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Labour Market Information in Responsive Career Pathways

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Future Skills Centre

Centre des **Compétences futures**

Blueprint

Acknowledgements

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About Blueprint

[Blueprint](#) was founded on the simple idea that evidence is a powerful tool for change. We work with policymakers and practitioners to create and use evidence to solve complex policy and program challenges. Our vision is a social policy ecosystem where evidence is used to improve lives, build better systems and policies and drive social change. Our team brings together a multidisciplinary group of professionals with diverse capabilities in policy research, data analysis, design, evaluation, evaluation, implementation and knowledge mobilization. As a consortium partner of the Future Skills Centre, Blueprint works with partners and stakeholders to collaboratively generate and use evidence to help solve pressing future skills challenges.

About The Future Skills Centre

[The Future Skills Centre](#) is a forward-looking organization that prototypes, tests and measures new and innovative approaches to skills development and training. It is passionate about building a resilient learning nation, backed by an agile and responsive skills ecosystem that equips everyone with the skills they need to thrive in a rapidly changing economy and share in Canada's prosperity.

As a Pan-Canadian organization, FSC works with partners across the country to understand how global trends affect the economy, and to identify what skills working-age adults need to thrive within an ever-evolving environment. FSC is funded by the Government of Canada's Future Skills Program and was founded as a partnership between Ryerson University, Blueprint and the Conference Board of Canada.

Table of Contents

Executive Summary

Labour market information[1] (LMI) plays a crucial role in the promotion of responsive career pathways by enabling individuals and career development practitioners to make data-driven decisions about career paths. However, the current state of LMI from traditional sources is inadequate for promoting responsive career pathways. Opportunities exist in the future skills ecosystem, but more work needs to be done to understand the needs and preferences of Canadian individuals, career practitioners and employers to determine how to best present LMI to different stakeholders and ensure individuals have the right skills to use it.

As part of the Future Skills Centre's (FSC) Responsive Career Pathways initiative, this paper reviews the current landscape of LMI in Canada and analyzes challenges in the use of LMI by key stakeholders. Our analysis is based on a review of recent research and commentary on LMI, conversations with experts, and input from our Responsive Career Pathways roundtables. The paper concludes with opportunities for how to make better use of LMI in support of responsive career pathways and strengthened career and employment systems.

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1   Hyperlinked terms throughout the paper connect to the Glossary.

Key Findings

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Traditional LMI does not empower individuals to make informed career decisions.	Making LMI accessible, relevant, geographically specific and timely are some of the key challenges that must be overcome to help LMI best serve the individuals who need it.
Innovations in generating LMI are promising but have not yet solved the challenge of usability.	Real-time LMI is an important development in providing responsive data that allows for proactive career development. However, it still has limitations that must be overcome in order for it to be a tool for effective and unbiased guidance.
There is limited knowledge of and experience with LMI among key stakeholders.	LMI remains opaque for many Canadians, and the varied stakeholders in the career services field often do not share a common language around it. Emerging innovations are promising, but in the absence of standardization, they have also added to the complexity around LMI use.
LMI needs to centre the human experience, and be contextualized to suit the type of user.	LMI is most impactful when the information is tailored to the needs of the user, which is driven primarily by key life decision points. Thus, to make LMI useful and relevant it should prioritize user-experience and be responsive to particular contexts.
Practitioners need training on newly relevant skills to best leverage data for clients, especially in a COVID-19 world.	Career development professionals must be supported in learning to use the tools necessary to find and provide the right LMI for their clients, and in adapting to the changing technological landscape.
Insights from behavioural science can help make LMI more useful and accessible.	Recognizing cognitive and behavioural biases, and integrating informed models for addressing them, can help reduce their negative effects on both individual and practitioner use of LMI.
Ongoing dialogue with key stakeholders is needed to ensure LMI innovations are leveraged and scaled sustainably.	Key actors including provincial and territorial governments, practitioners and educators need to agree on how to best incorporate and build on innovations and ensure that new solutions are accessible to all Canadians.
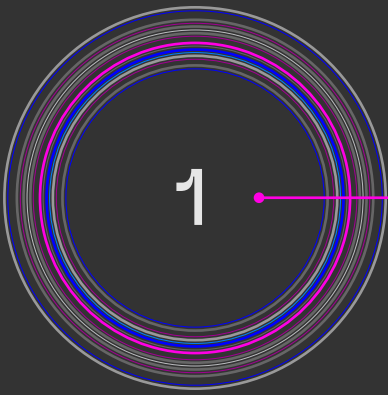
1 → Introduction

