



Lotte Card Co., Ltd. HandPay Service using Fujitsu palm vein authentication enables cashless, card-less shopping

Lotte Card adopted the Fujitsu palm vein authentication solution which allows users who registered their biometric information to make secure payments at stores simply by holding their hand over an authentication device. This innovative approach achieves cashless and card-less shopping and improves experience for shoppers. In addition, This made Lotte Card a leader in the competitive Korean credit card industry.

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Mr. Kim,
Smart Business Team Head,
Lotte Card Co., Ltd.
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Fujitsu and Lotte Card co-create card-less payments for shoppers

Established in 2002, Lotte Card Co., Ltd. (Lotte Card) is a credit-based finance business focusing predominantly on the credit card and instalment payment industries. With total assets reaching over 10.2 trillion KRW (approx. \$9 billion USD) the company has emerged as a market leader in the rapidly expanding mobile financial services industry. With the Korean government striving to proactively promote the Fintech industry, the mobile financial services industry has seen rapid expansion. In line with this, the biometric authentication market saw a two-fold increase between 2012 and 2016, with the industry now worth approximately \$270

billion USD a year. Wanting to take the lead in this area and gain an edge of its competitors, Lotte Card has set out to provide safe, user-friendly services to credit card users.

The safest, convenient payment solution driving Korea's financial industry

Adopting the Fujitsu palm vein authentication solution, Lotte Card enables users to make payments at stores simply by holding their hand over an authentication device. Explaining why the company is targeting this area, Mr. Park, Managing Director, Marketing Head Office, Lotte Card, says, “Lotte Group is a corporation that proactively implements the latest technology ahead of our competitors. We may not be Korea's No.1 company in the credit card market, but we take the initiative when it comes to adopting AI and big data analytics. We aim to become a leading corporation in the financial services industry in Korea, one that utilizes the latest technology.”

Palm vein authentication is far less susceptible to fraud compared to fingerprint recognition, as authentication is only given after analyzing special components found within a person's blood vessels. The vast number of veins found in the palm and the complexity of their shapes offer a huge amount of information, resulting in a false identification rate of 0.00008% and an

identification failure rate of just 0.01% - making it far more reliable than other methods of biometric authentication. Furthermore, there is no need to touch the sensor surface of the device itself, which many people prefer. Wanting to make the process as simple as possible, users first have their palm biometric information scanned and registered at a card center. This information is then converted into encrypted data before being related to the user's individual credit card information. What this means is that when a user wants to make a purchase, they simply enter their mobile phone number into the payment device and place their hand over the scanner. Once verified, payment is complete.

Card-less payment revolutionizing not only shopping but also the business

Lotte Card's HandPay Service is fully deployed, making card-less shopping a reality - eliminating the need to carry purses, wallets or mobile devices, and so on. Discussing the contributing factors behind the scheme's success, Mr. Kim highlights the close relationship formed between the 2 companies. He states, “Fujitsu has a keen understanding of Korea's regulations and unique environment, and answered our request with its extensive experience and technological expertise.” It is now introduced into more than 30 stores, including 7-Eleven, which has a major presence as the convenience store in South Korea and it is progressively being implemented across Lotte Group's retail division.



Customer Profile
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