# ePortfolio for Skilled Immigrants and Employers: LIfIA Project Phase One Final Report

### Prepared by

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# Learning Innovations Forum Forum d'Innovations d'Apprentissage

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### 1. Executive Summary

It is well known that skilled immigrants have difficulty getting appropriate employment in Canada, and that part of the problem is that employers have difficulty recognizing training and work experience acquired outside of Canada. This paper is a summary report of project, undertaken by the Learning Innovations Forum d'Innovations d'Apprentissage (LIfIA), to research and develop a strategy for an ePortfolio system for skilled immigrants to Canada.

The project was funded by Human Resources and Skills Development Canada (HRSDC), through the Foreign Credential Recognition (FCR) Program. LlflA contracted with three consulting agencies to undertake the work: Learning Agents from Manitoba, FuturEd Inc. from British Columbia, and the Edmonton Mennonite Centre for Newcomers (EMCN). All three have proven track records in the implementation of learning innovations as they benefit individuals and society at large. In addition, we engaged a wide number of strategic partners from the industry sector councils, professional regulatory bodies, training institutions, immigrant-serving agencies, and human resource development professionals. We intend that this project will support HRSDC FCR program objectives and contribute to the ePortfolio work of the Organization for Economic Development and Cooperation (OECD), Campus Canada, the European Institute for eLearning (ElfEL), ePortConsortium in the US, WPLAR Manitoba, and others who share our goals.

# Pan-Canadian Project

### Purpose:

- Apply the latest thinking about ePortfolios in the context of skilled immigrants coming to Canada AND employers
- Develop a recommended strategy for national implementation

Phase 1 Timeline:

July 2005 to March 2006

Sponsor: Learning Innovations
Forum d'Innovations
d'Apprentissage

Funding: Human Resources and Skills Development Canada

#### **Consultants:**

- FuturEd
- Learning Agents
- Edmonton Mennonite
   Committee for Newcomers

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Between September 2005 and March 2006, we have produced:

- A comprehensive environmental scan of the current state of ePortfolio use (1) in the workplace,
   (2) for skilled immigrants, and (3) in related training and HR institutions in Canada and beyond combined into one Background Report LIfIA ePortfolio Project for Skilled Immigrants;
- 2. Research-based conclusions about the feasibility and advisability of an ePortfolio system in various industries and employment environments summarized in this report; and
- 3. A strategy for creation and implementation of an ePortfolio system and associated tools for immigrants and their potential employers across Canada, also presented in this report.

An ePortfolio is an electronic portfolio of acquired learning – knowledge, skills and abilities acquired through formal, non-formal, informal, accidental and incidental learning. It differs from a conventional CV in that it sets out acquired competencies and provides digital evidence of those competencies. The ePortfolio is formally defined as "a collection of authentic and diverse evidence, drawn from a larger archive representing what a person or organization has learned over time on which the person or organization has reflected, and designed for presentation to one or more audiences for a particular rhetorical purpose" (National Learning Infrastructure Initiative, 2003). So the term ePortfolio is shorthand for two items – the digital archive and the presentation drawn from it.

## ePortfolio Defined

### An ePortfolio is (NLII, 2003)

- "a collection of authentic and diverse evidence, drawn from a larger archive
- representing what a person or organization has learned over time on which the person or organization has reflected,
- and designed for presentation to one or more audiences for a particular rhetorical purpose"



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The ePortfolio is about both process and product. ePortfolio tools help creators to identify and reflect on the outcomes of learning experiences. Creators can be individuals, organizations, even businesses – and they can be the receivers/processors as well. We now know that we must develop a system where creators and receivers can communicate effectively using the same language and ICT applications.

LIfIA is driven by the belief that an electronic portfolio, or ePortfolio can be an effective and efficient tool for skilled tradespersons and professionals to set out their foreign training and work experience, with supporting digital evidence. To ensure that an ePortfolio system is effective, employers have been engaged to ensure that it is designed to meet their needs and expectations.

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<sup>&</sup>lt;sup>1</sup> A complete <u>comparison of the ePortfolio and a credential-based CV</u> is available in the FuturEd eLibrary.

# **Project Rationale**

- Immigrants build Canada
- Immigrants must be skilled
- Having difficulties finding appropriate employment

### **Therefore**

- Demoralizing for immigrants
- Loss of human capital

### **Employers are having difficulty:**

- Understanding foreign credentials and foreign work experience
- Finding skilled workers in many industries
- Managing human capital in the knowledge economy

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The goal of this project is to stimulate and support an ePortfolio environment that is

- useful and used by immigrants as they seek employment, workplace advancement and skills upgrading in Canada, and
- used by employers to recruit and place individuals who have training and work experience from outside Canada.

This maximizes the use of human and social capital, both individually and collectively.

## Conclusions

### ePortfolio can:

- Interpret foreign work experience and workplace training to employers
  - Improve recruiting and placement
- Capitalize on entire bank of skills and knowledge for skilled immigrants
  - Hasten engagement with workforce
  - Increase productivity
- Utilize ePortfolio in the workplace and in lifelong learning

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# ePortfolio for Skilled Immigrants

- Would be standards-based (occupational skill standards)
- Would incorporate all forms of learning
- Would be recognized and used by employers
- Would be started before coming to Canada
- Would not necessarily be easy to create (digital evidence)



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The goals of LIfIA are to achieve "an ePortfolio for every citizen" and "one ePortfolio for life." This project is a piece of a much larger puzzle, and we are working to ensure that all Canadians have access to a digital identity and a digital record of formal and non-formal learning. We are working to ensure that, when ePortfolios are created, they meet international quality standards and provide return on investment for their creators and users.

### LIfIA Advocates for...

- An ePortfolio for every Canadian.
- One ePortfolio for life.
- Quality ePortfolio tools and services.
- ePortfolio systems for creators and users.
- Collaboration and proactive leadership.
- Connections to the global ePortfolio effort.
- Learning innovations as they benefit learners, communities and organizations.



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### 2. Introducing the ePortfolio

### 2.1. Terminology and Background

The term "ePortfolio" is used to encompass (1) tools, products and systems that can be used by (2) individuals, educators, employers and entire nations for the purposes of (3) describing, assessing, recognizing and using knowledge and skills acquired through all forms of learning with evidence that is digitally created, stored and managed through (4) practices that meet standards assure transportability, usability, and security. At it's most simple, it may resemble a personal homepage or an electronic resume, and at its most complex, it may become a person's digital identity.

