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MEXICO INSTITUTE

A NORTH AMERICAN WORKFORCE DEVELOPMENT AGENDA

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Working Paper

More collaboration on workforce development in the region would be an opportunity to generate more jobs and bolster the productive power of all three economies, strengthening the global competitiveness of the North American region.

Summary

North America faces an alarming skills gap that negatively affects the international competitiveness and economic performance of all three countries. Simultaneously, the United States, Canada, and Mexico are facing economic and technological transformations. This set of challenges calls for priority investment in the development of the continent's workforces. North America's highly integrated production and commercial networks mean that more regional collaboration is essential. If done well such collaboration is an opportunity to create jobs, achieve higher levels of productivity and strengthen the competitiveness of the region vis-a-vis China and other global economic powers.

North America would benefit greatly from a senior level trilateral taskforce or steering group, established by the three governments, which would include public-private, federal-sub-federal working groups to develop specific proposals on workforce development issues. The task force and working groups could be usefully incorporated into a modernized North American Free Trade Agreement (NAFTA) as part of the chapter on competitiveness. We recommend focusing the agenda on the following areas

1 Work-based learning: Promoting and investing in work-based training and learning programs, including the development of a shared definition of apprenticeships and a set of standards and criteria for their implementation and funding.

2 Credentials: Facilitating understanding and recognition of credentials and competencies through the development of a common terminology, through agreed credential and competency frameworks that are periodically updated to take account of workplace transformations, and through agreed guidelines for assessment and validation of those credentials and competencies.

3 Data Collection and Transparency: Develop real-time labor market data and information platforms that are comparable across countries in the region, as well as guidelines to make these tools openly available to all stakeholders.

4 Preparing for Change: Share and implement best practices to approach the "Fourth Industrial Revolution" and the onslaught of new technology and workplace processes in a highly competitive global economy.

The successful implementation of the proposed North American Workforce Development Agenda depends on joint collaboration and multi-stakeholder involvement, including federal, state/provincial and local governments, companies and employers, educational institutions, unions, NGOs and civil society, from all three countries.

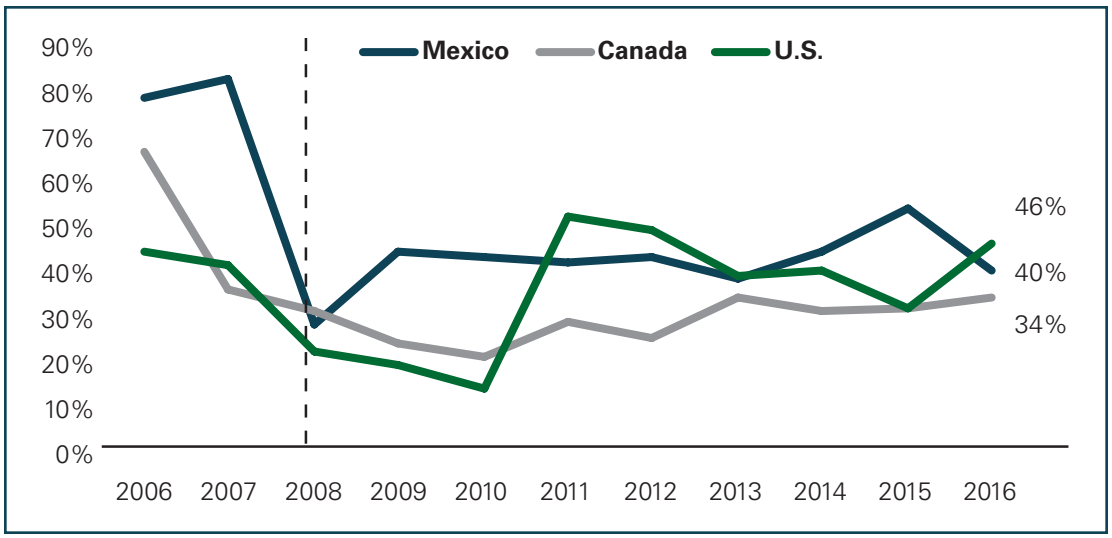
Besides improving and modernizing trade agreements, the North American economies should also be investing more and more smartly in the development of their current and future workers.

I. The Challenges

Over the last two years, there has been a great deal of criticism in the U.S. domestic political discourse about trade agreements – in particular trade in North America – causing jobs losses. Trade has caused jobs to move between countries, as well as within the United States, but serious studies point to productivity improvements and new technology, as well as trade from China,[1] as the major drivers of U.S. manufacturing jobs losses in this century. Results from a study by *Ball State University* found that over 87% of manufacturing job losses from 2000-2010 could be attributed to productivity improvements rather than as direct results of international trade.[2] Not only the U.S. but also other advanced economies experienced similar declines of manufacturing jobs also driven powerfully by the combination of international competition and new technology and production methods. Whatever the cause of the job losses or gains, too many workers have been left behind by changes in the market place in recent years. That trend could grow with technological changes in the years ahead.

The three North American economies already face an alarming skills gap.

The three North American economies already face an alarming skills gap. According to *Manpower's 2016/2017 talent shortage survey*,[3] 46% of U.S. employers are having difficulty filling jobs; while 40% and 35% of Mexican and Canadian employers respectively, face the same problem. Employers from the three North American economies reported the lack of *hard* and *soft* skills, and lack of experience, as the main reasons why they have difficulty filling positions. The U.S. is estimated to have over 6 million unfilled jobs and about the same number of unemployed Americans looking for a job.[4] Similarly, Canada and Mexico face skills gaps that negatively affect their competitiveness and industrial performance.

