



BLUE BAMBOO

simple. reliable. affordable.

Entertainment Venue at Beijing 2008 Olympics Games uses contactless payment technology to manage volume, speed and security:

Holland Heineken House selected [KuaiPay](#) and [Blue Bamboo](#) as partners to design and integrate a wireless and contactless payment network to support their hospitality and merchant requirements.



ABOUT THE EVENT



The **Holland Heineken House** is the traditional home away from home for the Dutch sporting world throughout the Olympic Games. Having first opened its doors in Barcelona 1992, the XXIXth Summer Olympiad in Beijing was the 9th time in succession that the Holland House will be open to all Dutch sportsmen and women, their families, friends and supporters, sponsors, VIP's and media representatives during the Olympics.

THE CHALLENGE

Design a low cost, closed loop contactless payment system to delight the Dutch contingent as part of their Olympic experience. Focusing on speed, simplicity and security, the KuaiPay and Blue Bamboo systems integration team confronted connectivity, networking, card acceptance and payment processing issues for the 16 day, one-time event set on the sprawling grounds of Beijing's Agricultural Museum site. As for connectivity, it was not realistic to deploy dial-up or GPRS configured devices as they would require Telco / data plans and on-site carrier coverage, which was a concern. A traditional wired Ethernet network was deemed not practical due to additional equipment, set-up and tear-down costs. Additional challenges include service quality and high transaction volume periods. Conventional acceptance of cash would not be preferred due to theft concerns and the diversity of tourists carrying various currencies. Finally, credit card acceptance in China is relatively immature, especially for non-China bank issued cards.





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THE SOLUTION



The first part of the solution included a central payment point at reception for accepting cash, credit and debit, along with the “topping up” of visitors pre-paid contactless cards. The second part included the deployment of Bluetooth enabled H50 contactless terminals, for deducting value from the cards and to process the transactions (i.e. food and beverage payments).

The third piece was to link all the devices together using a Bluetooth™ wireless local area network (WLAN), which is significantly more reliable with respect to up-time than a WWAN. This feature provided wait staff with the freedom to move around the venue with “no wires” while staying connected. The fourth and final component was settling the transaction using KuaiPay’s proprietary payment network, which include the back-end processing switch, and payment reporting system. As a result, all visitors can simply purchase a prepaid contactless card as the universal payment method for all bars, restaurant, shops and club within the venue.

THE TECHNOLOGY

Leveraging Blue Bamboo’s existing technology stack, built on a [GlobalPlatform](#) Java open standard, with secure microprocessor technology from [InnovaCard](#) and Bluetooth™ wireless networking components from [Bluegiga](#), an integrated WLAN based payment terminal network was built around Blue Bamboo’s new BlueBox™, a class 1 multi-radio wireless access server. This combination resulted in a high speed, robust and stable communication solution, providing ranges up to 80 meters to cover more than 75,000 square meters of floor space.

SUMMARY

Blue Bamboo's solution is significant as it combines several new technologies, including embedded contactless into a wireless “pay-at-the-table” configured POS terminals and a new Bluetooth™ wireless access server that provided the HHH team with innovative products and a value added service solution.



Kaishen Zhu
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