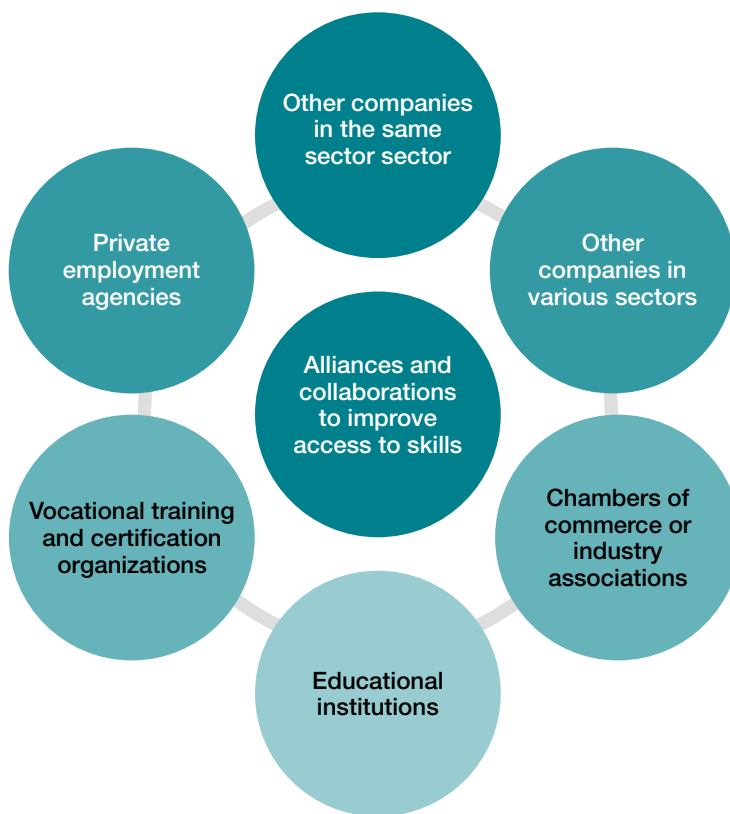
Collaborative initiatives

Diverse learning systems can stimulate innovation. As illustrated in Figure 34 below, these include partnerships between different labour market actors, which should be encouraged to create synergies and

maximize learning opportunities. Policies should also aim to improve recognition, validation, and accreditation procedures to enhance the visibility and transferability of the skills taught in these programs (OECD, 2021b).