In addition to this application of the ePortfolio to link employers and skilled immigrants, ePortfolio tools and processes are linked to:

- lifelong learning as the method of tracking and recognizing ongoing learning, as an incentive to the lifelong learning requirement;
- Prior Learning Assessment as the outcome of the PLA process of exploring and determining an individual's non-formal and informal learning;
- education and training at all levels (K-12, PSE and workplace) as a teaching tool (reflection as a basis for learning), as a learning management tool (e.g., project-based learning) and as an alternative form of learning assessment;
- eLearning as a type of Knowledge Management, a part of a Student Information System and a
  potential form of "Usable Learning Object" repository;
- learning organizations as a means of tracking and developing human capital and assisting professional development of employees within organizations across sectors;
- community economic development as an inventory of collective community human capital assets;
- Human resources development and Human Capital Management as the means of identifying and managing what a person and a group of persons knows and can do;
- social networking and social capital development through the development and use virtual communities;
- HR management strategies for targeted recruitment, training and succession planning; and
- digital identity and the creation of secure, private digital archives for all citizens.

This speaks to incredible array of ePortfolio uses, the complexity of the ePortfolio concept, and the vast, unrealized potential. Much more information about the ePortfolio is available from LlfIA and in the eLibrary of FuturEd.

#### 2.2. ePortfolio in 2006

An ePortfolio, in simplest terms, is an electronic portfolio of acquired learning – knowledge, skills and abilities acquired through formal, non-formal, informal, accidental and incidental learning. It can be used by individuals to demonstrate learning and personal achievement, by educators and employers to assess ability and employment suitability, by agencies and businesses to show positive change and organizational achievement.

The ePortfolio has been formally defined as "a collection of authentic and diverse evidence, drawn from a larger archive representing what a person or organization has learned over time on which the person or organization has reflected, and designed for presentation to one or more audiences for a particular rhetorical purpose" (National Learning Infrastructure Initiative, 2003). There are two concepts in this definition, the digital archive and the purpose-driven presentation, we will examine each separately.

The term "ePortfolio" is used to encompass (1) tools, products and systems that can be used by (2) individuals, educators, employers and entire nations for the purposes of (3) describing, assessing, recognizing and using knowledge and skills acquired through all forms of learning with evidence that is digitally created, stored and managed through (4) practices that meet standards assure transportability, usability, and security. At it's most simple, it may resemble a personal homepage or an electronic resume, and at its most complex, it may become a person's digital identity. The understanding and application of ePortfolio concepts is very multifaceted and rapidly evolving, so let's examine this complexity in February 2006 and speculate on where the field is going.

### 2.2.1.Tools, products and systems

To this point, tools associated with the ePortfolio have largely been:

- ⇔ software applications developed and marketed by commercial firms for use in specific markets, e.g., learning assessment for elementary, secondary or higher education; and/or
- software applications acquired and adapted by agencies or institutions for their own specific purposes, e.g., course-specific learning records or employee skills assessment.

These applications have been developed from very different perspectives and applications, for example:

- digital storytelling tools to record changes, achievements and cultural artifacts by children, families and communities:
- learning assessment tools to demonstrate expected learning outcomes by students of all ages;
- digital inventory tools to assemble and display capabilities, with supporting evidence, by artists, athletes, businesses, agencies or communities;
- reflective learning tools to promote and support individualized learning through the thoughtful examination of experience;
- electronic tools for authentic assessment of learning in non-academic areas, workplace experience or informal training;
- management tools for student information systems and knowledge management systems:
- cultural archiving and media exploration by Aboriginal communities;
- quality assurance tools for comparison of product quality to standards of excellence or professional standards of accreditation.

There are as many tools and approaches as perspectives and applications, and this led ePortfolio experts, under FuturEd leadership, to set out quality criteria to promote transferability, usability and security of ePortfolios among and between ePortfolio application environments.

These software applications or tools are imbedded in such industries as:

- 1. new media, e.g., as digital storytelling and digital archiving;
- 2. eLearning, e.g., as technological assessment and digital learning records;
- 3. ICT industries, e.g., as knowledge management software and digital communications;
- 4. human resources management, e.g., for recruitment, placement and advancement.

Until recently, ePortfolio tools focused largely on the presentation of information, with an archive of digital data that derived from the associated purpose of the presentation, i.e., the archive was created with the purpose in mind. However, new ePortfolio tools include digital environments for assembling and managing documents and all forms of media in a digital archive, and/or software applications for assembling and sorting portions of that archive for a particular purpose, e.g., applying for a job or seeking course credit. In the future, the archives will come first, with ePortfolios created when and as needed.

To this point, few ePortfolio systems have been developed, i.e., there are tools for production of ePortfolios but few tools for systematic reception and utilization of ePortfolios. Tools have been acquired by institutions and agencies, largely for use by ePortfolio creators – that is to say, tools are made available to students, for example, to present their acquired learning to teachers for assessment and credit. Few tools include a computer-based method of processing the digital presentation, i.e., processing can be very labour-intensive. Most recently, ePortfolio systems are being developed for use by "receivers" of ePortfolios as well, i.e., software applications that may be either one ePortfolio tool used by both creators and processors, typically standards-based ePortfolios and/or software applications that can pull what a processor might require from any ePortfolio tool by, e.g., a word search or a marking rubric.

In summary, the ePortfolio is about both process and product. ePortfolio tools help creators to identify and reflect on the outcomes of learning experiences, to produce archives and presentations. One particularly appealing part of the ePortfolio is the use of multi-media, i.e., the utility of audio files in demonstrating language or musical competence, the utility of video files in demonstrating skills, the use of social networking and blogging for establishing references.

### 2.2.2.ePortfolio applications and users

Creators of ePortfolios – both digital archives and digital presentations - can be individuals, organizations, even businesses – and they can be the receivers/processors as well.

Individuals may use ePortfolios for the demonstration of achievement and management of their own lifelong learning. Sometimes individuals create ePortfolios more as process than product, i.e., more for reflective learning than showcasing themselves. In their digital archives, they may assemble all the formal, digital records that exist about them and their learning created by themselves and/or created by others, e.g., health providers and police departments.