Introduction

Labour market information (LMI) plays a crucial role in the promotion of responsive career pathways, as it enables individuals and career development practitioners (CDPs) to make data-driven decisions about career paths. When individuals are considering career pathway options, they often want to know about education requirements, expected salaries and future prospects of occupations of interest. Similarly, CDPs need to be aware of trends in local labour markets when providing guidance to clients on which training programs to enrol in or which job opportunities would be a sustainable and appropriate match.

To help ensure that the Future Skills Centre's (FSC) Responsive Career Pathways initiative is informed by a strong understanding of the role and importance of LMI in creating more responsive career pathways, this paper reviews the current landscape of LMI in Canada and analyzes the challenges and opportunities in the use of LMI by key stakeholders in our careers and employment services system. Our analysis is based on a review of recent research and commentary on LMI, conversations with experts, and input from our Responsive Career Pathways stakeholder roundtables.

This paper begins with an overview of the LMI landscape in Canada, before moving on to discuss current barriers to using LMI for effective career guidance and career planning. It concludes with a consideration of promising opportunities for making better use of LMI in support of more responsive career pathways.
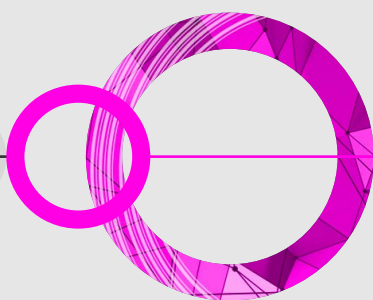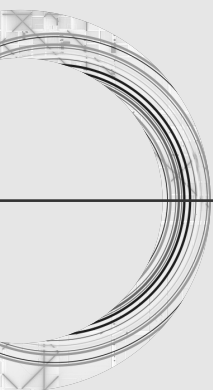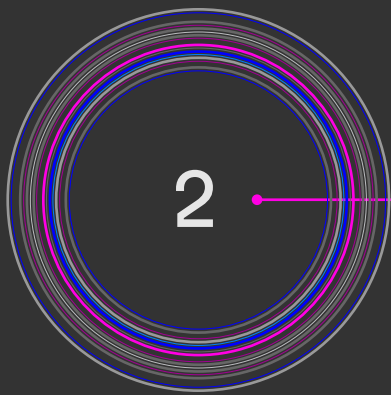
2 → Background and Context

Background and Context

What is LMI and Where Does it Come From?

Although many definitions of LMI exist, we broadly define LMI as any type of information that helps an individual and/or organization make a decision related to the labour market. The existence of multiple definitions for LMI can partially be attributed to the fact that there are many types of LMI which serve different purposes for different players in the labour market ecosystem. These include:

- Job vacancies
- Occupations and occupational profiles
- Work requirements
- Wages and salary information
- Skills and competencies

Canada's Labour Market Information Council (LMIC) has defined and described many of these LMI concepts as part of their ongoing WorkWords initiative, which aims to help stakeholders better navigate key terms and sources of LMI. WorkWords contains definitions of common terms, links to assist users in finding various data sources and insights into the interpretation of data for more informed career-related decisions.