FIGURE 34

Examples of collaborative practices for skills acquisition and development

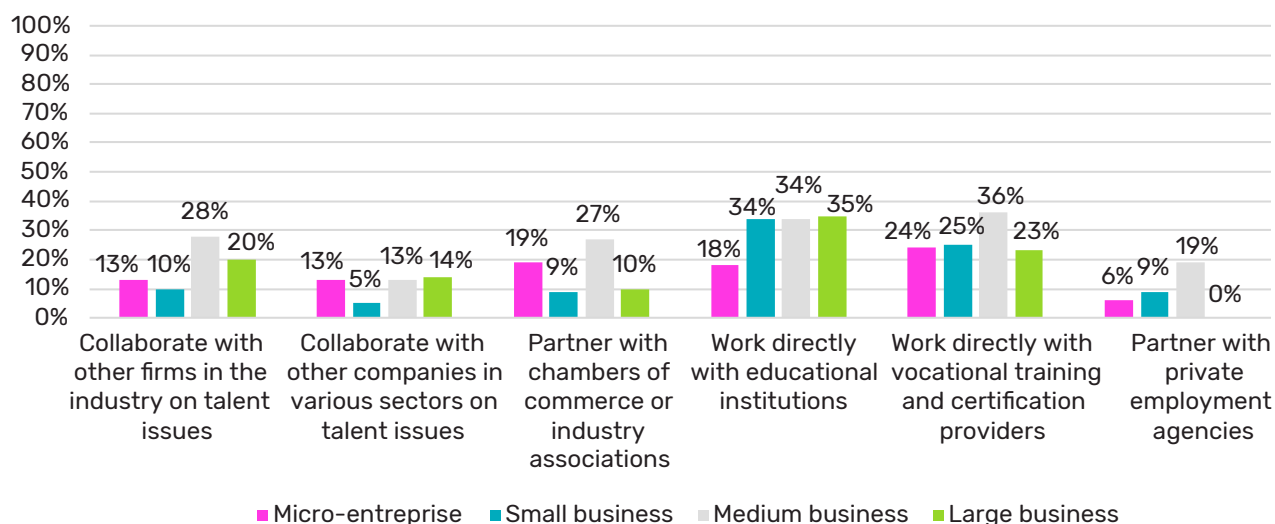


Enterprises with 20 to 100 employees appear to be the most invested in and willing to initiate partnerships with various organizations in order to accelerate internal skills development. Among the possible forms of collaboration, those with educational institutions are

given priority by all respondents which, regardless of firm size, view certification as a promising initiative. The findings also show a predisposition among SMEs to engage in collaboration with chambers of commerce for support in their internal skills development efforts.

FIGURE 35

Distribution of respondents by firm size and by the collaborative initiatives they plan to undertake to address skill needs (n=231)



certain skills. Respondents seemed unanimous in thinking that collaborative measures, as much as the other types of strategies and practices listed above, can develop creativity, but not significantly more than others.

Respondents identified training and certification organizations as those likely to strengthen seven of the eight types of transversal skills. Educational institutions

were identified as important partners for developing several transversal skills, with the exception of basic and creativity skills. Collaboration with firms in the same sector was seen to support the development of basic, digital, and communication skills, while partnerships with businesses in various sectors were perceived to help improve technical and adaptive skills. Chambers of commerce also play an increasingly significant role in improving technical, digital, adaptive, and communication skills.

TABLE 3:

Associations between collaborative initiatives to be initiated and skill needs to be improved (n=231)

	Basic	Digital	Cre- ativity	Prob- lem solving	Comm- uni- cation	Col- labo- ration	Tech- nical	Adapt- ability
Collaborate with other firms in the industry on talent issues	+	+			+			
Collaborate with other firms in various sectors on talent issues	+	+			+		+	+
Partner with chambers of commerce or industry associations		+			+		+	+
Work directly with educational institutions		+		+	+	+	+	+
Work directly with vocational training and certification providers	+	+		+	+	+	+	+
Partner with private employment agencies							+	



Diversity Programs to Address the Skills Gap

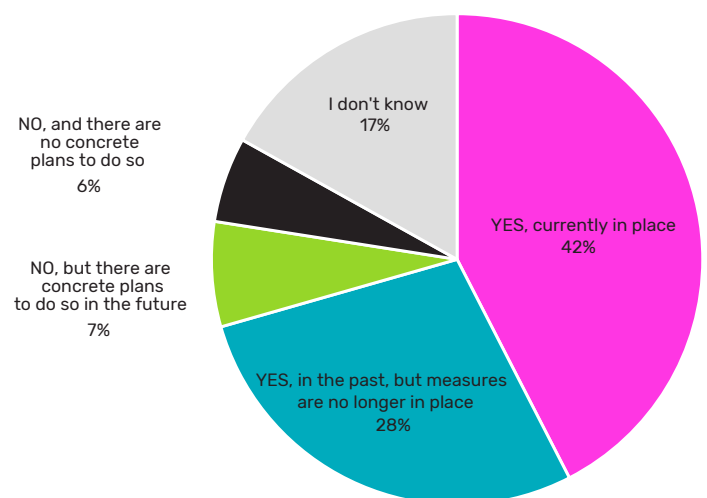
Diverse learning opportunities can improve the quality of education and training. They can also empower individuals to make relevant choices, thereby supporting their motivation to participate in lifelong learning. However, policy design must also be accessible, adaptable, and inclusive. In this section, we begin with a profile of organizations that have equity, diversity, and inclusion (EDI) initiatives in place. We then present findings on the contribution and potential of skilled immigrants.