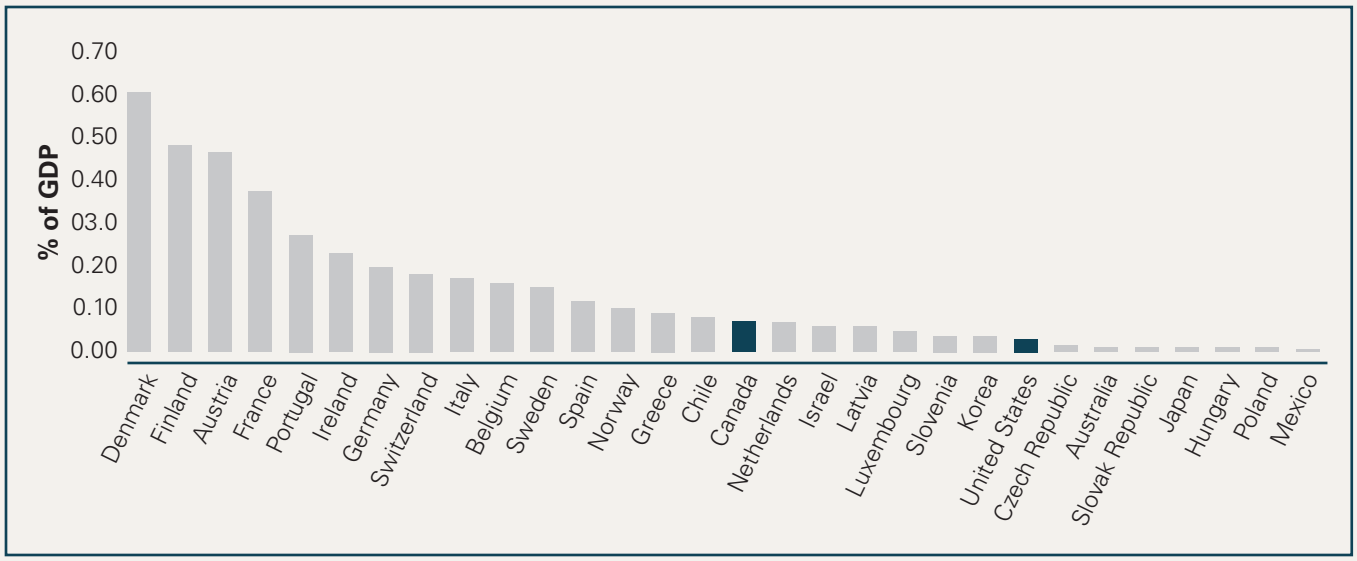


Graph 1. Employers in North America having difficulty filling jobs

Source: Manpower Group, 2016/2017 Talent Shortage Survey

The skills gap in North America, combined with the unyielding pace of change in the economy, calls for action. Besides improving and modernizing trade agreements, the North American economies should also be investing more and more smartly in the development of their current and future workers. The skills gap will continue to increase, without an organized and coordinated effort to address the problem areas. A 2015 study by *Deloitte* estimates that, by 2025, 3.4 million U.S. manufacturing jobs will be available from retirements and job creation: retirements will create 2.7 million openings and business growth will generate 700,000 jobs. Out of the total, 2 million U.S. jobs might go unfilled.[5] As new technologies arrive and as we move into the so-called "Fourth Industrial Revolution", the need for better workforce development programs will only increase.[6] According to a study by *The World Economic Forum,* up to 1.4 million U.S. workers may lose their jobs by 2025 because of new technologies. Without a strategy for "reskilling" individuals, over 40% of those workers may not be able to find another job.[7]

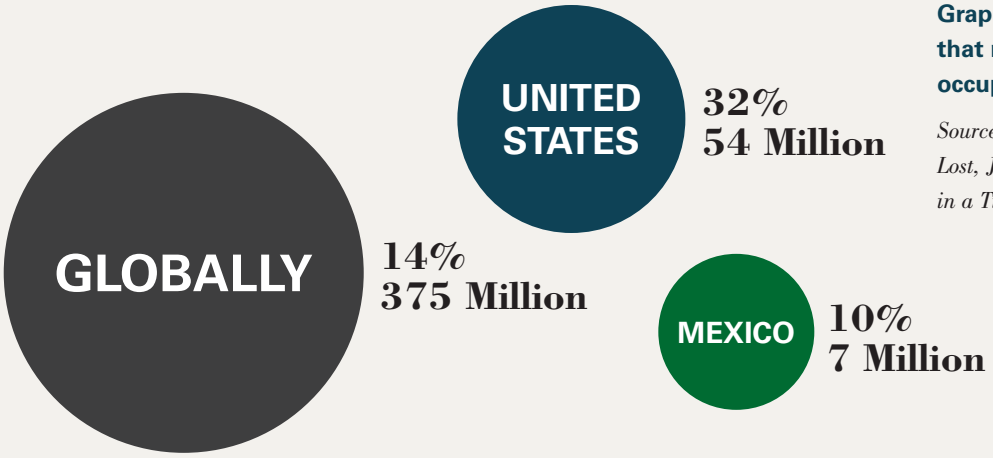
Graph 2. 2015 Public Expenditure of Labor Market Programs, as a Percentage of GDP



Source: OECD Stat, Labor Market Programmes, http://stats.oecd.org//WIndex.aspx?QueryId=8540

The speed and nature of the change in the economy calls for action. Productivity and technology advances will eliminate some jobs, but new jobs will also be created, and many jobs will be transformed. A recent study by *McKinsey Global Institute* makes the case that, by 2030, up to 375 million workers globally might need to change occupations or acquire new skills, including up to 54 million U.S. workers and up to 7 million Mexican workers.[8] Another study by Accenture argues that Artificial Intelligence (AI) will not so

much eliminate jobs as change the content of jobs, requiring new systems for training and retraining workers as technology evolves. Companies need to understand the new work models needed as AI is deployed in their sectors, and they need to build retraining of their workers into their business models.[9]



Graph 3. Percentage of workers that might need to change occupations by 2030

Source: McKinsey Global Institute, "Jobs Lost, Jobs Gained: Workforce Transitions in a Time of Automation", 2017

Hard and *soft* skills are both crucial to navigate Industry 4.0. A range of experts argue that given the economic transformation currently underway, the ideal workforce would possess capabilities such as emotional intelligence, complex problem solving, adaptability and learning agility, as well as *hard* skills, such as programming, software development, coding and data management.[10] It is urgent that we develop adequate learning and training programs that provide workers with the knowledge, tools and skills required to manage the new technologies and to adapt to these changes. The United States, Canada and Mexico need to build agile and resilient workforces, while creating systems that better support workers and defend their economies from the threats of displacement and unemployment arising from technological change and global competition.