Educators may use student ePortfolios to assess student learning, the quality of courses and entire institutions. Trainers may use ePortfolios to assess prior learning, target training, and provide alternative credentials. And, like all others in the employment environment, educators may use their own ePortfolios for learning management and career advancement.

Employers may use ePortfolios for recruitment and placement purposes, especially in knowledge-based environments. More importantly, they can better utilize the entire inventory of skills and knowledge in their workforce in a fashion known as human capital assets management.

Entire nations may provide the opportunity for citizens to have a digital archive. This is a complex public policy area to be explored. It has been argued that, in a digital world, each person must be able to present him/herself digitally. From another perspective, there is a great deal of digital information "out there" for each and every person; and the personal archive becomes a place to assemble that information and take ownership of it. From yet another perspective, ePortfolio tools provide for transparency of credentials and work experience to enable recognition of foreign credentials and to promote labour mobility. There is vast utility to a digital archive and a digital identity for all citizens, as an opportunity and not a requirement.

### 2.2.3. The new management of learning

In the past, we've formally managed learning by awarding and expecting credentials; this has been the function of the formal education system and various professional bodies. Employers use credentials as an approximate proxy for acquired skills and knowledge, and have, until now, had few other efficient tools for assessing actual skills and knowledge that individuals represent. We now understand that people acquire skills and knowledge from that formal learning, from informal and non-formal learning in the workplace and the community, from accidental and incidental learning in travel and human relations, but until we had an ePortfolio, we had no tool for manage that learning effectively and efficiently. So my son, who hasn't finished school but who has had a very successful business, is still called a "dropout" in Canada where we continue to think that people without credentials are likely to be stupid or criminal. We need to manage learning differently.

The digital archive is the place to record learning from environments over a lifetime; the ePortfolio becomes a presentation drawn from the archive for a specific purpose. This gives recognition to all forms of learning, and more importantly, the opportunity to use all forms of learning for the good of the individual, community, enterprise or nation. A purported ePortfolio that contains only formal learning is a simple digital transcript. The ePortfolio can be an alternative credential for those without formal credentials, such as early school leavers, and for those without recognized credentials, such as foreign-trained workers.

The process of creating both an archive and ePortfolio is one of translating experiences to a set of skills and knowledge and providing supporting evidence. More explicitly, the process is one of collection, selection, reflection, projection and presentation of learning. Without evidence of these processes, a purported ePortfolio is a simple digital resume.

### 2.2.4. Effective and efficient ePortfolios

The successful use of ePortfolios and implementation of ePortfolio systems, including digital archives and tools for end-users, will require attention to making them effective and efficient. The first time students are told they can't take their ePortfolios with them to the next level of education or to the workplace, they will question the value of investing time and effort in creating a second ePortfolio. The first time employers receive an abundance of ePortfolio applications for one job, they will question the wisdom of the process. Recognizing the pitfalls, groups of experts are creating technical standards for interoperability and transportability of ePortfolios and digital archives, i.e., removing the barriers. More importantly, ePortfolio experts worldwide have asserted the critical importance of personal ownership of one's ePortfolio, secure storage and access, affordability and utility to ensure ROI. To contribute to making ePortfolios effective and efficient, at FuturEd we have led in the development of internationally recognized ePortfolio Quality Standards and an ePortfolio quality checklist, a Consumer's Guide for making informed choices between ePortfolio tools and services, an ePortfolio consultation and training service, countless presentations and papers. But without panCanadian collaboration, ePortfolios will not achieve the immense potential for positive, proactive change in the management of learning, human capital and social capital. Many Canadians will have opportunities to create ePortfolios as students or trainees, but what is needed is the service that makes the ePortfolio transportable across learning and working environments.

### 2.3. LIfIA's role

An ePortfolio for Every Citizen! One ePortfolio for Life! Since 2004, these have been the rallying cries of the Learning Innovations Forum d'Innovations d'Apprentissage (LIfIA) and the European Institute for eLearning (EIfEL) in their combined, worldwide advocacy and research efforts.

One ePortfolio for Life means that a person should be able to carry his/her ePortfolio for a lifetime, from school to work to retirement; i.e., there should be no need to recreate one's ePortfolio; there should be return on the initial investment in an ePortfolio. With the rapid proliferation of ePortfolio initiatives and competing interests, there is an urgent need for collaboration between ePortfolio initiatives; informed and impassioned leadership on a nation-wide basis.

By *An ePortfolio for Every Citizen* we really mean that every citizen should have the opportunity to create and maintain a digital archive – a place on the Internet to collect and use digital materials created by oneself and others, a place to create and manage both social and human capital assets, a place that is owned by the individual, unquestionably secure, and accessible only by whomever the individual allows.

There is no need to choose one ePortfolio tool or approach. ePortfolio tools and services will morph and improve over time, ePortfolio tools will be created and used for a vast array of purposes.

There IS a need to create an online environment where all citizens can create, maintain and use their digital identity to advantage. To be effective, it cannot be a commercial service ultimately controlled by business interests, and it cannot be a government service that reminds people of Big Brother; it must an environment managed by a national non-profit agency that cuts across all the separate applications in education, employment, citizenship and community learning. The service must be trusted, professional and accountable to individual users. It must be useful, reliable, and engaging.

On behalf of Canadians, LlfIA stands ready to provide that ePortfolio service. LlfIA is licensing the most cutting-edge ePortfolio environment and creating a secure and enduring ePortfolio hosting service. LlfIA will ensure that all Canadians have access to a digital archive and ePortfolio presentation tools that account for all their learning and create effective transitions between school, work, community and lifelong learning. Already, LlfIA is the only body providing leadership and collaboration, and we believe that national, visionary leadership is necessary to ensure that the ePortfolio world does not become fragmented and competitive. LIFIA cannot do it alone.