Key findings related to the use of a more diverse workforce profile

While 42% of the businesses surveyed said they had implemented EDI measures, 28% said they had not and had no plans to do so. Approximately 6% had implemented measures in the past, but they are no longer in effect, and 7% of businesses said that they have not yet implemented any EDI actions but are considering it.

FIGURE 36

Distribution of respondents according to the existence of EDI measures in their companies (n=231)



The likelihood of having EDI programs in place is greater in larger firms. With regard to micro-, small- and medium-sized businesses, 32%, 35%, and 21%, respectively, report that they have no concrete plans to establish such programs.

FIGURE 37

Distribution of respondents by firm size and existence of EDI plans (n=231)

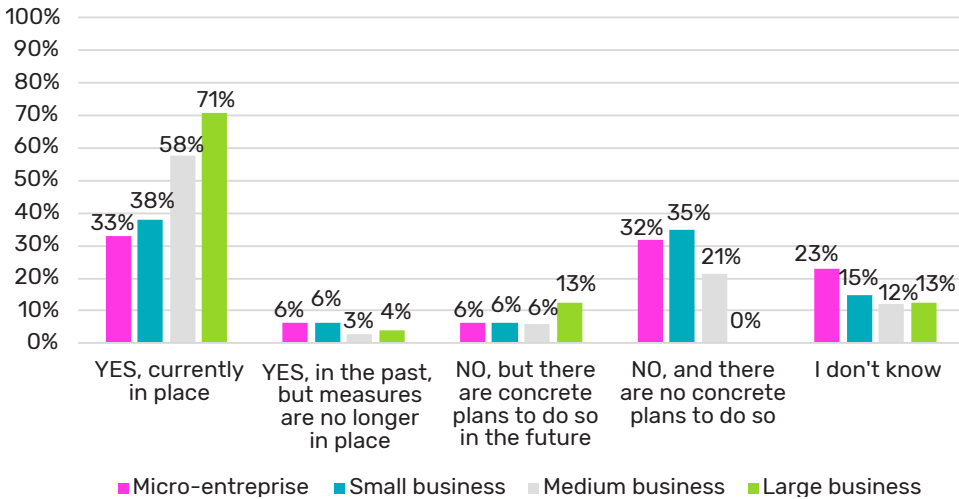
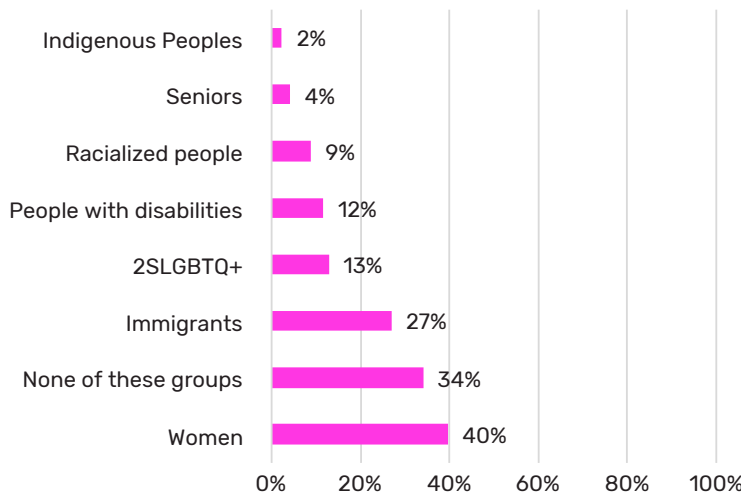


Figure 38 illustrates respondents' prioritization of which equity-deserving group should be targeted to improve representation. Most respondents indicated intentions to improve the representation of women. Many respondents said that no specific group was targeted for action. Immigrants were the third most targeted group.