1. Complex Problem Solving	6. Emotional Intelligence
2. Critical Thinking	7. Judgment and Decision Making
3. Creativity	8. Service Orientation
4. People Management	9. Negotiation
5. Coordinating with others	10. Cognitive Flexibility

Graph 4. Top 10 In-Demand Skills by 2020

Source: Manpower Group, "A skills Revolution: From Consumers of Work to Builders of Talent", 2017

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II. Public-Private North American Workforce Development Agenda

North America's economies share common workforce challenges and opportunities, while their commercial and economic integration call for regional cooperation to tackle these challenges. The massive cross-border production chains and trade networks have positioned the region as one of the most competitive globally.[11] However, skills gaps across the three North American countries have negatively affected our economies and industrial performance. More collaboration on workforce development in the region would be an opportunity to generate more jobs and bolster the productive power of all three economies, strengthening the global competitiveness of the North American region.

North America's economies share common workforce challenges and opportunities, while their commercial and economic integration call for regional cooperation to tackle these challenges.

Examples of successful workforce development initiatives across North America at the state and provincial levels are numerous. They illustrate the importance of developing mechanisms to collaborate, communicate and share best practices on these issues. The Government of Canada, for example, explicitly recognizes in its policies the need of collaboration and communication among stakeholders from all sectors to address current and future workforce challenges. This year, the Government will launch the Future Skills Lab, proposed in the 2017 federal budget,[12] which will bring together experts from provinces and territories, the private sector, educational institutions and NGO's, to identify labor market needs and explore new approaches to better assess and develop skills.[13]

Many examples, across the region and in many U.S. states illustrate the importance of public-private partnerships to achieve economic growth and workforce development.[14] In the U.S., The Government of Colorado, for example, is collaborating with the Markle Foundation, Microsoft, and LinkedIn, among other local partners, to develop a digital workforce and bring transparency to the market through the collection of data and use of digital platforms.[15] The Government of Wisconsin is also largely investing in the state's workforce and economic development through collaboration with the Wisconsin Economic Development Corporation, Wisconsin Technical College System, University of Wisconsin System, Wisconsin Workforce Development Association, and other stakeholders.[16] In Mexico, the Canadian aerospace and transportation company, *Bombardier Inc.*, whose production network encompasses all three countries, collaborated with and invested on the *Universidad Aeronaútica en Querétaro (UNAQ)* to develop a qualified workforce that fulfills the demands of the labor market. This partnership has contributed to place the state of Queretaro as an aerospace hub and allowing it to become the state in Mexico with the highest rate of GDP growth.[17]

The bottom line is that all three North American economies are going to have to develop and evolve such multi-stakeholder models if we want our economies to succeed in the global competition and technological change of the coming years.

The modernization of NAFTA will touch some aspects of North America's workforce challenges. However, the negotiations themselves will not address the most of the relevant issues for workforce development across the continent's production chains. Thus, in parallel to the NAFTA process or as a new proposal built into the NAFTA text, North America would benefit greatly from a public-private process where governments (at all levels), the private sector, unions, educational institutions and others can explore best practices on workforce development to better support preservation and creation of jobs during the technological changes and global competition ahead. We believe that the United States, Mexico and Canada should create a trilateral task force and working groups to develop and coordinate regional cooperation on key elements of workforce development..

In the following section, we propose priorities for action that should be included in a North American Workforce Development Agenda. Workforce Development is a long-term effort and an issue of shared responsibility that requires a joint effort across national, state and local entities, and between governments, private sector and academia. Success in the implementation of this agenda depends on the involvement of many stakeholders: federal, state/provincial and local governments, companies and employers, educational institutions, unions, NGOs and civil society. The federal governments, though, would ideally play a key role as facilitators of the agenda and would be responsible for bringing stakeholders from the three countries together, and for creating spaces for discussion and dialogue among them under a trilateral umbrella.

North America would benefit greatly from a public-private process where governments (at all levels), the private sector, unions, educational institutions and others can explore best practices on workforce development to better support preservation and creation of jobs during the technological changes and global competition ahead. We believe that the United States, Mexico and Canada should create a trilateral task force and working groups to develop and coordinate regional cooperation on key elements of workforce development.

III. Priorities for Action

The policy recommendations that follow flow from several sources. The methodology we employed consisted of literature review and data collection on skills gaps, labor market needs, and best practices in workforce development, training and retraining. We consulted with experts on workforce development; interviewed government, business and labor representatives; and held round table discussions with experts from federal, state and local governments, manufacturers, unions, chambers of commerce, NGOs and academic institutions, from Canada, Mexico and the U.S. We acknowledge the vital role these specialists and experts had in this process and express our explicit thanks for their contributions at the end of this paper.

To clarify challenges and action priorities on workforce development across the continent, we identified four clusters of issues: 1) apprenticeships and other types of work-based learning and technical education, including internships and mid-career learning; 2) certifications and the host of issues surrounding them, including recognition and portability; 3) data collection and transparency, including moving toward accepted norms for data collected and best practices for making that data widely available; and 4) best practices to approach/prepare for the "Fourth Industrial Revolution" and the expected onslaught of more new technologies.