### 3. Research Conclusions

### 3.1. Overall ePortfolio Utility to Immigrants and Employers

From our environmental scans, we have concluded that an ePortfolio system has utility in the workplace for, among other things:

- Pre-employment
- Recruitment and Hiring
- Employee Performance Management
- Talent Management/Succession Planning

# Potential Benefits Pre-employment

- · Gap analysis and goal setting
- Learner-controlled skills and knowledge building (learning portfolio)
- Track skills improvement over time (e.g. English)
- Confidence builder
- Job interview preparation
- Networking tool



# Potential Benefits Hiring

- More than a resume, less than an interview (pre- or post-interview resource)
- Virtual interview, shrinks time and distance (e.g. overseas)
- Digital evidence to support claims
- Secure validation of certifications
- Networked external resource interoperable with internal HRIS functions



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# Potential Benefits Employee Performance Management

- Reduced training costs through skills and knowledge recognition
- Individualized training based on competencies (better ROI)
- Transparent management tool for employee development
- Employee participation ~ motivation (promotion of lifelong learning)
- ISO 9000-2000 compliance (Both a product AND a process for continuous improvement)



# Potential Benefits Talent Mgmt / Succession Planning

- Internal hiring/team-building vehicle ("look inside first")
- Identify and track "High Potentials"
- KM "debrief" tool for exiting employees
- Workforce adjustment tool for layoffs
- Both a product AND a process for continuous improvement



In the context of the workplace, potential issues and barriers include:

- Time to build and assess portfolios
- Ownership and control
- Losing employees to competitors ("dark side" of labour mobility)
- Corporate Security
- Individual Privacy, Identity Theft
- Technology interoperability, mobility
- Technology accessibility (Digital Divide)
- Lack of widespread acceptance
- Language issues

### 3.2. Employer Views from Focus Group Research

What do employers think of the possibilities of an ePortfolio system for skilled immigrants and for themselves? On the basis of our background work, we developed a focus group protocol and conducted focus group research in five locations across Canada. Their conclusions and recommendations have been imbedded in our national strategy. A summary report can be found in Appendix A.

# **Employer Perspectives**

- Good timing: rising skills shortages, immigration levels
- Examples in Job Banks and PSC system
- Benefits
  - Good potential :for niche sectors, skill sets, countries
  - Transparent tool for diversity and equity
  - Early adopters could have competitive hiring advantage
  - Ease/improve recruitment, reduce wrong hires

### Potential Barriers

Cost, regulatory body acceptance/validation, privacy, ownership, process inertia, consistency

### Acceptance Factors

 Simplicity, accessibility, usefulness as a screening tool, trust, confidentiality, standards, integration, flexibility, extensibility, government support, marketing, training

#### Solutions

- Fit eP into existing interviewing and hiring practices
- Incremental approach with action research to measure benefits
- Make eP mandatory (!) with allowed exceptions for inclusiveness



# ePortfolio as a Tool to Describe Skills and Knowledge

- Majority in favour ("digital matching service", "living document", screening tool, digital evidence of credentials and experience
- Benefits:
  - Accessible documents of work accomplishments vs. credentials
  - Pre-employment bridging tool, linked to LMI
  - Help standardize competency language
- Acceptance Factors
  - Accuracy, consistency, ease of use
- Potential Issues
  - Time for creation and processing, privacy, content maintenance, system integrity, overall responsibility...



Employers working with EMCN support a process of creating such a portfolio based on principles of adult learning and Prior Learning Assessment and Recognition, and speculate that an ePortfolio could be used in a variety of ways.







- ❖ <u>Information</u> for the client and the agency
- ❖ Assessment/Self-assessment & Reflection— client's credentials, experience, language proficiency and interactions with licensing /regulatory bodies (PLAR, CLB, IQAS -results) will become "artifacts" in the client's portfolio. Reflection on past learning and determination of relevance to practice of the immigrant's profession in Canada.
- \* <u>Bridging</u> filling the gaps and taking new career directions. Being in control of one's own career.
- \* Facilitated Job Search e-portfolio

### 3.3. Views of Supporting Agencies

A national consultation group was convened March 28 in Ottawa, with representatives from the following agencies:

- Association of Universities and Colleges of Canada
- Canadian Plastics Sector
- International Credential Assessment Service of Canada
- CAMC
- Indian and Northern Affairs Canada
- TRIEC
- Skills International
- Canadian Labour and Business Centre
- Capacity Canada
- Centre for Canadian Language Benchmarks
- National Visible Minority Council on Learning
- SHRC
- Canadian Info Centre of International Credentials

Following an information session regarding the ePortfolio and our proposed strategy for skilled immigrants and employers, the group was asked the following questions:

- 1. Do you need any more detail before we move into the consultation questions?
- 2. Does this strategy, as set out, make sense to you? What clarification is needed?
- 3. Do you see an advantage to this proposed national strategy? Would you support it?
- 4. What disadvantages do you see? Can they be changed?
- 5. What would you add to the strategy? What would you remove?
- 6. Would you participate in it? What role do you see for your organization?

All of the participants expressed genuine interest and support, indicating that if they couldn't be actively involved, they would certainly support the initiative.

### 4. Proposed National Strategy

### ePortfolio for Matching Immigrants and Employers: Solving the Problem of Transition to Appropriate Employment in Canada

The **problem**, in Canada in 2006, is that:

- while immigrants contribute to the building of Canada, more immigrants are needed to sustain both population and economic growth; and
- there are growing skills shortages in almost every industry in Canada, and within Canada,
   competition for employees is fierce;
- employers are reluctant to hire immigrant, and they've acknowledged that they have difficulty recognizing foreign qualifications and understanding international work experience;
- yet Canadian industry also competes in an intense global marketplace for skilled professionals and tradespersons, and
- Canada is not the destination of choice it once was because skilled immigrants have difficulty getting appropriate jobs in their trades or professions and the barriers to working in Canada have become common knowledge, and
- at the same time, immigrants are becoming less attracted to Canada as their home economies begin to thrive; and therefore
- new policies and practices are needed to encourage and assist more skilled immigrants to choose Canada and to thrive here.

The solution, among other things, is an ePortfolio system in which:

- immigrants and others can set out clearly competencies acquired from formal, informal and non-formal learning and supply supporting digital evidence using established Canadian occupational skill standards as a framework and innovative new technologies; and
- using the same occupational standards, employers can clearly set out specific competencies
   required of recruits to their workplaces using the same technologies; then
- an electronic labour exchange function matches immigrants to jobs on the basis of competencies, with supporting digital evidence, rather than strictly on questionable credentials.