Even though Indigenous Peoples, racialized people, and people with disabilities are directly addressed in employment equity legislation, respondents do not seem to prioritize their representation. These results might be attributed to the fact that SMEs are exempt from federal and provincial employment equity legislation.

FIGURE 38

Groups targeted by diversity programs in order of priority to improve representation (n=231)

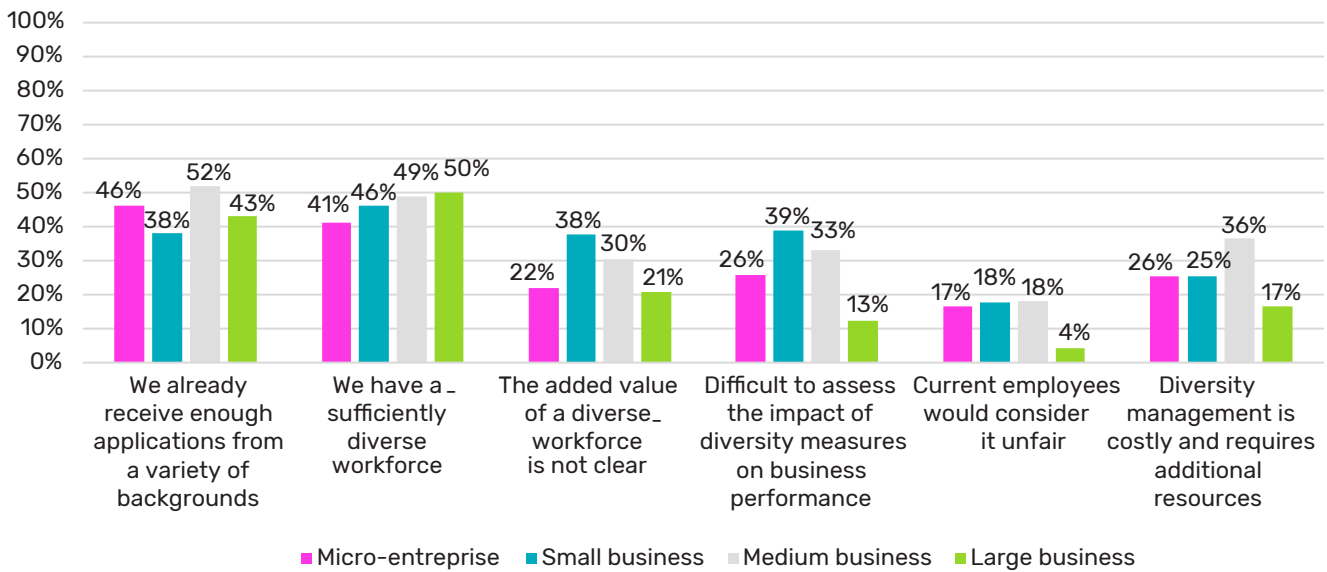


Regarding their views on the need for a more diverse workforce, between 41% and 50% of respondents, regardless of firm size, said that their workforce is sufficiently diverse. Between 38% and 52% expressed that they already attract diverse applicants.

It is worth noting that almost one-third of respondents in micro, small-, and medium-sized businesses believe that it is difficult to assess the impact of diversity measures on business performance. The same proportion of respondents thought that the value added by a diverse workforce is not clear enough and that managing diversity is costly and requires additional resources. Smaller proportions of respondents felt that it was unfair to implement diversity measures.

