



Ambrosia Infotech

"Synergising Minds"

## The Client

The client is a leading provider of SIM based data management solutions that enable mobile operators to reduce churn and increase revenue.

Matchtip was founded in September 2000 and is based in London. The company works with its strategic partners and alliances to deliver industry-leading solutions to mobile network operators.

# Ambrosia

## The Client



The client required an IT solutions partner who could provide them end-to-end product development services. They wanted a team, which could define the technical roadmap of the product this required that the team be aware of the latest GSM and 3GPP standards could rapidly build teams to work on niche technologies and could deliver a very versatile, scaleable and robust product. Ambrosia with its cost-effective delivery model, product development experience and a proven history of delivery innovative products was chosen. Ambrosia was the right choice for the client with its expertise in product engineering.

Some broad functions required for the system were:

- SIM to SIMEcho Application Server Phonebook Backup
- Server to SIM Phonebook Restore
- Data Encryption
- J2ME Client to implement JSR 177
- Data Security
- Data Compression to fit small foot print requirements
- Two way Communication between SIM and Server
- Messaging layer between SIM and Server
- Configurable SIM Applet Menu
- Configurable SIM State
- Synchronisation between SIMEcho and Telco PAM Server using SyncML
- Bearer Independent Protocol Support
- POS module (Interfaces to the Card Reader to get Phonebook Data)
- Multiple Billing Models
- Support for 2G and 3G SIM
- Extensive CDR

# Challenges

---

The project involved designing and architecting the complete product.

The key challenges of the project were:

- Support for 2G and 3G SIM
- Ability to migrate a 2G customer to 3G
- OTA SIM provisioning
- Small SIM Applet foot print
- Interoperability with various SIM vendors
- Support for both SMS and GRPS as bearers
- Implementation of Generic Phonebook structure
- SyncML client and Server
- SMPP Integration with SMSC

Ambro

## Challenges



# Solution

---

Ambrosia used its expertise in J2EE technologies, Weblogic Portal, protocol development and knowledge of the latest GSM/3GPP/ETSI standard to implement the world's first true 3G backup application.

The main highlights of the product were:

- Implementation of UDP over BIP for SIM to communicate to server using GPRS as the bearer
- Class 2 SMS as the Bearer
- Integrated to SMSC using SMPP
- Support for Generic phonebook structure
- Support for 2G and 3G SIM
- Adaptive behaviour of SIM Applet based on mobile device using terminal profile
- Customer Care Interface
- Admin Module
- Various Billing options Port Billing, CDR Billing, Monthly Billing, Transaction Billing, per message Billing or combination Billing.
- SNMP trigger
- Built in retry models
- Proprietary Message Layer
- IMEI Capture
- Roaming Intelligent that is if the customer is roaming it will prompt the user before sending any messages.
- Clustering to ensure high loads
- Standard Web service API's for easy integration with external systems
- Telco Grade product

## Solution



# Benefits

---

Some key benefits of the engagement for the client:

- Access to vast knowledge of GSM/3GPP/ETSI standards
- Access to high-end technical team.
- Extensive protocol stack development experience
- Ambrosia's could Rapidly Scale up the team size.
- Product Development expertise
- Ambrosia had the expertise to define the product technical roadmap
- Ambrosia could provide the client high end product consulting

Ambrosia

## Benefits



# Approach

---

Key features of our approach were:

- Focus on designing a very robust and scalable system
- Spiral development approach ensured constant improvement of the end product.
- Constant brainstorming resulted in ideas and suggestions which improved the overall end product
- Complemented through recruitment of highly skilled and qualified staff
- Following defined Product development methodology resulted in timely rollout of the system.

Ambro

Ambrosia Infotech

---

# Approach