The **obvious benefit is that one ePortfolio system** can be used by:

- all workers in Canada: employed, unemployed, underemployed, self-employed; skilled and
  unskilled immigrants; young Canadians looking for their first jobs and seniors filling retirement
  time; entrepreneurs developing market niches; employees of all ages making career plans and
  job transitions; and
- all employers and industries in Canada: managing human capital assets; recruiting and placing employees; targeting skills upgrading; developing succession plans; demonstrating quality assurance; and

- educators at all levels of formal education and training: for demonstration and assessment of student learning; demonstration of faculty competence and institutional achievement;
- all citizens for lifelong learning management, digital storytelling and cultural archiving, creating and managing a digital identity.

### As we conceive of it, an ePortfolio system is characterized by:

- a variety of digital tools and services that are interoperable and transportable within
   Canada and the global community;
- an online ePortfolio environment for digital archiving and purpose-driven presentations that is secure and enduring, with Canadian's data stored in Canada;
- access to a personal ePortfolio environment for each and every Canadian, owned and managed exclusively by the individual;
- balanced support for both producers and users of ePortfolio tools and environments;
- deliberate and systematic collaboration and communication between service providers to ensure transportability, quality and utility of ePortfolios;
- various services for developing, implementing and evaluating ePortfolio environments;
- **opportunity for engagement by all** industries and employers, regulating bodies, education and training providers, immigrant serving agencies;
- a requirement to provide Return on Investment.

### What we are proposing, then, is:

- a Pan-Canadian program (to benefit all regions of Canada, with federal funding)
- that is developed, implemented and evaluated (phased in over 5 years, with attention to impact and Return on Investment)
- for an **ePortfolio system** (interoperable tools for both creating and processing electronic portfolios) in a suite of tools for digital archiving, communicating and collaborating
- for **both** employers (as processors) and skilled immigrants (to Canada) as creators (*with the intention to extend to include all immigrants and all Canadians when possible*)
- that helps immigrants set out skills and knowledge acquired through formal education,
   workplace training and experience, and non-formal learning experiences, with supporting digital
   evidence (in a manner that is recognized by Canadian employers)
- that relates directly to the stated skills and knowledge required by employers in Canada (as per stated professional and occupational skill standards),
- and which helps employers (in enterprises of all sizes and industries) set out clearly and
  objectively the necessary skills and knowledge for employment using the same ePortfolio tool as
  a "digital checklist",
- thereby creating and implementing a system (for employment and development of skilled immigrants) that is **effective**, **efficient and electronic**.

### Why we think this is important is because:

- skilled immigrants are having difficulty gaining employment in their skilled trade and professions when they come to Canada;
- employers have difficulty understanding the credentials, work experience and non-formal learning of workers from outside Canada; and
- this is a socio-economic problem for all Canadians, however
- there are databases of stated skill and knowledge requirements for many trades and professions in Canada (in addition to Essential Skill standards and employability skill standards)
- that can be accessed and utilized digitally by both employers and skilled immigrants, and
- that can serve as the ideal framework for standards-based ePortfolios,
- thereby increasing the Return on Investment in these existing large-scale initiatives in addition to
- more quickly and appropriately engaging skilled immigrants in the Canadian workforce and
- solving employers problems with skills shortages and lost business opportunities.

### Who we think should do this is:

- a coordinating body that is independent of government, able to engage the entire
  ePortfolio community, and linked to immigrant-serving agencies, education and training
  bodies, and international initiatives, i.e., the Learning Innovations Forum d'Innovations
  d'Apprentissage (LIfIA)
- with a **management team** comprising government representatives
- and an advisory team of actual employers from a spectrum of industries, both private and public sector and employer representatives from, e.g., sector councils and business organizations
- working together with a team of actual immigrants and representatives from Immigrant Service Agencies, unions and professional associations.

**How** this would be done would include, but not be limited to, the following:

- establishing advisory and management teams;
- establishing **criteria** for form, format and utility of an ePortfolio environment from the employment perspective (standards-based ePortfolio for presentation purposes);
- developing ePortfolio tools and services that link to Canadian occupational skill databases;
- piloting ePortfolio tools and services with targeted employers and skilled immigrants;
- assessing for impact and Return on Investment; and
- extensive public awareness and public education.

### When to do this is immediately because:

- the ePortfolio is an innovation with immense potential for the management of human and social capital, and
- recognizing this, there is a sudden burst of interesting but uncoordinated and competitive
  activity aimed at the development of tools and approaches in the education system, the
  workplace, and in lifelong learning; however,
- the value of the ePortfolio can only be realized if an ePortfolio provides Return on Investment, is transportable between systems over a lifetime; owned and updated by creators; and utilized to advantage by processors, e.g., employers and educators; and
- this will not happen without immediate, coordinated, and collaborative leadership.

**Who** are "we"? LlfIA is a national, non-profit corporation with membership from across Canada. Through projects and partnerships, **LlfIA** actively advocates for:

- An ePortfolio for each and every Canadian (a digital inventory of skills and knowledge acquired through formal, non-formal and informal learning);
- One ePortfolio for life (a system of interoperability, security and transportability that enables individuals to take their ePortfolios from school to work to the community throughout a lifetime);
- ePortfolio tools and systems that meet recommended quality standards for transportability,
   ownership and utility; and
- An ePortfolio system of production and utilization for maximum effectiveness and efficiency.

### In support of this proposal, we have:

- Conducted situational analysis and prepared extensive reports on ePortfolio systems in general,
   in the workplace and for skilled immigrants, giving us the ePortfolio expertise we need;
- Conducted research with employers, skilled immigrants and associated agencies who, we find, support this concept and want to see it implemented, giving us the **support networks** we need;
- Developed ePortfolio tools and services, giving us the practical experience we need;
- Consulted broadly within the Americas and the European Union for best practices and emerging issues, giving us the currency and context we need;
- Developed partnerships and working relationships across Canada and internationally, giving us the **leadership reputation** we need;
- Organized conferences and completed large projects, on time and on budget, giving us the management credibility we need;
- Focused on ePortfolio for transitions between school and work and community, giving us the objective position we need;
- Advocated for ROI for learning innovations, giving us the accountability mechanisms we need.