FIGURE 39

Distribution of respondents by firm size and rationale for implementing EDI measures (n=230)



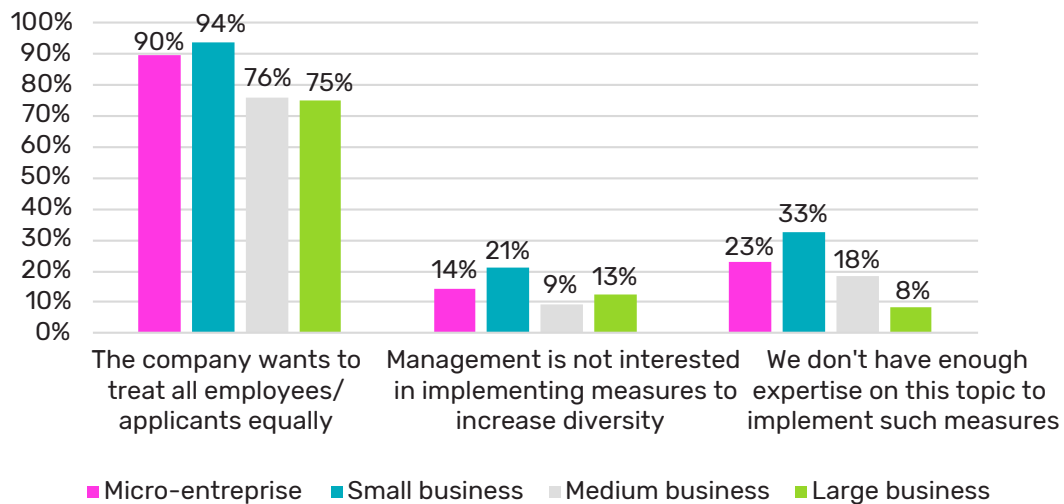
Between 38% and 52% expressed that they already attract diverse applicants.

Figure 40 below shows that respondents' views on the rationale for EDI actions vary according to firm size. Despite the fact that a significantly higher proportion of micro-enterprises and small businesses report wanting to treat all employees equitably, smaller firms are more likely to report that their management is not interested in implementing EDI measures. In addition, a greater proportion of micro-enterprises and small businesses report that they do not have the expertise to implement EDI programs.

Smaller firms are more likely to report that their management is not interested in implementing EDI measures.

FIGURE 40

Distribution of respondents by firm size and rationale for implementing EDI measures (n=230)



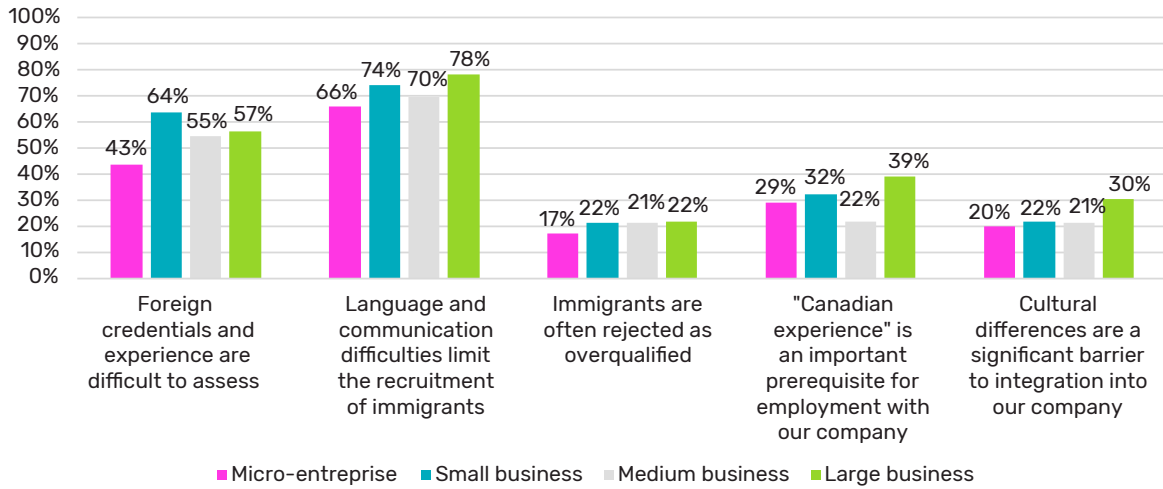
Key findings for the immigrant workforce

Respondents were asked about their willingness to accept more immigrant workers. Their opinions converged regardless of the size of their firm. Figure 41 below identifies language challenges followed by difficulty in assessing foreign experience and credentials to be the main barriers to hiring immigrants. Large firms are more likely to stress the importance of Canadian experience and are also more likely to report that cultural differences are a barrier to employment.