Traditional and Novel Approaches to LMI

The different types of LMI discussed above originate from a variety of sources. There is a rich history of generating and analyzing LMI in Canada, primarily driven by federal government departments. However, a number of new approaches based on advancements in big data analytics and artificial intelligence technologies have emerged. Both traditional and novel approaches to LMI have value for job seekers and CDPs as they pursue responsive career pathways.

Traditional LMI

Most traditional LMI in Canada is generated by government departments, including Statistics Canada and Employment and Social Development Canada (ESDC). These departments conduct detailed national surveys and sophisticated analyses to provide stakeholders with access to insights on the labour market. Currently, traditional LMI assets in Canada include the Labour Force Survey, the Job Vacancy and Wage Survey, the Survey of Employment, Payrolls and Hours, the Canadian Occupational Projection System, and ESDC's Job Bank. These are reliable, robust sources of LMI which are often representative of national and sub-national populations. However, given the labour intensity of generating this type of evidence, traditional LMI is often reported infrequently (monthly, quarterly, or even yearly) and generally carries a time lag associated with the data that is reported.

In addition to these primary sources of traditional LMI, a wide variety of other organizations also generate LMI for specific purposes. These include provincial and territorial governments, sector

associations (for example, the Petroleum Services Association of Canada, the Mining Industry Human Resource Council and the Canadian Council for Aviation and Aerospace), local economic development organizations (such as the Ontario Tourism Education Corporation and Workforce WindsorEssex), non-profits and more. LMI generated from these stakeholders may focus on a particular region or sector and often aims to serve a specific interest group.

Novel approaches to LMI

Advanced capabilities related to data mining and analysis, including those leveraging AI algorithms, have paved the way for the generation and use of new types of LMI.

Recently, many private companies have begun generating **real-time LMI** (RT-LMI), which uses software developed to "scrape" or "spider" job postings on the internet in order to generate up-to-date LMI. Using a combination of web-crawling and natural language processing algorithms (a form of AI), RT-LMI providers are able to analyze text of online job postings and glean information on job titles, employers, industries, occupations, skills, education and certification requirements, salaries and other variables (Maher & Maher et al., 2014). These data are aggregated by region, occupation and/or sector in order to conduct up-to-date labour market analysis based on real-time data.

Compared to traditional LMI, RT-LMI is more frequent, being updated on a more regular basis (daily, in many cases), and more timely, so there is less lag time between the observation of the data and the time it is reported. Another crucial advantage of RT-LMI is its localness. While most traditional LMI is reported down to either the provincial/territorial, economic region or census metropolitan area level, job postings can be geocoded to a more local level (such as cities or communities) depending on the provider and the accuracy of their methodology. This is especially important for locally-informed career guidance and regional workforce development action planning. RT-LMI also enables better labour market forecasting to help individuals and practitioners develop more sustainable career pathway options.

Another emerging area of LMI is skills-based data. Skills are increasingly understood as the fundamental building blocks of the labour market. Emerging from this shift in thinking is a novel approach to understanding how occupations relate to one another in terms of their skills composition. This requires mapping skills frameworks (such as ESDC's Skills and Competencies Taxonomy) to occupational classifications (such as NOC) and generating skill similarity scores between occupations. Similarity scores enable the exploration of possible job transitions based on current and past occupations (skills matching), as well as areas for further individual skills development to facilitate alternative career pathways (skills gap analysis). Skills matching and gap analysis offer new insights to users looking to explore potential job transition pathways. Nevertheless, they are still novel approaches that require refinement and deepened nuance in the skills frameworks that underpin their analysis.

In addition to making LMI more current, these novel approaches have bolstered the potential for accurate forecasting. Online job posting data and skills-based data analysis are making it possible to inform occupational outlooks with real-time information. According to LMIC, these approaches to forecasting have merit, but require further investigation against traditional alternatives to determine their relative accuracy and whether they help users make more informed decisions.

For a more detailed and comprehensive analysis of the various providers of LMI in Canada, see LMIC's forthcoming analysis of the LMI landscape in Canada (LMIC, 2021).