Issue #1. Apprenticeships and other types of work-based learning and technical education, including internships and mid-career learning

Work-based learning programs, such as apprenticeships, facilitate matching the demand and supply of skills and jobs. The mix of academic instruction and on-the-job learning equips individuals with relevant capabilities – *hard* and *soft* skills – to meet the current and future demands of the labor market, and provides businesses with the trained employees they need. This type of learning programs has a positive impact on the economy as these programs facilitate the transition from school to the labor market,[18] foster worker productivity, and lead to higher wages. Despite the many advantages and benefits of work-based learning programs, they remain a second choice for young people and parents in North America. Negative stereotypes persist regarding vocational education, which reduce the potential benefits of such programs and harms the economy.[19]

The three economies of North America have increased their interest and investment in Career and Technical Education (CTE) in the past years. In many states across the U.S., CTE has become a policy priority. Michigan, Tennessee, Washington, Colorado, Nevada, Kentucky, and Wisconsin, among others

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states, have increased funding of CTE programs, including money to upgrade equipment and improve career counseling.[20] In addition, the current U.S. federal administration has called for the expansion of apprenticeships and vocational education as a national policy priority.[21]

Mexico and Canada have also moved forward on the implementation and expansion of CTE. In 2013, the *Secretaría de Educación Pública (SEP)*, in partnership with the *Cámara México - Alemana de Comercio e Industria (CAMEXA)* and the *Confederación Patronal de la República Mexicana (COPARMEX),* created the *Modelo Mexicano de Formación Dual* (MMFD, Mexican Dual System of Vocational Education), which has expanded across the country. The Model follows a triple approach, in which governments, educational institutions and industry have a key role to play.[22] Another effort, the *Colegio Nacional de Educación Profesional Técnica* (CONALEP, National College of Technical Professional Education) is a federalized institution that provides technical education across all states in Mexico, following the dual educational approach.[23] In Canada, the *Red Seal Program* is a federal effort that aims to harmonize and align apprenticeship systems across the country, as provinces have the policy lead on apprenticeship.[24] The federal government also supports apprenticeships with taxable cash grants to help cover expenses and incentivize participants to complete the program.[25] Another example of how technical education has proliferated in Canada is the emergence of a third pillar of post-secondary education, alongside universities and community colleges – polytechnics. Polytechnics offer industry-aligned technical and technological training, across a breadth of credentials, from four-year bachelor's degrees to apprenticeships in the skilled trades. Canadian polytechnics combine practical and academic education, and focus on the development of skills and use of technology.[26]

On-the-job training can be a robust tool to develop a qualified workforce that fulfills the changing skills required in the workplace. As our economies incorporate new technologies and face higher levels of globalization, the labor market is undergoing a massive disruption that will transform activities in the workplace.[27] This expected transformation of work calls for a greater investment in reskilling and "upskilling" programs. On-the-job training is beneficial for both employers and employees. When employers invest in their workers, it increases the probability of retaining them and they achieve higher levels of productivity.

A number of large companies are leading the effort. Walmart, for example, launched the *Walmart Academy training program* in 2016, which now operates over 185 training academies across the U.S. The two-to-six weeks training program provides workers with advanced retail, technical and digital

skills.[28] Amazon's *Career Choice Program* also provides employees with the opportunity to learn new skills and advance in their careers. The company pays 95% of the fees for their workers to get a certificate or diploma in qualified/in-demand careers, such as transportation, IT and computer science, mechanical and skilled trades, and healthcare. To incentivize the participation of workers, Amazon holds the training in classrooms at Amazon's facilities.[29] Sadly, as the 2018 Accenture study highlights, most companies have not yet accepted the value proposition of mid-career on the job training. Accenture argues persuasively that such programs are going to be more important than ever in the years ahead.[30]

Despite this progress on recognizing the value of apprenticeships and on-the-job learning and training, much more needs to be done. North America can learn from best practices and lessons learned by other countries, such as from apprenticeships systems in the UK and Germany, and from U.S., Mexican and Canadian states and provinces that have strong pilots or systems in place. Experts recommend that the development, implementation, evaluation and assessment of workforce development programs should agree on a clear definition, standards and a minimum set of criteria so that programs and credentials are comparable across each country and across the North American region. That is not yet the case in the three countries or across the three economies despite the deep integration of continental production networks. We suggest the following elements to include in a North American agenda:

1. Agree trilaterally on a definition of apprenticeships (in distinction from other work-based learning systems), and a minimum set of criteria and quality standards of such programs.
    a. The agreement should leave enough flexibility to adapt to national, regional and local demands, while incorporating economic and technological changes and providing a sense of common professional skills attributes of graduates.
2. Agree on broad guidelines in North America on assigning roles and responsibilities to governments, industry and intermediaries regarding the development, implementation and funding of apprenticeships.
3. Agree on building a tri-national Career and Technical Education (CTE) and apprenticeships taskforce to identify best practices in strategies to promote apprenticeships and other types of work-based learning programs.
4. Agree on elements of a marketing strategy to increase public awareness of the benefits and advantages of work-based learning in order to change negative public misperceptions of such programs and reduce restricting stereotypes of vocational education and careers. Top-level officials must be engaged in the work to change public perceptions.

5. Agree on building tri-national spaces to foster on-going dialogue between stakeholders across the region in order to share best practices on work-based learning and training, and to strengthen public-private partnerships.
6. Agree among the three countries on ways to incentivize and support companies, including SMEs, to develop training and learning programs for reskilling and upskilling their workforces. Again, this effort can highlight the need for new work-based training models to keep up with the evolution of technology and job content in the years ahead.

Issue #2. Certifications and the host of issues surrounding them, including recognition and portability