Large firms are more likely to stress the importance of Canadian experience and are also more likely to report that cultural differences are a barrier to employment.

FIGURE 41

Distribution of respondents by firm size and perceived challenges in recruiting immigrants (n=225)







Summary of Main Findings

For businesses to remain competitive and continue to grow, they must respond to the challenges and opportunities created by environmental, economic, and technological transformations which will undoubtedly affect their operations and processes thereby increasing demands for new skill sets. Existing research suggests that investment in skills is essential in the context of significant change and uncertainty. It is likely to have positive effects on productivity levels and growth rates (OECD, 2021b; Saba et al., 2021).

In this context, our research project examines the need for transversal skills through multidisciplinary modelling. It examines the impact of macro-level transformations on the evolving need for skills and the means of acquiring them by focusing on underlying organizational and social dynamics.

Challenges facing businesses in the context of organizational transformations

- > Changing consumer demands, the introduction of new technologies, and market growth top the list of challenges for 50% of the businesses surveyed. Micro-enterprises, more often in the startup stage, appear to be more concerned about changing supply chains, environmental regulations, and increasing global competition.
- > The COVID-19 pandemic has caused significant disruptions that have impacted organizational systems and employment; it is therefore important that programs and other business support measures respond to the needs emerging from the pandemic. Our analysis shows that the COVID-19 pandemic was one of the major factors affecting the functioning of firms of all sizes. The vast majority of the businesses surveyed (more than 80%) reported confidence that they would make it through the crisis without difficulties. It is important to note that 51% of businesses even saw the COVID-19 crisis as an

opportunity for growth. Despite this strong confidence in their ability to weather the crisis, 75% of respondents report that their business has had to face significant operational difficulties.

- > Nearly 74% of respondents believe their business is adequately prepared for the changes ahead. This level of confidence is lower for firms with 10 to 100 employees, which are often in earlier stages of growth.
- > Businesses appear to be overwhelmed by labour needs. While 74% of the firms surveyed anticipate a sharp increase in labour needs over the next few years, 63% also report that labour shortages constitute their most significant challenge, followed by rising labour costs for 50% of respondents. One out of two firms report that they must implement new organizational practices to meet changing technological, environmental, and economic requirements. Businesses are also suffering from increased turnover, which exacerbates their need to recruit talent. Yet, 57% of businesses are facing difficulties in recruiting employees with mission-critical skills.

Transversal skills in businesses and their impact on organizational shifts

- > Businesses are more confident in their ability to deal with business and labour market challenges when they have succeeded in strengthening the transversal skills of their employees beyond basic skills, as traditionally defined.

- > In particular, improving creativity, collaboration, problem-solving and adaptive skills is essential to take on the challenges arising from rapidly changing socio-technical transformations that are reconfiguring the organization of work.
- > More than other forms of change, the introduction of new technologies, changes in consumer demand, and increased global competition are amplifying the need for firms to upgrade transversal skills.
- > The ability of employees to adapt to the full range of challenges facing organizations is emerging as an essential transversal skill.
- > Manufacturing; professional, scientific, and technical services; retail trade; and health care were the top sectors identifying transversal skills to be the most important, as well as the top sectors for which the need for skill improvement was greatest.
- > The introduction of new organizational practices (e.g., telecommuting and redesigning work organization), labour shortages, and rising labour costs accentuate the need for SMEs to improve transversal skills.
- > Businesses facing strategic transformations focus on improving digital, technical, creativity, problem-solving, and communication skills. In contrast, there is a greater emphasis on improving adaptive and collaboration skills in the consolidation stages when businesses are implementing organizational changes that respond to the macro-level transformations.