▍Who Uses LMI and How?

For the purposes of the Responsive Career Pathways initiative, we identified three primary user groups — individuals, CDPs and employers — and consider how each of them use LMI to inform career pathways.

Individuals

Individuals need LMI to inform important personal career decisions. Understanding trends in the labour market can help individuals decide which field of study to pursue, the types of education or training to enrol in, which skills to develop and ultimately which jobs and career paths they should seek out.

Owing to these different decision points, changes over the life course and the unique needs of diverse populations, there is considerable variability in the needs and preferences of LMI amongst different population groups. In a 2018–19 survey of Canadians, LMIC found that 68% of employed respondents had salary and wage information as a top LMI need, compared to just 34% of those not in employment, education, or training (LMIC, n.d.b). According to a March 2020 LMIC report, those from higher-income households were more likely to search for information on salaries and benefits, whereas lower-income households look for information on the cost of living and the number of available jobs (LMIC, 2020). Still, participants across most groups said that information on skills requirements is a top LMI need, as well as benefits, workplace environment, current and future job openings and cost of living.

Career development practitioners

CDPs rely on LMI to provide data-driven guidance to their clients by identifying trends in the labour market and making recommendations based on their clients' skills, needs, and interests. According to a LMIC survey, 95% of career practitioners in Canada use some sort of LMI when advising clients (including job seekers, students and others) (LMIC, 2019). Ninety percent of practitioners said they mainly use LMI to answer specific questions, as opposed to gaining a general understanding of labour market trends and other uses. The most sought-after types of LMI among practitioners were skill requirements, certification/education requirements, salary information, occupational outlooks and training information. Practitioners may use occupational outlooks to get a better sense of the best options to promote to job seekers. The survey results also indicated that CDPs largely look for LMI that is up-to-date, user-friendly, trustworthy and publicly available.

Additionally, the survey showed that while most Canadians can locate LMI on their own, they turn to CDPs to help them understand it. However, **only 60% of practitioners said that the data is easy to understand, signalling a significant gap in the capacity to understand LMI for both individuals and practitioners.**

Employers

Employers use LMI to support their human resource policies and processes, such as setting wages, developing job descriptions, understanding legal requirements and determining training needs. **When it comes to preparing for the future, many employers are unsure of how to use LMI to prepare their workforce for upcoming disruptions.** According to LMIC's 2018–19 survey, variability exists in the type of LMI that different employers look for, where they find it and how they use it, if they use it at all (LMIC, n.d.b).
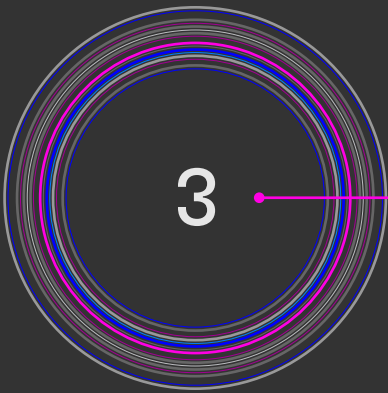
The most common types of LMI sought by employers were availability of potential applicants, wages and labour law information. They also sought LMI on the skill sets of graduates by field and workplace benefits by occupation. The use of LMI varied significantly across different sizes of employers. While 65% of all employers reported using LMI as part of their human resource management strategy, this included roughly half of small firms compared to about 80% of medium and large firms. **Only 12% of small employers said they use LMI to determine training compared to 26% of medium and large employers.** These results indicate that small firms are not using LMI in the same ways as their larger counterparts. This may be because smaller firms do not find LMI as relevant or impactful as medium and large firms do (76% compared to around 93% for medium and large firms), or due to differences in organizational capacity and resources.
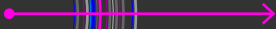
Other users

In addition to the three primary groups discussed above, there are a variety of other relevant stakeholders that use LMI. For example, training providers may use LMI to refine and adjust course offerings based on trends in labour demand. They may also use LMI projections to understand whether demand for their current suite of offerings is expected to grow or shrink in the future.