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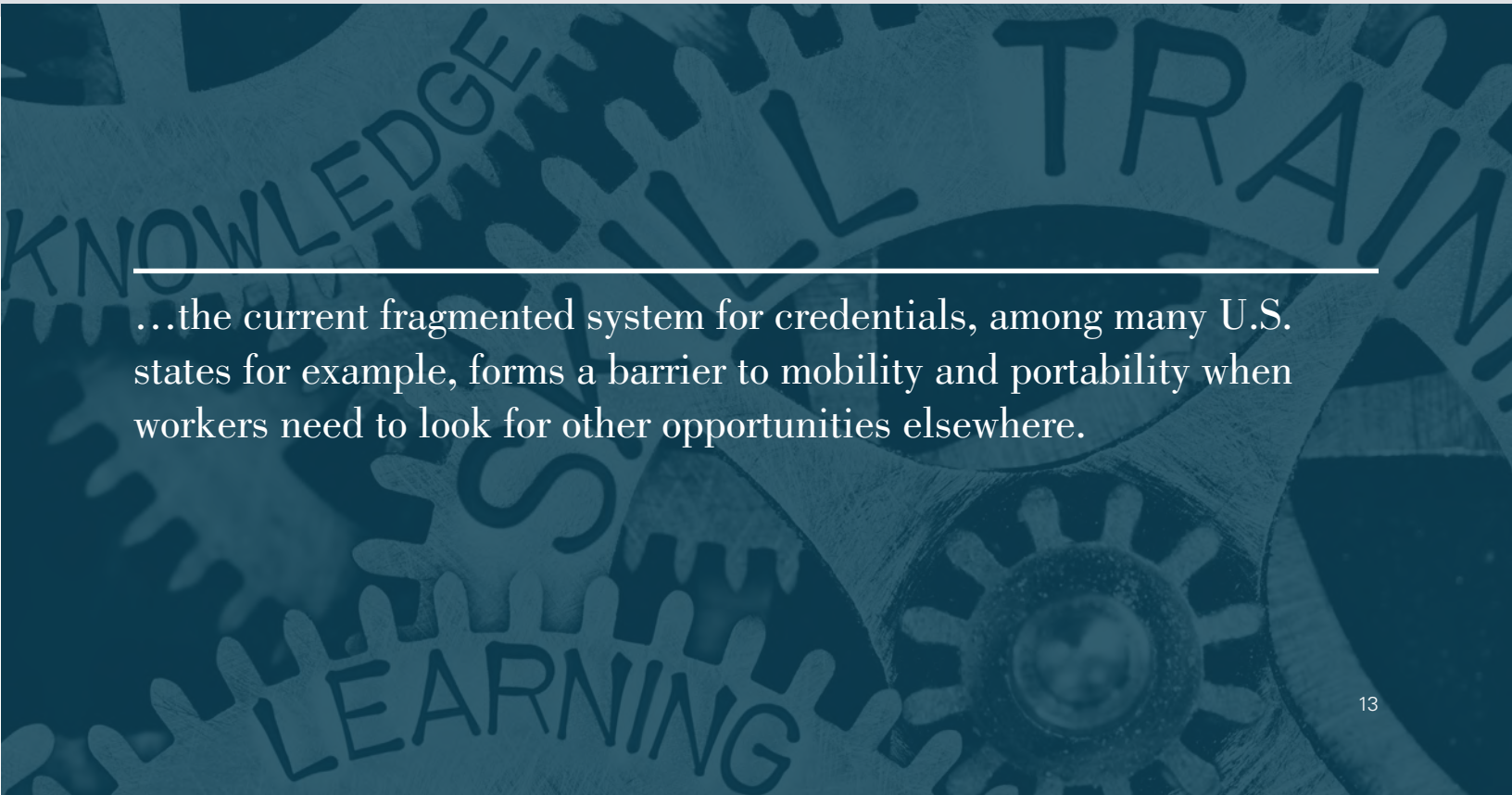
It has been shown that professional credentials generally reduce selection costs for firms, and lead to higher wages for and quality of workers. If widely recognized, credentials give businesses a clear sense of what skills a worker has or will have, and they facilitate mobility in the labor market. Enhanced mobility might help alleviate the impact of job displacement taking place because of Industry 4.0 or of the kind of industrial shifts we have experienced during this century. They can also improve employee retention by providing career development opportunities as credentials are accumulated. At the same time, the current fragmented system for credentials, among many U.S. states for example, forms a barrier to mobility and portability when workers need to look for other opportunities elsewhere.[31]

The Mexican National Competencies Framework[32] and the Canadian Red Seal Program[33] are examples of national efforts to better coordinate and bring transparency to the credentials market. While several efforts to develop such a system in the U.S. exist, none has yet been widely accepted. In addition to challenges with each system, differences on education and training systems across the region, make it difficult to compare qualifications and assess skills of workers holding credentials from another North American country. It is vital to work towards making credentials transferable and portable across sectors in order to support North American competitiveness against global competitors and to help meet skills gaps. Part of this task is also getting academic institutions and employers to validate and recognize education and experience from abroad. The Pan-Canadian Framework for the Assessment and Recognition of Foreign Qualifications for example, is a public commitment by provinces, territories and the Government of Canada to improve assessment and recognition of foreign qualifications so people are able to use their skills in the Canadian labor market.[34]

North America can learn from best practices and lessons learned by other countries/regions regarding credentialing systems as well. The European Union has developed a common language of competencies and skills by developing the

European Qualifications Framework, which facilitates comparability of qualifications between member states, encourages use and validation of credentials by the private sector and educational institutions, and ensures quality programs.[35] We suggest the following elements to include in the North American agenda:

1. Agree among the three North American countries (at federal and sub-national levels) on a common terminology about credentials and competencies to facilitate understanding and transferability, as well as recognition, across the continent.
    a. Credentials should be industry-defined and competency-based to ensure they meet the needs of the labor market, are accepted and used widely, and are comparable regionally.
2. Agree on developing or strengthening national competency frameworks and aligning them to the tri-national common terminology for credentials and competencies.
    a. Agree on a process to revise and update the frameworks periodically in order to meet the present and future labor market needs. Promote the use of competency frameworks in hiring processes.
    b. Agree on fostering regional development through cluster-based initiatives and connecting them with the education sector to create virtuous ecosystems that strengthen the whole chain of value.
3. Agree tri-nationally on a set of guidelines to assess and validate informal learning and professional experience, and to identify skills associated to such experience. Share and emulate best practices within and across the three countries.



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…the speed of change in the economy requires the development of real-time "labor market information platforms" and databases of "in-demand" skills that are regularly updated.

Issue #3. Data collection and transparency, including moving towards accepted norms for data collected and best practices for making that data widely available

One of the biggest challenges is that neither public authorities nor the private sector and academia collect and share the right data on skills and workforce trends. Data collection allows people to make informed career decisions and, if shared widely, can bring transparency to the labor market.[36] This would help optimize outcomes of workforce development initiatives and would make it easier to assess programs and replicate those that have worked well at the local or sub-federal levels.