### LIfIA is now prepared to:

- serve as an agent, outside of government, to champion and lead panCanadian development
  of ePortfolio systems, with common standards in a competitive environment, to achieve more
  efficient development and greater utilization of Canada's human capital assets, i.e., the
  knowledge resident in Canadians of all ages and abilities;
- **develop, implement and evaluate ePortfolio systems**, specifically for skilled immigrants making the transition to employment in Canada in 3-5 pilot situations:
  - o one or more sector councils (e.g., Aviation maintenance, trucking and plastics sectors),
  - o one or more immigrant-serving agencies (i.e., Edmonton Mennonite Centre for Newcomers),
  - o one or more regulated professions (i.e., professional engineers, nurses),
  - o one or more non-regulated occupations (e.g., nanny, construction workers); and
- demonstrate that an ePortfolio system can contribute to solving problems faced by skilled immigrants as they seek appropriate employment in Canada, and employers faced with skilled shortages and hiring challenges.

### Appendix A

### **Summary of Focus Group Research with Employers**

In terms of **background**, LlfIA and project partners are in the process of drafting a strategy, to be submitted to HRSDC, for an ePortfolio system that would meet the needs of both skilled immigrants and employers in the process of appropriately connecting one to the other.

The **ePortfolio** is an accepted means for an individual to set out acquired skilled and knowledge, with digital evidence, from formal education and training, workplace training and work experience, and all other learning venues. In the case of skilled immigrants, the purpose of creating an ePortfolio would be to gain employment commensurate with foreign qualifications and experience – both of which employers find difficult to assess. Therefore, the focus of this research project is to determine the elements of an ePortfolio and ePortfolio system that would be used effectively and efficiently by employers.

The **purpose of this focus group research**, part of the planning process, was to gather the informed opinions of actual employers from a variety of sectors.

In each of **five** provinces representative of different regions of Canada, LlfIA engaged and supervised lead parties to conduct **focus groups that were similar in composition and addressed the same questions.** 

- BC, by FuturEd
- Alberta, by EMCN
- Manitoba, by Learning Agents
- Ontario, by LIfIA (with Learning Agents assistance)
- Nova Scotia, by LlfIA (with Campus Canada assistance)

**Participants** were to have included at least one person from each of the following categories. One person may have represented more than one category. Focus groups were to be approximately 10 people, actual employers and/or HR personnel rather than employer representatives.

- 1. Employer types
  - a. Public sector
    - i. Government
    - ii. Non-governmental (NGO)
  - b. Private sector
    - i. SME (small business with less than 50 employees)
    - ii. Large business
- 2. Employment type
  - a. Regulated profession (e.g., engineering, nursing, teaching)
  - b. Regulated trades (e.g., carpenter, ship building)
  - c. Non-regulated profession/trade (e.g., nanny, IT technicians)
- 3. Context
  - a. Employers who have little difficulty employing skilled immigrants
  - b. Employers who have great difficulty employing skilled immigrants
  - c. Employers who may themselves be skilled immigrants

There were almost 50 attendees in total for the 5 focus groups. Representation was from the following organizations:

### 1. an ePortfolio as a tool to describe acquired or required skills and knowledge

The majority of participants were in favour of ePortfolio as a tool to describe acquired or required skills and knowledge. It was portrayed as a digital matching service, a living document, an archive and a communications tool. Focus group attendees noted that currently there are a vast array of formats and qualities of information.

Participants agreed it would be useful for screening as a pre-interview tool, for addressing problems hiring immigrants (e.g. insufficient language and interpersonal skills) and for understanding cultural differences. In addition, digital evidence would allow the employer to confirm credentials and experience. As a pre-employment tool ePortfolio could provide standardization and consistency in competencies and training.

Participants agreed that a positive would be the higher level of accessibility; a big benefit for organizations and candidates alike, particularly with standardized formats for information retrieval systems e.g. search functions, flexibility in which to view formats, etc. It could ID potential recruits (filter through an online system such as Workopolis) because it could be more diverse, customizable and richer in accomplishments. ePortfolio application could also address the need for advanced communication of labour market realities/information. A portal could assist in getting information across modernized with links to labour market groups in each province.

There was strong emphasis placed on accuracy, consistency and ease of use. Search and screening features were discussed and integrity of information was considered very important. Participants identified additional value of ePortfolio use in assessing and documenting prior learning, and providing information on job searching. Participants indicated that it would be critical that information posted on ePortfolio truly represented the individual.

If a user-friendly system was developed and the information standardized, along with quick and easy access, then the majority of participants would consider ePortfolios as an enhancement to the process of bridging skilled immigrants with employers. For immigrants, ePortfolio could provide links to the Canadian work environment, tools on how to apply for jobs they are qualified for (instead of being underemployed) and emphasize the importance of language training and prior learning.

ePortfolio could also be a tool for achieving a common language for competencies. It would be more than credential as it could offer a way of digging deeper past the resume to ascertain real competencies. It could focus on work accomplishments rather than education. Nationally standardized ePortfolio would help employers make the hiring process easier. The system could facilitate a better understanding of skills, terminology, and education in different countries.

Concerns about abuse of the system were also on the forefront of discussion. Who would be responsible for maintenance, policing, integrity, etc? How would credentials be recognized on such a system? Privacy was considered a major concern if ePortfolios are maintained through a system, particularly government. Some of the biggest challenges would be portfolio maintenance (for both parties), system integrity, speed and accuracy, and keeping information current and relevant.

### 2. employer perspectives on an ePortfolio

The majority of participants were in favour of the application of ePortfolio for employers. Participants generally felt that now is a good time, as any enhancement that can assist employers to connect with skilled workers during this current labour shortage would be positive. In addition, they noted that the time is ripe as the labour force changing over due to demographics. A good, working system is highly desirable with positives greatly outweighing the negatives. It was also considered a constructive move toward responding to the current and future increase in immigration.

Representative employers concurred that they need a better way to recruit, train and retain immigrants but expressed agreement that there would need to be training for both employers and immigrants to make ePortfolio an effective tool in their hiring process. Most agreed that ePortfolios would act as an

excellent screening tool for employers and agencies that can make the adjustments and commit the time to alternative methods of screening and recruiting. It was agreed that there would be advantages to being able to see and "experience" skilled immigrants through the ePortfolio system and that it could promote a holistic form of recruiting. It could also improve understanding of international credentials and facilitate the selection process for interviews and assessment. One group felt that for employers with sufficient time to commit to investigating each individual, the ePortfolio would be a useful tool in learning more about an applicant and their potential.