Furthermore, workforce boards, economists and analysts and policy-makers all use LMI to inform strategic decisions and investments. These can include:

Understanding how current workforce development programs and systems are meeting the needs of clients, employers and the broader workforce

Using projections to predict potential labour surpluses and shortages in order to fund programming to address gaps

Analyzing regional variations in sociodemographic composition and employment opportunities to inform other public social programs

3 → Challenges

Challenges

Given the complexity of the current LMI landscape and the variety of use cases for the information, a number of challenges arise particularly on the question of using LMI to enable more responsive career pathways.

Traditional LMI Does Not Empower Individuals to Make Informed Career Decisions

Traditional sources of LMI provide critical information about the labour market, but often this information is not adequate to meaningfully inform career planning and decision-making.

The most common challenges relating to the use of LMI in career guidance and planning include accessibility (locating the LMI; presenting it in a digestible manner), relevance (LMI relevant to use case/decision point), localness and granularity (regionally specific and disaggregated) and timeliness (minimal time lag between observation and reporting) (LMIC, n.d.a).

In addition, traditional labour market information is often not presented in an accessible, user-centred way. Information may be complex or structured in a manner that is difficult for the user to understand. Language or terminology used may be unfamiliar to end-users.

In our stakeholder roundtables, participants noted that **LMI is currently not responsive and nimble enough to supply service providers and job seekers with actionable data that is timely and at the right level of detail to respond to employer requests.** For example, participants noted that information on labour shortages is rarely broken down into detailed data on the specific skills needed for those positions, the proficiency level required or the level of seniority. This information is necessary to map the skills of job seekers to employment opportunities and identify where targeted training may be needed.

These challenges contribute to a current state in which end users find it difficult to find and understand LMI relevant to their needs. Moreover, challenges in accessing and using LMI are not equally experienced by all demographic groups. For example, **young people report challenges in accessing LMI that is relevant and that meaningfully discusses future occupational outlooks** (LMIC, 2020).

Innovations in Generating LMI are Promising But Have Yet to Fully Address Usability

RT-LMI offers more frequent, local and timely data than traditional LMI. This enables the exploration of potentially viable and desirable job transitions for job seekers at risk of redundancy and for those looking to navigate their careers months or even years before they face possible disruption. **Using RT-LMI in a service context is one of many important steps that are needed to facilitate a shift from a reactive, work-first approach to employment services (how to get a job now), to an approach that elevates person-centred career guidance over the life course.**

While RT-LMI opens many opportunities for enhanced career guidance, it has some limitations. Online job postings are not a perfect proxy for labour demand and are subject to biases toward certain industries, occupations and regions. According to an **LMIC** study comparing online job postings to the Job Vacancy and Wage Survey, professional, service sector and management occupations are overrepresented in online job postings, while trades and other manual labour professions are underrepresented. There are also biases in the required education levels and geographic locations of online job postings (LMIC, 2018). This could result in career guidance and decision-making that is also biased.

There is also little current evidence on the optimal use and effectiveness of RT-LMI in career guidance. In its current form, RT-LMI is often presented and shared in ways that are difficult to interpret for users. Certain tools like **planext** and **OpportuNext** leverage RT-LMI for stakeholders in actionable ways, although use cases are limited (**Berres, 2021**). **More work is needed to define specific use cases and service journeys for RT-LMI, while incorporating data on skills that can make RT-LMI actionable and useful for individuals, CDPs and employers.**

There is Limited Knowledge and Experience with LMI Among Key Stakeholders

Despite important efforts underway to increase its quality and availability, LMI remains mysterious to many Canadians who might have trouble using it even if they know it exists. Furthermore, CDPs, policy-makers, education/training providers and industry often do not speak the same language about skills, LMI and data. This further complicates efforts to build shared knowledge about LMI and facilitate communication about LMI across sectors. While work is being done to improve standardization by linking occupations to job titles via analysis of skills and work requirements, it is complicated by the fact that stakeholders use similar terms to refer to different things.

