

## PolyU students receive Silver Award for best concept

PolyU students Cheng Mei Na, Kwong Kuk Hung, Leung Po Ling, and Ng Chun Kit won the **Silver Award** (Best EPC/RFID Concept) at the Hong Kong U-21 RFID Awards 2012 presented by GS1 Hong Kong. Under the guidance of Dr W.H. Ip and Prof. Benny Cheung of the ISE Department, their team created an innovative project called **“ePlatform for Collective Memory Acquisition and Preservation – Sustain our Unique Legacy Easy (eCAPSULE).”**



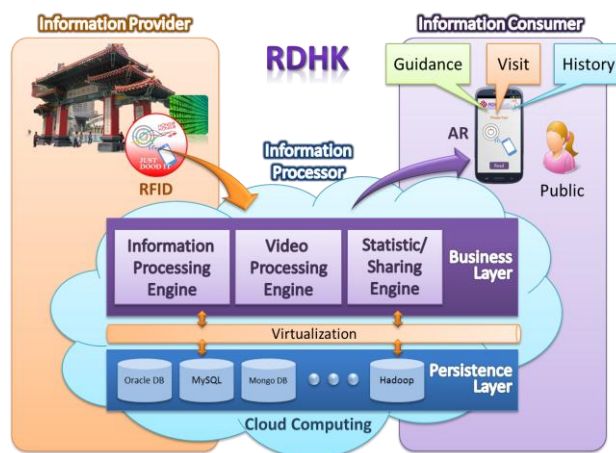
Team members (from left): Ng Chun-kit, Kwong Kuk-hung, Leung Po-ling, and Cheng Mei-na

The award reflected the high level of originality and creativity among young talents from Hong Kong, particularly in adopting EPC/RFID technology to address a well-defined daily problem. Consequently, this innovation has foreseeable market potentials. Their winning project, “ePlatform for Collective Memory Acquisition and Preservation – Sustain our Unique Legacy Easy (eCAPSULE),” leverages RFID, cloud computing, augmented reality (AR), and geo-social networking technologies to enable visitors and locals to discover the underlying local culture of Hong Kong. In using mobile devices to read RFID location tags installed at places of interest and guideboards, the innovation can help Hong Kong better promote local cultural heritage and conservation through building and enhancing a collective memory. Since the winning team was interviewed by local news, Sing Tao Daily, the project has raised public interest and awareness. Moreover, the published article on 19 November 2012 showcased the team’s remarkable idea of utilizing RFID and other emerging technologies in culture conservation as well as heightened the project’s significance.

### Details on the winning project – “ePlatform for Collective Memory Acquisition and Preservation - Sustain our Unique Legacy Easy (eCAPSULE)”

As a tourist destination, Hong Kong has long been regarded as a shopping and gourmet paradise. However, the city has much more to offer other than just luxury goods and fine dining with a rich cultural heritage infusing Eastern and Western cultural influences. This heritage has been largely overlooked despite its potential in helping broaden the appeal of Hong Kong’s indigenous culture. Indeed, it has only been in recent years that Hong Kong’s cultural heritage merited more scrutiny. In fact, it was the demolition of Queen’s Pier in 2008 that eventually sparked intense public debate over the need for more local cultural conservation.

By leveraging RFID technology, cloud computing, AR, and geo-social networking technologies, the ePlatform for Collective Memory Acquisition and Preservation – Sustain our Unique Legacy Easy (eCAPSULE) concept project aims to assist Hong Kong better promote local cultural heritage and conservation. Designed by students from the ISE Department of The Hong Kong Polytechnic University, this project enables visitors and locals to discover the underlying local culture of Hong Kong using mobile devices to read RFID location tags installed at places of interest and guideboards.



System Architecture of platform, RDHK, of eCAPSULE

The user simply uses his or her mobile device to scan RFID location tags to access information regarding a location on a cloud-based database via a pre-installed mobile application. The platform provides integration with popular online multimedia and social networks such as YouTube and FaceBook. In this manner, the eCAPSULE not only serves as a convenient tourism guide to augment a visitor’s experience of Hong Kong, but can also be utilized to build a collective memory for local cultural conservation and sustainability, as well as to promote the city’s cultural heritage.