Generally speaking all focus groups agreed that the ePortfolio could be an excellent tool for employers who are looking for specialized skills and experience (especially from particular countries). It was suggested that an ePortfolio system provide a component for how employers can indicate their skills needs preferably with a dynamic format. Participant noted that job banks could have some useful examples and the Public Service Commission has its own system. There is also the potential to knit with existing company skills inventory. ePortfolio could be a transparent tool for diversity and job equity. Early adopters could have the competitive advantage and EPortfolio could be an internal promotion tool. Focus group attendees were also inspired by opportunities for organizations to use the strategy to create a database that would allow better management of resources, manage training and plan for succession. It could also be applied as an instrument for organizational flexibility and change.

Several identified it as an approach that would be very valuable with the organization to support recruitment or succession planning but expressed some concern about how it might apply in hiring within their organization. Reasons for this hesitation included lack of awareness of ePortfolio application, concern that regulatory bodies would not accept credentials, issues of privacy and sharing of company materials, and the potential cost of implementing new technology or hiring resources. Many focus group participants held preconceived ideas and attitudes with respect to certain aspects of the ePortfolio concept e.g. funding sources, relationships, organization, responsibility, security and privacy issues. One participant noted that if a company develops the ePortfolio, privacy legislation suggests they have to give employees everything they have about them, including what is on their ePortfolio. Addressing these points before developing an implementation plan would be an important step in gaining valuable, ongoing support while assisting in shifting paradigms and generating new ways of thinking. Some participants noted they would use ePortfolio, but as an additional tool, not a replacement tool.

Factors that would make it more likely for employers to incorporate ePortfolio included ease of use, trusted and accepted standards, assurance of confidentiality, integration with existing systems, coordinated efforts of government departments, and access to support for training and assessment. Participants agreed that simplicity in the beginning and the ability to effectively screen applicants was critical in order for employers to utilize such a system.

Focus group respondents stated that employers and employment professionals would utilize the system if they were clear on the concept, and the benefits could be communicated. Participants agreed that promotion and marketing is crucial in order for the ePortfolio system to be successfully implemented and utilized e.g. it seems to be a good idea in principle but not necessarily in practice. Participants noted that articulating and actualizing the potential would be critical in developing a tool that will be supported by key individuals in multiple industry sectors.

Time, money, relevance and effectiveness were very important. The first and most basic benefit that would attract the use of an ePortfolio system (within industry) is if it made recruiting *easier* for employers. Second, would be the human aspect, the *increased ability* to find the right person for the right job at the right time. Participants emphasized that professionals involved in recruiting have a need to make decisions quickly and accurately. Employers want to have prompt responses and connect with candidates who are organized and responsive job seekers. The tool must also have easily accessible technology for both the employer and employee and be available to everyone. One participant suggested it would have to be easier that the education model. It was also felt that most employers may have reservations about abandoning traditional methods for recruiting. Adopting a new approach to recruiting could be difficult. One suggestion was to fit ePortfolio within existing interview and hiring practices. Consistency of implementation was discussed; employers may question the use of an ePortfolio when the majority of other employees (immigrant and non-immigrant) are being hired using traditional methods.

Most agreed that the ePortfolio concept would work well within human resource departments but not necessarily on the front lines with hiring managers and decision makers in the "direct" process. Some industries are desperate for employees and are much more willing to engage in new practices to find qualified people. Others have a 'tried and true' approach and would find it difficult to make changes in what is already perceived to be a successful system. Participants agreed that their collective need for qualified people would assist in shifting paradigms and promoting the adoption of ePortfolio for use as part of the regular recruiting process. Situational awareness is important to recognize different HR styles - some are there to grow the workforce/company, some are there to protect the company from its workforce – the latter may would not necessarily be conducive to the ePortfolio expense.

One focus group discussed making ePortfolio mandatory. There was a mixed reaction based on a concern that it may exclude people. They suggested mandatory but allowing for exceptions e.g. accepting a paper résumé along with counseling to transfer to ePortfolio. An incremental approach was suggested along with measuring benefits as the process unfolds. One group recommended it be adopted as bottom up (off the radar screen) vs. top down. There was also a discussion of the unionized environment which precludes voluntary participation and may have a rigidity of hierarchy.

The employer perspective generally was that anything that would assist an employer with matching would have potential benefit for employers. Credential validation could be a key barrier to the success of this program. ePortfolio would have to have flexibility so that components could be added once validation could be established.

### 3. an ePortfolio system for creator and processor

Participants in the focus groups were enthusiastic about the opportunities for creators to demonstrate both skills and creativity and to support learning. They viewed the ePortfolio system as the same tool with two applications. One group noted the ePortfolio could be a tool for explaining non-formal learning, facilitating self-reflection and career development, and also as a preparation tool for interviews. It could provide an environment for lifelong learning. Also allowing the applicant to match their skills to the competencies required by the job competitive advantage.

In terms of concerns, there were questions about the time and motivation required to maintain and update records, portability of portfolio data and protection of privacy for both individuals and organizations. One recommendation was that the ePortfolio must be secure, be individually owned and portable, and be verifiable. Focus group discussions raised the issue of who would take responsibility for the creation/maintenance of the ePortfolio system.

One group noted there is a need for a model that is employment driven with a presentation to the employer of relevant acquired skills vis-à-vis required skills. There is also a need to equate and relate to employer language. The tool needs to be objective, accurate and be able to answer key questions. Employers want to see appropriate education and training but have problems with intangibles: work ethic, loyalty, emotional intelligence with online assessment tools – can ePortfolio address these criteria?

It was agreed that discrimination, both real and perceived, were barriers to both employers and skilled immigrants using an ePortfolio system. One participant stated that some employers may view a separate ePortfolio system specifically for immigrants as restrictive and this may add to an already existing bias regarding immigrant credentials and skills. Additionally, it was agreed that skilled immigrants effectively targeting industry and creating an ePortfolio (that is accepted by people within that industry) could be difficult. Knowledge of Canadian workplace culture and the dynamics of Canadian business were considered major barriers to individual immigrants (and their resulting ePortfolio development) due to both understanding existing systems and standards and because of systemic racism, particularly regarding recognition of experience and credentials. A suggestion was that HRSDC should be the gatekeeper and manage the system. Another comment presented noted that a negative stigma exists regarding government-run programs and ePortfolio could fall into the same category. A concluding note was that

skilled immigrants are not always top of agenda and suggested a broadened focus to consider youth and Aboriginals. Otherwise it could potentially be seen as exclusionary.

