



DECCAN HERITAGE  
FOUNDATION

## Design and Development of a 360-degree Virtual Tour



### Partner: DHF (Deccan Heritage Foundation)

The Deccan Heritage Foundation (DHF) is a charitable organization whose goals are to preserve, restore and promote the rich heritage of the Deccan region of India through conservation projects, cultural promotion, and educational programs.

One of DHF's key projects is being undertaken in Bidar in north-eastern Karnataka. A geological feature of Bidar is its porous laterite soil that retains water. Medieval period city planners cleverly utilized this to build several open wells, tanks and pools for water storage and distribution. They adapted an ancient Persian water technology system called karez or canal – which, with its network of gradually sloping, subterranean water tunnels carved into permeable rock and accessed through vertical wells, allows for water storage and distribution to local communities. More than five hundred years on, in the midst of the worst drought in forty years, Bidar district administrators are cleaning and reviving one of the twelve karez network lines with remarkable success.

### About the Program:

Sonata has developed a 360-degree virtual tour of the Bidar karez. The platform - [www.bidarkarez.org](http://www.bidarkarez.org) - uses still photography and video streams taken over a four-month period when water levels inside the tunnels were at a low, to provide a panoramic digital and virtual tour of the entire stretch of the karez system.



### Expected Outcome:

Once restored, the karez is expected to significantly alleviate the quality of life of the local population by increasing access to clean drinking water with minimum energy costs, and improving agricultural productivity as well. The karez will also serve as a model restoration project that combines economic benefit with the preservation of our heritage.

Sonata's platform is helping promote this unique initiative amongst visitors, students and research scholars. Our technology will help amplify the efforts made in the preservation of an authentic historical fabric. It will also help fulfill an important mission of DHF – that of bringing the Deccan's rich heritage to a new generation of Indian as well as foreign visitors.

"Deccan Heritage Foundation India (DHFI) and the Indian Heritage Cities Network Foundation (IHCNF) had a requirement for dissemination of information on one of their ongoing projects, the rehabilitation and revitalization of a historic water system unique to Bidar. Sonata Software generously contributed as part of their Corporate Social Responsibility in building a project website. We at DHFI and IHCNF and other partners are grateful for the time and effort put in by the team at Sonata Software and supporting our cause. As one of the few conservation projects in India with a whole website dedicated to disseminating its every aspect, this is one of a kind.", *Ambassador Latha Reddy, Founder and Chairperson DHF*