While innovations in the development of LMI are promising for improving the accuracy and quality of LMI, they have also added to the complexity of the current LMI landscape, making it even more difficult for users to develop a strong understanding of what LMI is and how to make most effective use of it.

CDPs Require Training in Using Data as Usability Issues and Data Overload Persist

CDPs face a distinct challenge in identifying and providing the right LMI to the right user in the right context. Even when equipped with accessible, high-quality LMI, the information is not useful for end-users unless presented in a way that aligns with user needs. Cutting through noise to narrow down and define particular use cases is a persistent challenge for CDPs given the breadth and complexity of LMI.

In order for new LMI innovations to be effective and usable, CDPs must champion the adoption of these tools and be willing to learn how to use them. **A concerted effort is needed to build up the skills and competencies of CDPs to access and leverage novel tools in their practice, understand their implications for clients at distinct decision points throughout the life course, make service decisions and adjust offerings accordingly.**
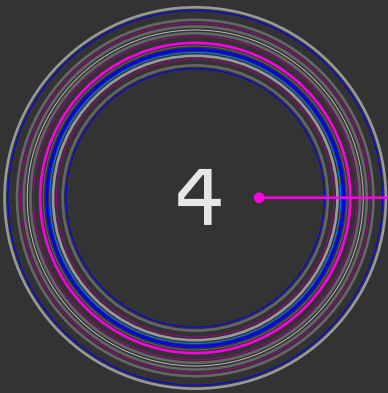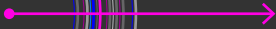
4 → Opportunities

Opportunities

Despite the current challenges in making LMI more usable for career guidance, there are many promising opportunities to build on innovations in the LMI ecosystem to strengthen its usability. Organizations working in the ecosystem, including LMIC and Nesta, have set the direction for how LMI can be better used in our career and employment services systems (Nesta, 2019; LMIC, n.d.a, 2018).

### Skills-based data, made in Canada

In order to enable skills-based data generation and analysis, stakeholders in the ecosystem are working together to link skills to occupations. For instance, a partnership between ESDC, Statistics Canada and LMIC is developing the Occupational and Skills Information System (OaSIS), a framework relating Canadian occupations (NOC codes) to the international standard for skills frameworks, O*NET. **This work provides the conceptual underpinnings necessary for the generation of skills-based data linked to Canada's system of occupational classifications.**

User-centred LMI

Recent innovations have attempted to introduce a human-centred experience lens to the way LMI is presented. LMI is most impactful when the right information is delivered to the right user in the right context. Ongoing initiatives aim to structure and present these novel data insights in a user-friendly way to promote responsive career pathways.

LMIC has learned that user needs relating to LMI are driven by life decision points (entering the labour market, exploring career options, establishing oneself, maintaining, etc.) and presentation of LMI must be contextualized to suit the particular type of individual (mid-career worker, immigrant, new grad, etc.) (LMIC & FSC, 2021). Particular types of LMI can include those elements discussed earlier in this paper (wages and salary, skills and education requirements, occupation, job vacancies, etc.), which can be presented in a variety of modalities, including facts, figures, charts, graphs or insights, through websites, apps, APIs, reports, or in-person consultation, among others, at various points along the career guidance journey.

