QR CODING PROJECT PROPOSAL

Prepared by

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Project Title: Using QR Code Technology for Community Information Including Heritage and Culture

Start Date: January 1st, 2013

Completion Date: May 31, 2013

Project Description

A. Background

This project will design and develop a QR coding system that tags relevant historical points of interest in Athabasca as a means of enriching the experience of people wanting to learn more about the places, people and events that have shaped the town and the area. The system will provide an easy method of creating QR codes, metadata entry, geo-referencing, and web linking for anyone wishing to update the information in future, or create new information. It will have a statistical tracking and reporting function to help measure use of the system.

Quick Response (QR) codes are easy to use, simple to make and becoming increasingly pervasive. They can be generated instantly, allowing users to access information using QR code readers with a mobile device such as a cell phone. The idea of linking spaces and objects to information is not new; parks and museums

have traditionally used interpretive signs for this purpose. But the addition of QR code technology allows for a much richer interaction with places and things by providing people with options to receive their information from an array of images, audio-files, videos as well as text. QR codes essentially provide new levels of meta-tagging that increase flexibility and interactivity with the environment.

At Athabasca University (AU), a QR coding pilot project was initiated in the summer of 2012. QR codes were used on Library event posters and were also featured at the AU Art Walk during the University's 2012 Convocation. QR codes linked a dozen spaces/objects to videos giving viewers the chance to access further information about the object, its place in the collection, or its significance to the University. For example, the AU Mace was tagged and linked to a summary of its history and importance. The summary was provided by the Registrar, who traditionally carries the mace at Convocation..

QR codes are a simple technology that can be used in many ways. The technology might, for example, be used to deepen a tourist's experience with interpretive signage on-site and then direct her to an array of other sites; the system might encourage school children to collect points along the way in a sort of treasure hunt. AU Library has been working with the Town of Athabasca on a QR Coding such a project aimed at assisting the town to market itself better to tourists. But the information could be of use to others as well. A local teacher, for instance, might choose to use the QR Codes with his students during field trips that focus on Athabasca's history.

The Town of Athabasca is in the process of updating a series of panels located throughout the community. The current panels, which have historical and nature images and text, will be augmented with QR codes allowing the user to link to timely information and activities in the town. The project will create content and apply fifteen QR tags to objects/places throughout the town, including AU campus. These QR codes will link to interactive and contextual contents, including short video clips from "experts" speaking about the object/place, and other visual and interpretive text. The information will provide an in-context tour of the town introducing objects, places and people important to the town. This project will include a pilot launch in May to determine the success of the project. It is anticipated that this pilot in Athabasca could be turned into a regional initiative that would attract and keep tourists in the area longer.

Project Partners:

Town of Athabasca
Athabasca Heritage Society
Athabasca University:

- Library
- School of Computing and Information Systems

- e-Lab
- Heritage Resource Management
- Office of the President

B. Objectives:

The objectives of this project are to:

- Design and develop a QR coding system to tag and code landmarks and attractions in the Town of Athabasca

- Conduct research on the history of the Town of Athabasca and liaise with library, archives, historical society and the public as needed for the QR Codes

- Digitize and develop content (audio, video, images) in support of the project, including short stories, images and other media; these will be recorded, archived, and coded

- Create tags with content for at least 15 locations in the Town of Athabasca and AU campus

- Conduct a pilot launch to test usability and feasibility of using QR codes in the Town of Athabasca

- Prepare a summary report on the technology used and results of the project

- Prepare guidelines or best practices to help other towns regarding QR code technology deployment

C. Project Benefits:

- Promote tourism and investment through the use of rich sources of information, freely and conveniently available to anyone with a mobile device. The longer tourists and others spend in the community, the greater the benefit to the local economy and the greater its profile

- Present the history of community as a seamless web through rich content about people, places and events

- Establish connections between otherwise separate parts of community life, increasing an appreciation of heritage as a relevant and important part of everyday life

- Foster the development of regional identities through use of similar technology and approach to community content

- Meet immediate and long- term digital preservation needs of materials and resources that are difficult or expensive to preserve in other formats

- Create an environment in which multiple formats make use of one aggregated source

- Produce and actively promote the resulting tools, prototype framework, report, and best practices document to small towns, small museums, and heritage organizations in Alberta, allowing them to set up their own QR code system easily and economically

D. Funding:

We have received a grant from Alberta Tourism ($8,000) to complete the Athabasca project as a pilot to showcase the technology to other municipalities.

E. Process and Timelines

December 2012	The project team will meet with interested parties, stakeholders, and individuals for contributions to use for the objects and places that will be QR coded. Identify landmarks to be included and content to accompany them.	
January	The project team will hold design phase and technical meetings with project groups and Computer Services, reviewing the QR code system requirement, metadata standards, format being used, and system support.	

	Develop timeline and documentation for implementation strategy and conduct strength and gap analysis. The project team will acquire hardware, software and resources for project use. The library will hire a project facilitator/researcher to conduct research on the history of the Town of Athabasca and liaise with the library, archives, historical society and the public regarding content and project. On a regular basis, the project team will conduct the following: • Group and input co-ordination • On-going researcher training • On-going input editing • knowledge dissemination	
February – March, 2013	The project team will perform the following: • Design QR code template and metadata • Create content • Metatag content • Create unique QR codes • Design and prepare questionnaire for pilot launch use.	
April – May 2013	The project team will operate the QR coding system and test the system with various devices and platforms. The project Team will document the development and create a guideline or best practice document for others to use. The project team will provide user training and conduct system feasibility and	

	reliability assessment. The project team will research and explore the use of QR/NFC codes for other community services and information retrieval.	
June, 2013	The project team will prepare a report on the technology used and result of the project.	

F. Project Management

The principal developer will manage the project. Progress will be monitored by the development team through periodic team meetings and review of the work of the team members, web developer, and project partners.

Personnel

Role & duties of the principal developer	To oversee and manage the operation of the project.
Role & duties of the co-developers	To assist with the operational and technical aspects of the project, including system and content development, implementation, maintenance, documentation, digitization, and user training and support.
Education and experience required of personnel who will be working on the research project	The principal developer and co-developers hold positions at Athabasca University in relevant fields. The project facilitator/researcher hired will have documented experience in the relevant field(s).

G. Dissemination

- Information/Articles on ARDN site and on university websites and publications
- Articles in local newspapers, interviews on local radio
- Information session at local schools

- Report/best practice document
- Workshop
- Social networks

Members of the project team will be available to make presentations on the QR coding project in conjunction with town-sponsored and other special events such as the Municipal Heritage Conference, a Lunch ‘n Learn session at the University and an ARDN engagement workshop.

Members of the development team will create a QR code and poster to promote the project.

H. Results

A fully functional QR Coding system to provide easy access to the town’s attractions and heritage information through pointing at QR codes with mobile devices.

I. Performance Indicators

At the system level, we will test for functionality and usability and evaluate the feasibility and reliability of the system. Usability and efficiency are important key performance indicators; this will be reflected by increased usage and feedback from the users.

At the institutional level, findings from this project will be reported to Town Council and ITS committee informally and formally through reports presented to funding agencies. Findings from this project will be presented at appropriate scholarly conferences and submitted to appropriate journals for publication.