



Benefits to the Client

- Full spectrum of services, including hardware prototyping, BSP and user application development, available at one place
- Ready to use full functional Android BSP
- Reduced time to market
- Efficient client support

Overview

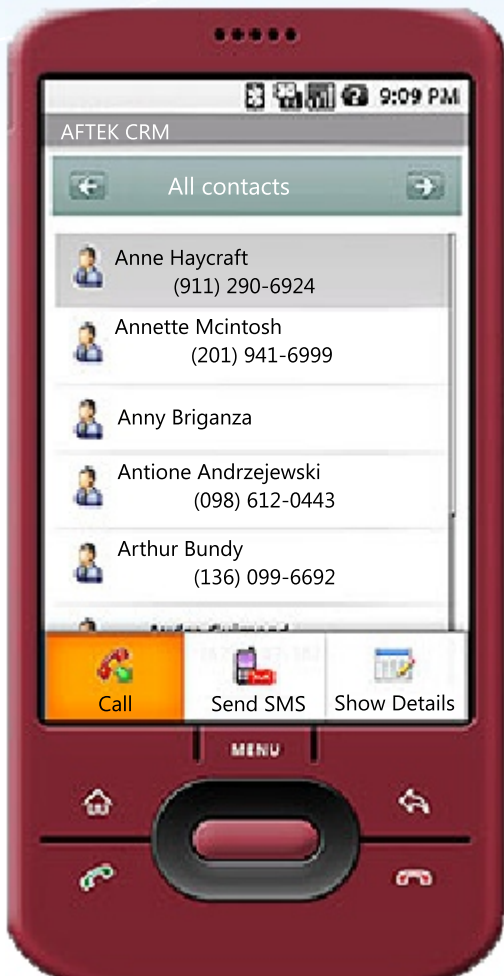
Google Android is an open source and customizable mobile handset platform based on Linux 2.6. Android offers a full stack including an operating system, middleware and key mobile applications. Android includes Dalvik virtual machine for Java applications.

Aftek's Expertise

With its capability to provide end to end solutions, Aftek is perfectly placed to develop hardware and software applications based on open source platforms like Android.

Aftek's wide variety of skills include

- Hardware systems designing and prototyping based on various processor architectures.
- Developing BSPs for embedded OSs like Linux, μ CLinux, MontaVista for applications ranging from consumer electronics to industrial applications. **Extensive experience of Linux BSP enables Aftek to develop a variety of solutions based on Android BSP.**
- Developing device drivers for a wide variety of communication and media devices - for portable applications like mobile phones, media players, infotainment systems, set-top box and wireless communication devices.
- Developing innovative mobile applications such as touch point applications, mobile advertisements, mobile searches, polls, location based services, CRM extensions,



CRM Application



Car infotainment



Mobile phone



Set-top box



Net book

Since the release of Android Java SDK, Aftek has engaged in gaining expertise in developing Android applications. **With this, Aftek is well placed to develop Android based applications with capabilities like:**

- Designing rich GUI with optimized graphics using OpenGL.
- Providing features using core level mobile aspects like making or receiving a call, sending or receiving SMS and post processing the same or using the camera, creating a richer and more cohesive experiences for users.
- Building intelligence using logs like calls, SMS.
- Providing features using core data such as phone book, contacts, calendar, meetings, notes or geographic location to provide a more relevant user experience.
- Providing features using various supported API including maps, media, text to speech and Bluetooth.
- Providing features using SQLite database API

About Aftek

Aftek Limited is a full spectrum technology services company from India. Over last 20 years Aftek has gained significant exposure to variety of technologies. Rich technological capabilities, focused investments in Research & Development and industry exposure enables us to reach beyond the basic IT services to design and deliver projects, products and implement end-to-end solutions to customers in variety of industries. Our service spectrum covers key services as Application Development, Application Maintenance, Hardware Development, Firmware Development, Embedded Systems and Testing Services.

Case Studies

Android BSP for PXA270 platform

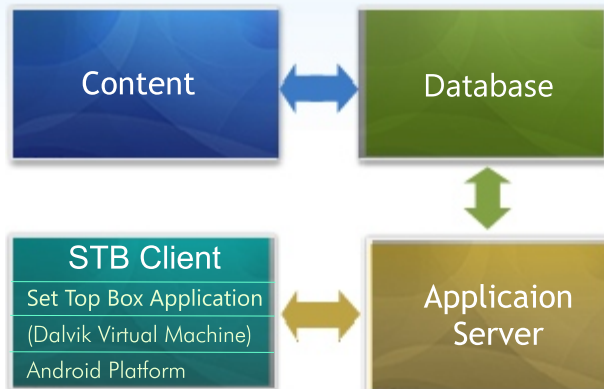
Aftek has developed a hardware platform based on PXA270 and an Android BSP for it. PXA270 processor is widely used for mobile and portable applications.

- Aftek designed and developed hardware prototype based on PXA270 platform.
- Aftek customized Android BSP for PXA270 platform.
- Enhanced ARMBoot (boot-loader) with support for firmware upgrade.
- Optimized root file system.
- Developed drivers for devices like:
 - Graphical display
 - Touchpad
 - USB host with support for mass storage and HID classes
 - Flash memory

Set-top box application

Set-top box application provides extensive feature set including online bill payment, news, e-shopping, weather forecast, integration with services like YouTube, Google maps with directions.

Set-top box architecture overview



Aftek developed the Android set-top box application using Android Java SDK. Features of this application include:

Banking: It enables the user to perform online banking transactions like checking the balance, transferring funds, ordering demand drafts/pay orders etc.

Maps: It displays the map of the selected city with important locations which the user can browse through it.

Weather forecasts: It displays the weather information of the selected city with forecasts and satellite pictures.

YouTube videos: It displays the standard video list (i.e. top rated, most viewed etc) user is able to see videos by selecting on particular video.

News: It provides the latest news directly from internet with complete data and pictures. The news will be on the subjects like world, India, business, sports, entertainment and health.

Bills: Using this application, the user can check and pay the bills of various utilities and service providers. User will have various payment options like credit card, debit card, cash card and online banking.

Astro: It provides information related to astrology based on the zodiac signs. It will have sub features like horoscope, numerology, zodiac traits, lifestyle etc.