More importantly, the speed of change in the economy requires the development of real-time "labor market information platforms" and databases of "in-demand" skills that are regularly updated. Technology has facilitated the collection of data and the creation of platforms to access it, so it should be very possible to make this information available very rapidly. Recognizing this, for example, the Government of Canada has proposed to allocate more resources in its 2018 budget towards the development of an "Education and Labor Market Longitudinal Linkage Platform" to track labor market data, including in-demand skills and earnings by occupation. The digital platform will be available to the entire population and used to monitor and evaluate government programs.[37]

Experience on regional data collection illustrates the advantages and benefits of tri-national cooperation on data collection and information platforms. In 2014, the Federal governments of the three economies launched the North American Co-operation on Energy Information (NACEI) website, which compiles energy-related data, maps, and analyses from the three countries in English, French and Spanish. The initiative aims to create an institutional framework for sharing quality energy information and data, harmonize concepts and terminology to make it comparable across countries and the region, and make it publicly available for stakeholders.[38]

Other initiatives from the private sector include *Credential Engine*, [39] which aims to bring transparency to the U.S. credentialing market by centralizing the registry of credential information, and *LinkedIn Workforce Report,*[40] which

collects data on workforce and employment trends on a monthly basis. These are good examples of data collection to expand or replicate across the region. We suggest the following elements to include in a North American agenda:

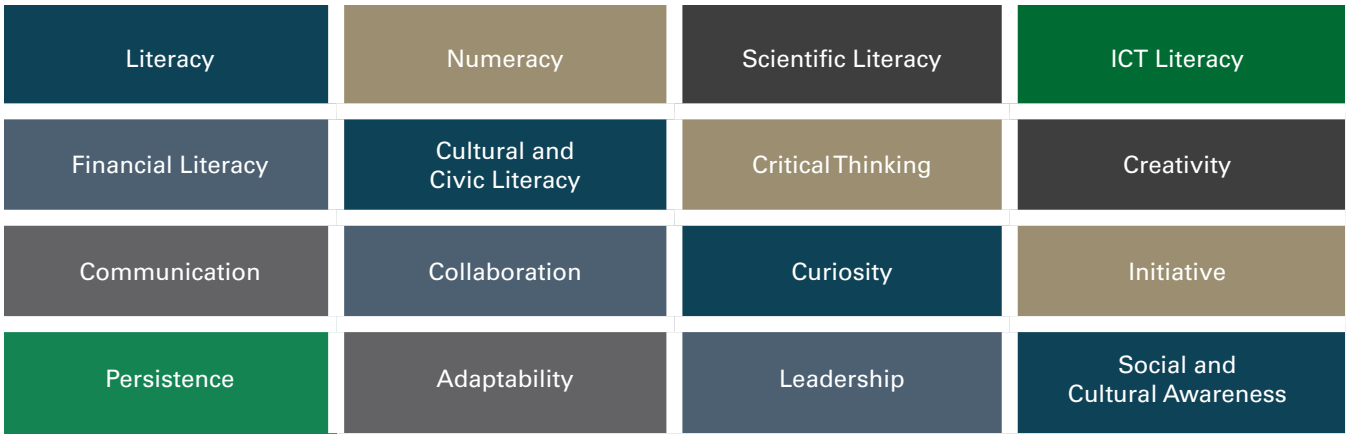
1. Agree on a tri-national set of norms to collect real time labor market data and information in a consistent and homogeneous way so it is comparable across countries and across the region.
    a. The data collected should include a list of in-demand skills and competencies, longitudinal data to measure performance and the "Return on Investment" (ROI) of education and training programs and credentials, and research that speaks about development of hard and soft skills.
2. Agree on the development of a tri-national online platform (linked to national platforms) that uses open standards for linked data on the semantic web that can serve as a hub of the real-time labor market data collected individually by the three countries and as a hub of best practices from across the region, including the private sector..
3. Agree on guidelines to make the tri-national platform and data tools openly available to all stakeholders, while allowing space for the development of private sector initiatives. The goal would be to ensure that the vast majority of the population and isolated regions have access to them.

Issue #4. Best practices to approach/prepare for "the Fourth Industrial Revolution" and the onslaught of new technology

Experts argue that the already rapid pace of change will increase. Studies argue that the change will produce massive job creation, as well as massive job destruction and transformation.[41] The good news is that the new technology will also allow businesses to achieve higher levels of productivity and growth. According to Accenture, those companies that succeed in the integration of technology and human capital could increase profits by 38% and employment by 10% by 2022. A big challenge, however, is that a very low percentage of companies plan to invest in training programs needed to re-tool their workers, although a high percentage of workers want to develop the skills required to work with machines. It is urgent that companies start investing more in job training, especially in programs that are agile and flexible.[42]

Technology and productivity improvements are transforming jobs leading to an increased demand of digital and professional skills. In addition to adequate technical skills, workers will need *soft* skills, such as teamwork, empathy, communication and self-awareness, to be able to learn throughout their careers. The need for skilled workers with the ability to adapt to changes in the labor market will only increase as we fully implement the "Fourth Industrial Revolution".

Graph 5. Required skills moving into Industry 4.0.



Source: The World Economic Forum (in collaboration with the Boston Consulting Group), "New Vision for Education: Unlocking the Potential of Technology", 2015

The competitiveness of the North American region relies on our ability to manage the integration of people and technology in order to achieve higher levels of productivity and welfare.

