1. Introduction and Terminology

The purpose of this paper is to examine an ePortfolio tool to be used to advantage by communities, for community economic development, particularly communities in transition.

1.1. The ePortfolio

An ePortfolio is an electronic learning record – a digitally created and managed archive of skills and knowledge.

- The term “learning” is used as shorthand for “a body of acquired skills, knowledge and abilities (SKA) resident in either an individual or a community.”
- The term “electronic” is used to imply the use of a computer, particular software or tools, and, often, the Internet.

Typically, the ePortfolio is a tool generated and used by an individual, but there is reason to assert that the same tools, processes and uses apply to communities as well. Individuals and communities can use an ePortfolio to:

- Archive learning acquired from all forms of learning in an inclusive, objective manner;
- Provide evidence or verification of learning in a dynamic, multimedia fashion;
• Manage Human Capital Assets (skills and knowledge resident in humans) for and by themselves to, first, maximize usage of acquired learning and, second, conduct gap analysis to target required assets; and
• Showcase or promote particular assets as required.

Hypothetically, the ePortfolio and/or non-electronic portfolio is currently used in all levels of education and training systems as a form of
• Evidence and assessment of student learning;
• Learning, through the research and reflection required to create a portfolio;
• An enhanced transcript of time spent in a particular institution.

Pragmatically, the ePortfolio is imbedded in good eLearning as, first, a systematic means of prior learning assessment and, second, as the individual’s record of skills and knowledge acquired form a particular course or program.

Hypothetically, the ePortfolio may be used, in the context of employment and Human Resources management by:
• Individuals to make application for employment and advancement;
• Trainers to target training and improve effective and efficiency of training;
• Employers to match required skills to the acquired skills of job applicants.
• Enterprises to manage human capital assets effectively and efficiently;
• Businesses to showcase the breadth and scope of human capital assets.

Ideally, the ePortfolio is best used within a “system” of producer and consumer. At one end, individuals and/or communities create an ePortfolio, investing considerable time and effort in the creation process, hoping to be able to use the ePortfolio in an education, employment or promotion endeavor. At the other end, individuals and/or communities are expected to receive and process many ePortfolios, but to do this effectively and efficiently requires tools and systems that currently do not exist. The focus of this project is the creation of an ePortfolio tool that can be used by communities to archive and manage community learning and human capital assets.

1.2. The Community

A community can be one of several things:
• A group of people and enterprises within a specific geographic area, i.e., a local community;
• A group of people and/or enterprises that have a common cause or interest, regardless of geography, i.e., a voluntary community of interest;
• A public sector endeavor, such as a university or non-profit organization, i.e., a mandated or assembled community;

• A private sector endeavor such as a business, i.e., an enterprise community or production system.

Each type of community could use the ePortfolio with similar and different processes and purposes.

2. The Community ePortfolio Project

Individuals and education communities can easily access a large number of commercial ePortfolio tools and/or use them to create customized, proprietarial ePortfolio tools. However, it is not so easy for communities because the tools need to be modified to accommodate the nature and needs of the community. FuturEd has proposed a research and development project to create a Community ePortfolio Tool (CePT) and systematically examine the benefits and uses of this Knowledge Management tool from the community perspective. It has been conceived of as Phase 1 of a larger endeavor that could include wider dissemination to rural and remote communities across Canada and/or a tool with international development potential.

2.1. Project Objectives

The objectives of such an R&D project would be to examine and promote the benefits of the Community ePortfolio from the perspective of communities, their members and purposes. Specifically, this project focuses on developing a tool - a learning e-portfolio web application - that can be used by:

▪ Communities and/or groups to develop a list of collective “learning” - categories of Knowledge, Skills and Abilities (KSA) that the collective can use to advantage;

▪ Communities, workplaces or industries to assess their human capital in a collective sense and manage it in innovative ways

▪ Strategic planners and economic development agencies to help communities transition from one focus (e.g., sunset industry) to another;

▪ Governments to assist rural and remote communities to remain viable; and

▪ Industry sector councils and professional associations to provide better service to communities and workplaces.

