

Turkcell Mobile Signature: Moving Business through Mobile

An Executive Summary



In 2007, Turkey was the first country to commercially launch a mobile signature solution – Turkcell’s “MobilImza” service. Since then, the solution has evolved, the number of available services has increased, and usage per subscriber has multiplied by five. Turkcell, the market leader in Turkey with a market share of 53%, is now a reference for other operators looking to launch similar mobile signature solutions.

A number of factors led to the emergence of this technology at such a relatively early stage:

- In Turkey, a signature is required for many internal and other related business processes that would not require proof of acceptance in other countries, such as holiday requests, corporate flight reservations, annual leave and distribution of payslips. In 2004, an electronic signature law was adopted in order to give digital signatures the same legal value as wet signatures. Turkcell was able to rely on this pre-existing ecosystem for electronic signatures to launch mobile signature in 2007, following a slight adaptation of the law to include mobile use cases.
- Despite relatively high mobile internet penetration, smartphone penetration is still relatively low at 11% (according to the latest figures) indicating that any mobile signature solution needed to be compatible with all kinds of phone, including basic devices. The company’s dedication to innovation and testing of new user-centred technologies helps to explain the successful usability of the mobile signature solution for users. The MobilImza system uses WPKI technology, in which the qualified certificates (defined by EU ETSI standards) can be activated over-the-air following face-to-face verification of both the user and government issued photographic identification during registration to the service (ID cards are mandatory for every citizen in Turkey from birth).

- While Turkcell originally chose to work with an independent Mobile Signature Service Provider (MSSP), the company eventually developed its own MSSP solution, giving it greater flexibility to update the technology to match changing legislation or customisation needs from individual service providers. Developed by Turkcell Technology, a separate entity created in 2007, the MSSP - called mSign - is now commercialised to other operators.

- Turkcell endeavours to develop and maintain close relationships with partners in other industries, including the main Turkish banks. Initially, Turkcell’s project was supported by the five main Turkish banks, which together pushed for the government to adapt the electronic signature law. In 2008, banks declared that mobile signature was the best and most secure authentication method and offered pre-registration at their branches. In the first few years of growth, financial services represented 84% of mobile signatures. Now more than 66 services are available including login to an eGovernment service portal, secure access to medical records by doctors, secure VPN remote access for businesses, local tax declaration and online bidding, while other companies have started to use it in their workflows. Businesses have also started to develop solutions that leverage this technology, such as SIM-embedded locks that can be locked and unlocked with a mobile phone and the ability to pay parking fees via mobile.

Turkcell’s experience demonstrates the long-term investment and patience required to cover the initially high development costs for a mobile signature service. Initially, broad scale take-up was relatively low, primarily due to the common “two-sided market” challenge faced by many new products: due to the limited number of subscribers, service providers were not always

eager to integrate mobile signature into their processes. And because of the limited number of available services, people hesitated to subscribe to mobile signature.

Although subscriber numbers remain comparatively low in absolute terms, annual growth is now encouragingly high, running at over 80% per annum. Part of this is due to the replacement of Turkcell’s original pay-per-use business model (each signature cost as much as an SMS) with two complementary approaches: a monthly subscription for subscribers and a price per signature for service providers. Corporate subscriptions and high-value customers remain the primary revenue drivers due to the relatively high cost of the service but Turkcell expects an improvement in its operating margin due to improving scale economies as the user base grows.

Turkcell is also testing a new subscription process, as the current process accounts for 93% of customer complaints and has been identified as a key barrier to adoption. At present, customers can pre-register online via a bank website, through the customer care centre or via an SMS message, but they still need to visit a point of sale to show ID, sign the contract and upgrade their SIM card³. The new subscription process would use the credentials already captured by the bank and allow customers to subscribe without going to a point of sale (provided they have the right SIM card), reducing the process to a few hours instead of a few days. Turkcell believes this improvement will be key to driving adoption rates.

Read about the case study in full and find out more about the Mobile Identity Programme on our website: <http://www.gsma.com/mobileidentity/>

¹ Turkey penetration: operators’ announcements as of Q2 12

² The monthly cost of MobilImza is US\$2.74 (5 Turkish Liras) which represents more than a quarter of the estimated average revenue per user in Turkey (US\$10.849).

³ 128k SIM cards are distributed de facto to all of Turkcell’s business customers but this does not address the whole consumer base.