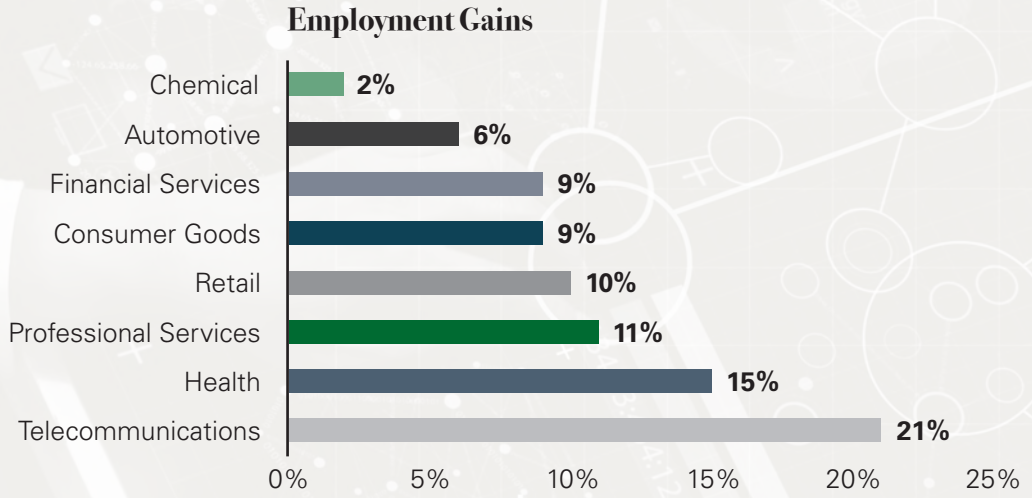
Policy makers need to develop new public-private partnerships and models to adapt successfully to the pace of change, or face serious workforce crises.[43] Public authorities, business leaders and educators need to be creative in order to provide workers with effective ways of learning new skills more quickly, such as short-term, agile learning, training and credentialing programs. Additionally, all three countries need to modernize academic spaces and adapt the curricula to develop a 21st century educational system that meets the demands of the 21st century labor market. The modernization of educational systems includes providing educators with relevant training, tools and skills so they can also adapt their teaching and learning methods.

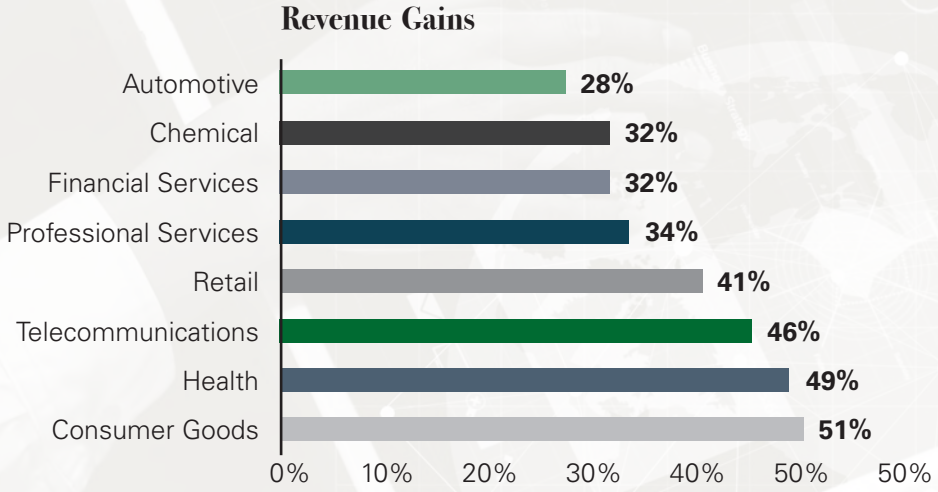
The competitiveness of the North American region relies on our ability to manage the integration of people and technology in order to achieve higher levels of productivity and welfare. Additionally, our ability to compete successfully with other global production centers depends on our ability to collaborate and achieve higher levels of efficiency and production, enhancing regional integration. We suggest the following elements to include in a North American agenda:

1. Agree on key steps and tools to incentivize companies to invest in reskilling and upskilling of their workers, provide mid-career training and learning opportunities, and to develop short-term, agile training and learning programs to ease the transition into the Fourth Industrial Revolution.
2. Agree tri-nationally on approaches and strategies to encourage companies to collaborate with educational institutions, unions and other interested parties in order to better align curricula with the labor market needs, better connect graduates/students to the labor market, and foster the modernization of academic/educational spaces.
    a. Work to strengthen STEM Education as a strategic tool for creating a strong basis of skills that will allow the development of strategic workforce skills.

3. Agree on building tri-national spaces to share best practices on the implementation of Industry 4.0 and to strengthen partnerships between the education and private sectors across the region to better link the priorities of the economic sector to those of the education sector.
4. Agree tri-nationally on best practices to support SMEs so they keep up with technological changes, innovation and talent creation.
5. Establish trilateral research and innovation projects in strategic economic areas through grants and scholarships.

Graphs 6 and 7. Employment and revenue gains of adopting new technologies





Data Source: Ellyn Shook & Mark Knickrehm, "Reworking the Revolution", Accenture Strategy, 2018

IV. Implementing the Agenda

The North American Workforce Development Agenda must be a collaborative, joint effort that includes North American governments, private sector, educational institutions, unions, and NGOs, among other stakeholders. The goal is to forge agreements on ways to better support the preservation and creation of jobs during the technological changes and global competition ahead.

Workforce development is a long-term effort. We should not delay it any longer. We invite leaders, stakeholders and experts in North America to cooperate closely to agree and implement a robust North American Workforce Development Agenda.

We believe that the best way forward would be for the three governments to establish a senior level trilateral taskforce or steering group, which guide the process and as part of this effort would name public-private, federal-sub-federal working groups to develop specific proposals in the areas described above

The task force and working groups could be linked formally to the ongoing work of an updated and modernized North American Free Trade Agreement (NAFTA) as part of its competitiveness chapter[44] or they could operate in parallel with NAFTA. If a new NAFTA accord is not achieved, the task force and working groups would still add great value.

The bottom line is that North America's workers and businesses will benefit greatly from pursuing an active dialogue and cooperation on workforce development to improve the well-being and competitiveness of the United States, Mexico and Canada.

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NORTH AMERICAN WORKFORCE DEVELOPMENT AGENDA

ISSUE #1

Apprenticeships and Other Types of Work-Based Learning and Technical Education

1. Agree trilaterally on a definition of apprenticeships, and a minimum set of criteria and quality standards.
2. Agree on broad guidelines in North America on assigning roles and responsibilities to governments, industry and intermediaries regarding the development, implementation and funding of apprenticeships.
3. Agree on building a tri-national Career and Technical Education (CTE) and apprenticeships taskforce to identify best practices in strategies to promote apprenticeships and other types of work-based learning programs.
4. Agree on elements of a marketing strategy to increase public awareness of the benefits and advantages of work-based learning in order to change negative public misperceptions of such programs.
5. Agree on building tri-national spaces to foster on-going dialogue between stakeholders across the region in order to share best practices on work-based learning and training, and to strengthen public-private partnerships.
6. Agree among the three countries on ways to incentivize and support companies, including SMEs, to develop training and learning programs for reskilling and upskilling their workforces.