Overview of businesses' skills development strategies

- > Despite operating in highly transformative environments, 55% of the firms surveyed said they regularly assess their employees' training needs, 16% conduct assessments sporadically, and 29% have never relied on assessments for measuring employee needs.
- > Paradoxically, more than 75% of the firms surveyed say that they have to invest in training and retraining their workforce, without having taken or considered this preliminary step of assessing their skill needs. The importance of investing in employee training is even more pressing for small and medium-sized businesses, compared to micro-enterprises or large businesses.
- > The skills in which businesses intend to invest are, in order of priority, technical, problem-solving, adaptative, and digital. The findings show that technical skills are rarely associated with the ability to cope with organizational transformations.
- > The reasons cited for less investment in skills development include lower interest in developing a learning culture within organizations. Businesses cite the lack of time employees have to devote to training. Despite being aware of the difficulty of recruiting and the labour shortage, many businesses continue to focus on recruiting employees with the desired skills rather than developing them through other means.

Strategies to address skill gaps

- > Implementing training programs and providing feedback to employees to track and correct performance gaps remain priorities for all firms. At the same time, the use of certain practices continues to depend on the size of the business. Firms with 50 to 200 employees prefer to use labour market recruitment to acquire the skills needed. Large and medium-sized businesses, given the opportunities for diversification of career paths available to them, make greater use of internal mobility.
- > Approaches to closing skill gaps include monitoring employee performance and changing the way work is organized to leverage and share skills within firms.
- > When respondents were asked to associate the approaches used to close skill gaps with the types of skills to be developed, formal training programs and changing work practices are identified as likely to improve six types of transversal skills. Firms seem to be less concerned about the internal development of basic skills and, instead, use outsourcing to fill these gaps.

More than 75% of the firms surveyed say that they have to invest in training and retraining their workforce.

Strategies for developing new skills

- > Among the most effective strategies for developing new transversal skills are diversity management practices, particularly those aimed at attracting people with diverse profiles, including accelerating investments to target and develop the career paths of women. In the same vein, labour scarcity is increasing firms' interest in attracting international talent.
- > Paradoxically, the skills development strategies desired by respondents differ from those currently in place. Firms of all sizes consider the development of an internal learning culture and strategy to be most important. Offering formal in-person training and providing online training rank second and third respectively. Given the time and effort required to learn new skills, providing support to, and encouraging employees who take courses ranks fourth. External recruitment ranks fifth. Risk-taking remains the lowest priority strategy for firms of all sizes.

Building skills through collaboration

- > Medium-sized businesses (20 to 100 employees) appear to be the most invested and willing to initiate partnerships with various organizations in order to accelerate internal skills development. Small- and medium-sized businesses are more likely to engage in collaboration with chambers of commerce to support their internal skills development efforts.
- > Among the possible forms of collaboration, those with educational institutions are given priority by all respondents which, regardless of firm size, view certification as a promising initiative.
- > Respondents identified training and certification organizations as those likely to strengthen seven of the eight types of transversal skills. Educational institutions ranked next as they are seen to support the development of several transversal skills, with the exception of basic and creativity skills. Collaboration with firms in the same sector was seen to support the development of basic, digital, and communication skills, while partnerships with firms in various sectors were perceived to help improve technical and adaptive skills.

Acquire new transversal skills by stimulating diversity programs

- > While 42% of businesses surveyed said they had implemented EDI measures, 28% said they had not and had no plans to do so. Approximately 6% had implemented measures in the past, but they are no longer in effect. Seven percent of businesses report that they have not yet implemented EDI programs but are considering it. Large firms are more likely to have such programs in place. With regard to micro-, small- and medium-sized enterprises, 32%, 35% and 21%, respectively, report that they have no concrete plans to implement EDI measures.
- > Nearly one-third of respondents in micro-, small-, and medium-sized enterprises believe that it is difficult to assess the impact of diversity measures on business performance. The same proportion of respondents thought that the value added by a diverse workforce is not clear enough and that managing diversity is costly and requires additional resources. Smaller proportions of respondents felt that it was unfair to implement diversity measures.
- > Respondents were asked about their willingness to accept more immigrant workers. Across all firm sizes, language challenges, followed by difficulties in assessing foreign experience and credentials, were cited as main barriers to hiring immigrants. Large firms were more likely to stress the importance of Canadian experience for a position in their firm. They were also more likely to report that cultural differences may be a barrier to employment.