In the knowledge economy, the ePortfolio should be used by individuals and by communities to maximize the use of human resources and competitive advantages. The web-based CePT will be designed to be expandable, incorporating existing and emerging portfolio tools. The application of the tools may be extended to specialized communities, e.g., of visible minorities and immigrants, First Nations, Seniors, rural and remote communities.
In the context of research and development, the concept of the ePortfolio is connected to:

- Community networks and community learning networks;
- eLearning and uses of ICT in education, training and human resources development;
- Application of and access to broad-bandwidth technologies and possibilities;
- Community asset accounting and community economic development;
- Human Capital Accounting and the management of Knowledge Workers;
- Prior Learning Assessment and the recognition of all forms of learning;
- Innovations in learning systems and HRD;
- Volunteer recruitment, development and management;
- Professional communities of practice and virtual communities;
- Community and enterprise branding and competitive advantage;
- Strategic planning and change management.

The ePortfolio exists at the intersection of all these important concepts, yet it is a simple tool at the cutting edge of ICT applications.

2.2. Project Activities

The processes inherent in this project include:

1. An environmental scan to learn from and link to any existing community ePortfolio endeavors, e.g., in Europe;
2. Specifications development for the development and use, form and content of a prototype Community ePortfolio Tool;
3. A product scan to assess the suitability of existing individual-purposed ePortfolio tools for modification and usability in the enlarged context;
4. Generation of a set of appropriate, existing skills profiles to be used in a web-based ePortfolio tool, with necessary permission and approval;
5. Tool development / modification to the proposed specifications;
6. Evaluation design and implementation involving all stakeholder groups;
7. Pilot testing in 2-3 communities with rigorous research and evaluation;
8. Modifications to the CePT based on outcomes and research recommendations;
9. Preparation of a research report for publication and promotion purposes;
10. Promotion of the CePT to increase use and accrue the benefits.

The purpose of this project is to develop a research framework and implementation plan for a larger research project that will then develop, implement and evaluate a web-based Community Knowledge
Assessment tool that imbeds PLA in community economic development and transitions to the knowledge economy for rural and remote communities.

3. **Research Summary**

3.1. The **objectives** of this R&D project are to:

- Create a web-based CePT tool, for use by communities, groups and industries to assess collective human capital, that is effective, efficient and usable in addressing socio-economic challenges;
- Contribute to a better understanding of ePortfolio tools in the management of individual and community Human Capital Asset;
- Assist communities to use human resources and other assets to advantage.

With wide dissemination and research substantiation, the tool and HCAM become self-sustaining.

3.2. The **research hypotheses** to be tested are that:

- Resident in the various members of a community are a bank of Knowledge, Skills and Abilities (KSA) that are “hidden,” underutilized and potentially valuable to the sustainability and prosperous future of the community;
- Conducting a community learning assessment, using a Community ePortfolio Tool, is a creative, positive and useful process in dealing with either community building or forced change in communities, groups and industries.

3.3. The **expected measurable outcomes** are:

- A number of case studies of communities that have created an ePortfolio;
- Positive change in those communities based on the completion and application of the CePT;
- An increased number of Canadians using PLA principles and practices, specifically recognizing non-formal and informal learning;
- A perceptible shift in HR practices from managing people to managing the knowledge resident in communities, i.e., the expansion of HCAM principles and practices from the individual to the group.

3.4. The intended success measures include, but are not limited to:

- The communities who complete and use the CePT to advantage in creating a preferred future.
- The number of governments that are able to assist communities to remain viable as they face forced change.
- A sense of the unrecognized human capital in Canada.
In summary, the project clearly links to Canada’s Innovation Strategy in that it utilizes existing web-based skills databases, PLA and ePortfolio tools; and develops innovative tools and a policy levers for managing human capital resident in groups and communities in and for the knowledge economy. The project clearly links to Research and Innovation objectives in that it: helps communities to create efficient systems and competitive advantage by effectively and systematically identifying and marketing their collective skills; and provides the basis for communities to better manage and develop industries and sustainable communities through human capital principles for the knowledge economy.