Currently, there are ongoing initiatives in Canada that aim to leverage both traditional and novel forms of LMI and make it available to users in a user-friendly way, namely LMIC's Equipping Career Services with LMI Tools and Data (or "Data Lake") initiative. Funded by FSC, LMIC is gathering a variety of different types of LMI, both traditional (Statistics Canada surveys and microdata, sector councils, etc.) and novel (job postings data from Vicinity Jobs) to construct an open access data repository available to stakeholders in the ecosystem. After gathering and structuring the data into the repository, the second phase of this initiative entails an open call for proposals, inviting service provider organizations to partner with technical organizations to collaborate on developing customized career guidance and planning tools that interface with the LMIC repository, extract data and shape it into a tailored tool. As proponents, service providers would define their particular use case for LMI, while their partners would assist in development of the tool and its user interface.
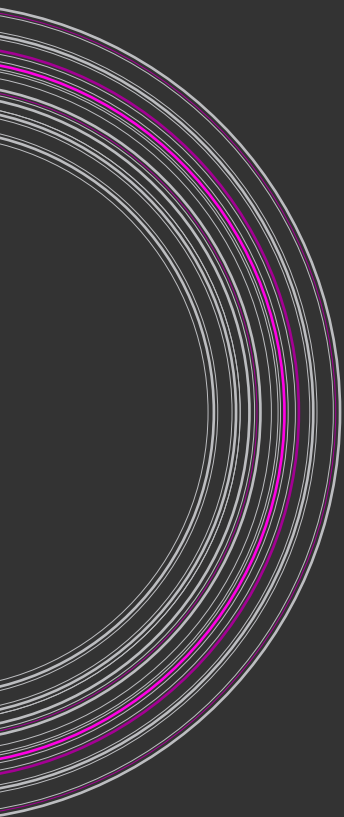
LMI is most impactful when the right information is delivered to the right user in the right context.

This approach gives service provider organizations ownership over the design process of their career guidance tools. **This way, the identification of user needs and preferences with regards to LMI is self-driven, allowing service providers to focus on one or more touchpoints along the career guidance journey based on their expertise and their clients' needs.** Technical partners can assist with developing mock-ups, wireframes and prototypes that integrate into practitioners' workflows and present user-friendly and impactful LMI insights at the right time. During this time, LMIC's role will be to maintain and improve the pipeline of data available in the repository for stakeholders to access.

Developing the right skills and competencies of practitioners

Complementary to the presentation of user-friendly LMI are the abilities of CDPs to leverage these novel tools in their practice, understand their implications and make service decisions accordingly. Practitioners must be trained on newly relevant skills and adapt to the changing technological landscape, especially in the context of operating in a COVID-19 world (Bimrose & Goddard, 2021). Currently, the Canadian Career Development Foundation (CCDF) is finalizing a pan-Canadian Competency Framework for Career Development Professionals in order to bring coherence to professional standards and guidelines in the career development sector. **As part of this initiative, CCDF is working closely with LMIC to develop standards and guidelines around the use of LMI in career development practice.**

Behavioural insights into LMI use

Finally, there are opportunities to draw on insights from behavioural science to make LMI more accessible and useful by addressing cognitive and behavioural barriers. For example, a fallacy referred to as base rate bias could cause job seekers as well as practitioners to focus on rates of change in an occupation instead of the level of absolute employment in the field, which is arguably a more important metric. Alternatively, confirmation bias could cause individuals to seek out specific LMI which confirms a preconceived bias. Cognitive and behavioural biases/barriers such as these limit access, comprehension and informed action toward responsive career pathways. **Using structured models for integrating high quality, accessible LMI that recognize and address these biases can reduce their negative impact** (The Behavioural Insights Team, 2021).
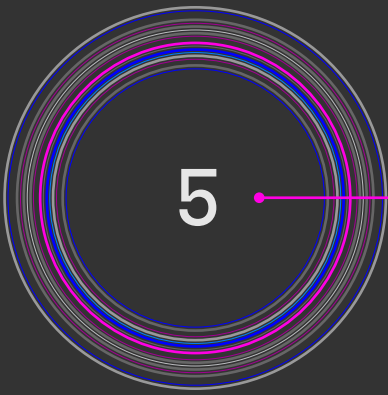
5 → Conclusions

Conclusions

Using LMI effectively can help drive more proactive, informed decision-making and create more responsive career pathways for Canadians.