Recommendations

Environmental, economic, and technological challenges have a significant impact on businesses. Faced with the uncertainty caused by transformations that are difficult to anticipate, it is important to equip businesses, especially those in the early stages of growth, so that they can assess the impact of changes and undertake the necessary transformations.

To remain competitive and grow, it is important for businesses to invest in strengthening the transversal skills of their employees beyond the core competencies, as traditionally defined. More specifically, creativity, collaboration, problem-solving, and adaptability are the critical skills needed to enable businesses to adjust and respond to shifts brought about by rapidly evolving socio-technical transformations that affect the organization of work. To this end, investing in training and upskilling is paramount to maintaining competitiveness and adapting to the changing competitive landscape.

Labour market challenges affect smaller and growing businesses, which are an important engine of economic growth and social development. Labour shortages are significantly affecting SMEs, especially because they often lack the resources of

large business. Despite this, SMEs continue to use recruitment as the main strategy to address knowledge obsolescence and skills supply. It is therefore imperative to support SMEs' efforts to cultivate continuous learning cultures and diversify their staffing sources by exploring new avenues to recruit and expand their talent pool; for instance, this could be achieved by partnering with employment agencies and associations who deal and work with special interest groups. Valuing and actively seeking out diversity is a good start to remedying labour shortage.

SMEs use more traditional means of skills development even when it comes to new transversal skills. Formal training programs and changes in work practices are identified as likely to improve six types of transversal skills. Informing SMEs of new training practices and helping them implement such practices would improve transversal skills development, which requires shared opportunities for experimentation and a greater tolerance for risk-taking.

SMEs appear to be the most invested in and willing to initiate partnerships with various organizations in order to accelerate internal skills development. They consider certification bodies, educational institutions, and chambers of commerce to be very

important for the development of new skills. These institutions could, through shared platforms, act as catalysts by offering customized skills development frameworks to assess needs and better equip SMEs. This supports the trend we are seeing towards microcredentials, while highlighting the need for more oversight of microcredentials to ensure that the person actually possesses the skills. These kinds of partnerships between different stakeholders are important ways to meet the challenges SMEs are facing, while sharing available resources, knowledge, and expertise to train, upskill, and reskill employees.

Despite recognizing the value and importance of using a diverse workforce to increase talent pools, almost one-third of the businesses surveyed reported that they had not implemented EDI measures and had no plans to do so. The same proportion believes that it is difficult to assess the impact of diversity measures on business performance and that managing diversity is costly and requires additional resources. SMEs believe that language differences, followed by difficulties in assessing foreign experience and credentials, are the main barriers to hiring immigrants. On the other hand, SMEs are less likely than larger firms to require that job candidates have Canadian work experience. They are also less likely to see cultural differences as a

barrier to employment. Providing SMEs with shared services to provide the expertise to develop, implement, remediate, and evaluate EDI action plans is an integral part of a successful EDI process and reduces backlash. Oftentimes, the desire is there, but the knowledge is lacking, and this can be effectively remedied. This would lead to a dual outcome of alleviating some of the labour shortage challenges faced by SMEs while contributing to more inclusive workplaces.

Lastly, as an outcome of both the COVID-19 pandemic and of the scarcity of skilled labour, the issue of retention is more important than ever. Employees want a work environment where they feel supported and valued. Important contributors to creating such an environment are professional support, including training and opportunities to upskill and reskill, as well as flexible work arrangements.

Important contributors to creating a supportive environment are professional support, including training and opportunities to upskill and reskill, as well as flexible work arrangements.

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