ISSUE #2

Certifications and the Host of Issues Surrounding Them

1. Agree (at federal and sub-national levels) on a common terminology about credentials and competencies to facilitate understanding and transferability, as well as recognition, across the continent.
2. Agree on developing or strengthening national competency frameworks and aligning them to the tri-national common terminology for credentials and competencies.
3. Agree tri-nationally on a set of guidelines to assess and validate informal learning and professional experience, and to identify skills associated to such experience.

ISSUE #3

Data Collection and Transparency

1. Agree on a tri-national set of norms to collect real time labor market data and information in a consistent and homogeneous way so it is comparable across countries and across the region.
2. Agree on the development of a tri-national online platform (linked to national platforms) that can serve as a hub of the real-time labor market data collected individually by the three countries and as a hub of best practices from across the region, including the private sector.
3. Agree on guidelines to make the tri-national platform and data tools openly available to all stakeholders, while allowing space for the development of private sector initiatives.

ISSUE #4

Best Practices to Approach/ Prepare for "The Fourth Industrial Revolution

1. Agree on key steps and tools to incentivize companies to invest in reskilling and upskilling of their workers, provide mid-career training and learning opportunities, and to develop short-term, agile training and learning programs to ease the transition into the Fourth Industrial Revolution.
2. Agree tri-nationally on approaches and strategies to encourage companies to collaborate with educational institutions, unions and other interested parties in order to better align curricula with the labor market needs, better connect graduates/students to the labor market, and foster the modernization of academic/educational spaces.
3. Agree on building tri-national spaces to share best practices on the implementation of Industry 4.0 and to strengthen partnerships between the education and private sectors across the region to better link the priorities of the economic sector to those of the education sector.
4. Agree tri-nationally on best practices to support SMEs so they keep up with technological changes, innovation and talent creation.
5. Establish trilateral research and innovation projects in strategic economic areas through grants and scholarships.

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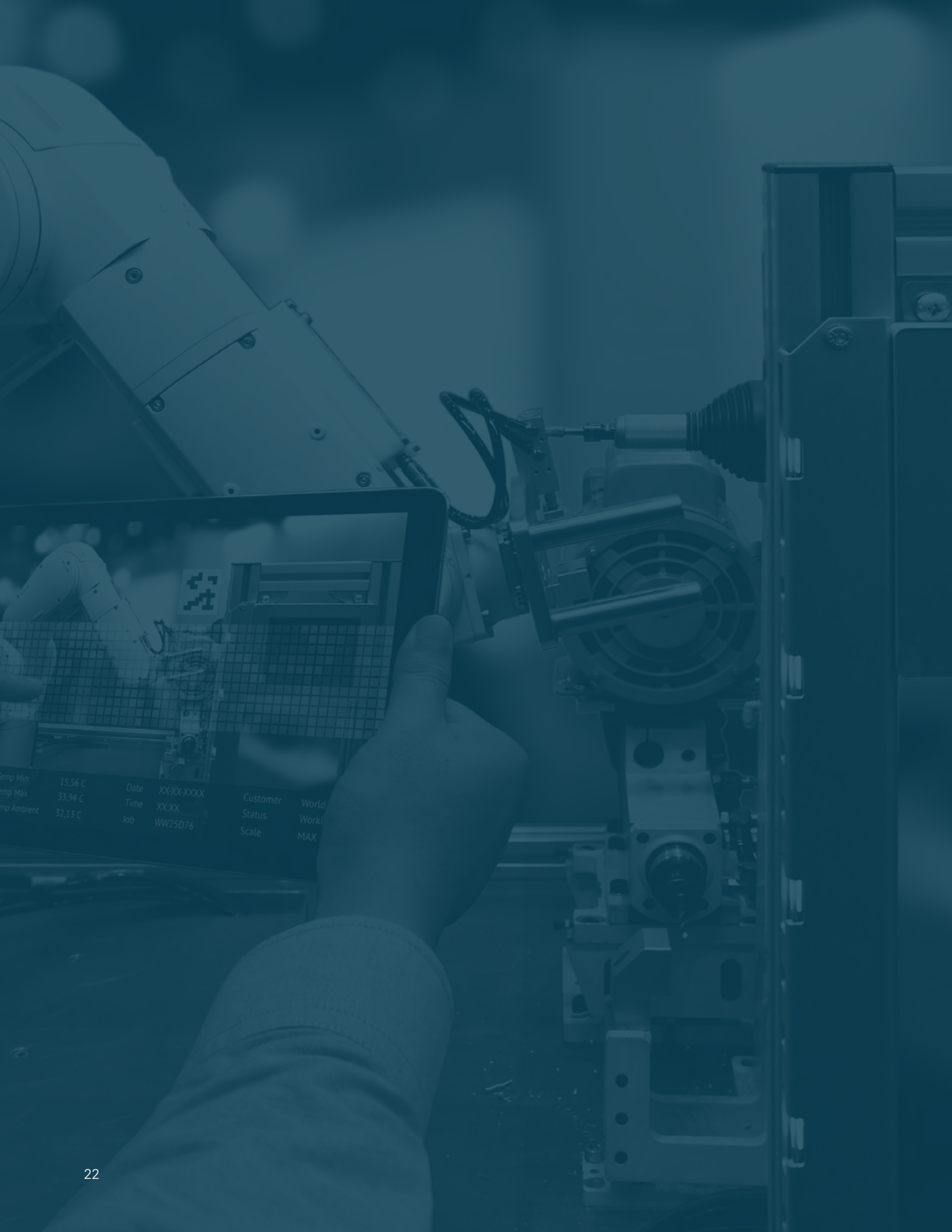
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