More work needs to be done to identify relevant use cases, and to understand archetypal needs and preferences to determine how to best present information to different stakeholders in the labour market and to ensure individuals have the right skills to use it. For instance, we can present CDPs with comprehensive dashboards composed of data that is local, timely and granular to the highest degree, but without the right skills to use new tools and data, it won't be helpful. CDPs must be able to respond appropriately to the insights available and make service decisions for clients accordingly. In order for this vision to materialize, CDPs must have access to high quality, engaging, innovative training so that they are equipped with the knowledge, skills and mindset to deliver high-quality career guidance services to Canadians.

Similarly, a more intentional approach is needed to support workers at risk of disruption. If they aren't equipped with the skills and information they need to navigate the labour market well before being let go, they face more difficulty in their job search. Indeed, accessing responsive career pathway supports after loss of employment is inefficient. Workers must be supported such that they are empowered to plan the next steps of their careers early on by thinking about their skills in new ways, and by expanding their career horizons using information on new potential career pathways

This will also involve engagement with employers to proactively plan for responsive career pathways as a way to ensure smooth labour market transitions.

Naturally, with new opportunities comes new challenges. For instance, how can we address the biases and limitations of new approaches to generating RT-LMI? Most online job postings are heavily skewed toward white-collar industries and occupations, primarily in urban centres. While this covers a significant chunk of the labour market, it leaves a gap pertaining to lower-skilled occupations, many of which are the ones at risk of automation. While certain RT-LMI tools have made strides to consciously seek out and include more local job boards, these are on an ad-hoc basis and rely on deep knowledge of local partners. It would be a significant undertaking to adequately cover all localities at this level of detail across the country.

It is also important to note the dearth of evidence on the effectiveness or implementation process of new LMI tools. We don't know how career guidance that leverages these tools compares to traditional career development services in terms of labour market outcomes and participant experience. We also don't know the main pain points and barriers/enablers of implementing these tools with various skills and workforce development stakeholders. Further research and testing is needed to investigate these knowledge gaps and explore the impact of innovative LMI tools.

Evidently, new LMI tools have clear potential to help CDPs, job seekers, employers, policy-makers, labour market analysts and other skills stakeholders make more informed decisions. However, in the current state, these tools are part of a larger suite of tools/approaches needed to shift the career guidance paradigm toward that of a proactive, lifelong endeavour.
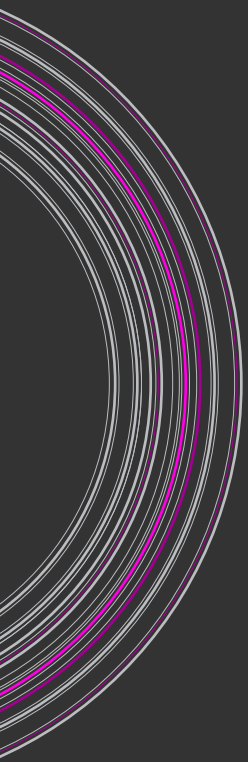
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Investments in research and innovation promoting responsive career pathways should aim to build an evidence base around what applications and use cases are best for RT-LMI, as well as how and when they can be combined with traditional LMI.

Finally, a thorough understanding of the opportunities and challenges presented by the practical use of new LMI tools is not enough. **To ensure that innovations are leveraged and scaled sustainability throughout the labour market ecosystem, an ongoing dialogue with key stakeholders will be needed.** Stakeholders representing all groups in the ecosystem, including provincial and territorial governments, CDPs and educators are key to driving change in the generation, accessibility and use of LMI. Stakeholders will need to agree on a roadmap that not only outlines how new innovations can be built into and upon existing systems and service agreements, but also one that ensures that any opportunities arising from new solutions can be made widely available to all Canadians.

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