One focus group highlighted that the process could provide access to the digital divide (especially for job seeking newcomers). However, the group cautioned that the more technology that's involved, the less free the process is. It is important that it not become another hoop to jump through or raising the bar. IT systems available to immigrants must be adequate and there needs to be a balance between template and free design/content. Context is also important. Other focus groups noted that if immigrants were to work with a specific template it should also act as a learning process that encourages self-assessment and continued education regarding Canadian workplace culture. The use of an employment counselor was recommended to add a personal connection. Additionally the ePortfolio process may also help immigrants understand Canadian industry and cultural differences *before* arriving in Canada. One focus group noted that's where the most value would be – as part of immigration process. ePortfolio could assist in immigrants understanding their relative chances of employment and to identify what remedial training they may need. They would be in a better position to deal with the challenges.

However, concern also focused around front end communication of ePortfolio system to potential immigrants before coming to Canada. Canadian Embassies would need to advise people in advance about this system and to prepare people pre-entry. There was also a concern about candidate (immigrant) buy in. Why would this ePortfolio system be chosen over other options available? Additionally, how will immigrants deal with issues considering language and cultural understanding such as presentation standards in North America? Where would existing language programs fit in: TOEFL, IALS, Canadian Academic English Language Test, TOEIC? New immigrants may be frustrated when they have already done pre-screening before coming to Canada and then another screening once they get here.

A nationally recognized system with a variety of different processes and one consistent format was recommended. There was discussion of the 'semantic web' which would enable people to connect globally. Social networking tools would be an important piece in ePortfolio implementation.

### 4. national implementation strategy

Focus group participants noted that a national strategy would send a message that Canada is serious about integrating skilled immigrants into the work force. It would also provide a way to address growing skill shortages throughout Canada. In principle, participants agreed that an ePortfolio approach could be an effective way to better integrate skilled immigrants into the Canadian workforce. ePortfolio could provide some standardization that would allow immigrants to present and support credentials in a way that would help employers more readily assess candidates, verify information and match people to positions.

Several points were emphasized including the necessity of early participation by all stakeholders as well as the need to coordinate with existing technology and systems. A coordinated national strategy would create better opportunity for necessary financial and structural support through cooperation between stakeholder groups such as all levels of government (including regulating authorities), employers, immigrants and placement associations. Sector Councils, industry associations and academic institutions were also mentioned. This would better ensure standards acceptable to regulatory bodies and the development of a comprehensive database of credentials and equivalencies. In addition, skilled immigrants and representatives should be involved at all stages as part of the coordinating body to ensure that they are owners of the process.

Concerns included issues of access to technology and training, difficulties of effective assessment and comparison, consistency of language, resource requirements for implementation, the need for standards that would be recognized and accepted by regulatory bodies, and potential costs to employers and users. Participants identified a need to associate all points of contacts for immigrants and employers. Questions included who was going to pay, and how the service would be delivered. All participants agreed that in order to be utilized (and taken seriously) the ePortfolio system must be of high quality and dependability.

It would also require structure for training to both employers and immigrants to support the implementation and integration. There must be support from regulatory authorities so that standards incorporated into the ePortfolio strategy would be recognized and considered acceptable credential for hiring within Canada, especially for regulated professions and trades. Without this acceptance, ePortfolio will not have value for employers and any effort at implementing an ePortfolio strategy would be wasted. Additional concerns were voiced about the buy-in required for all employers and organizations across the county to utilize the same tool in recruiting. There were also questions regarding jurisdiction in terms of federal and provincial relationships. Would it be in the form of provincial implementation with national coordination for example? There is also the issue of Canadians as 'skilled immigrants' which varied between provinces.

One focus group communicated their fear of expending large sums of money and resources on a complex ePortfolio system that may not be used. The question was also raised regarding this being a process developed for only skilled immigrants – how would the general public view this initiative? Has it been determined why each individual is not gaining and maintaining meaningful employment? The group agreed that enhancing existing resources might be a better approach than to develop new resources. It was suggested that an outsourced centralized server may make would make IT support and use more attractive. The sheer size of the project would be a major concern.

However, the same focus group agreed in supporting a pilot to determine to true validity of ePortfolios for immigrants. Pilot projects to research applications and results were recommended by all focus groups. One suggestion was for the provinces work together with the federal government to pilot a few sectors/trades/professions which would provide a national perspective: engineering, biotechnology, mining engineers and skilled trades. Goals and timelines would be necessary to measure success. It would also be important to benchmark against other systems around the world e.g. UK, U.S.

Participants expressed the need to assess existing projects to avoid duplicating efforts. A considerable amount of work has already taken place and it would be prudent to consolidate and leverage existing resources and avoid replication wherever possible. Tapping into current systems was suggested by all focus groups e.g. Ontario Immigration Portal. One participant suggested that people who already have their Skills Passport could use it toward their ePortfolio. It was also recommended that systems such as Workopolis and Monster understanding the value would be critical. Additional suggestions included researching existing networks and resources such as apprenticesearch.com, torontojobs.ca, Ontario job futures document and the Conference Board of Canada.

Participants emphasized that functionality will be a very important component in bringing an ePortfolio system to the pilot stage, and in gaining the support of industry leaders and ultimately, the decision makers. A highly organized linear approach with well thought out objectives and milestones would be appreciated (by organizations) as compared to a test and tell approach when participating, particularly at operational management levels. These professionals are busy with operations and generating revenue for their organization(s). They hold a great deal of responsibility and time is very valuable. They do not want to be handed a concept, they want to work with a solid tool that has a clear impact upon implementation.

It was agreed that a national strategy would address the need for immigrants to maintain/grow labour force. Labour mobility is a reality and there is a need for portability. ePortfolio allows employers to find and advance the people worth nurturing and provides a recognition tool for retention. It could be a potential attractor to make skilled immigrants choose Canada. It could also be part of immigration selection process and an international awareness building tool for employment requirements. The ePortfolio would be prepared overseas while waiting for approval, and would include documentation. Immigrants would arrive with their portfolio in place.

One group concluded a national ePortfolio system is an exciting opportunity to improve the integration of skilled immigrants into the Canadian workforce. Coordination of these components will help to ensure a system that is effective, efficient and flexible – for all users.