

## Mobile Industry Trends and Business Challenges

Mobile devices became pervasive objects as soon as people used mobile phones, smart phones and PDAs anywhere and at anytime. Mobile applications let people access information and act on decisions or make purchases anywhere, anytime. There are number of areas where mobile applications are in demand like shopping, entertainment, security system, surveillance on certain items, travel reservations, mobile games, search, mobile stock trading, social networking etc.

However, the design and implementation of mobile applications is not as straightforward because of the different form factors and context of use.

### Mobile application development has its associated challenges like

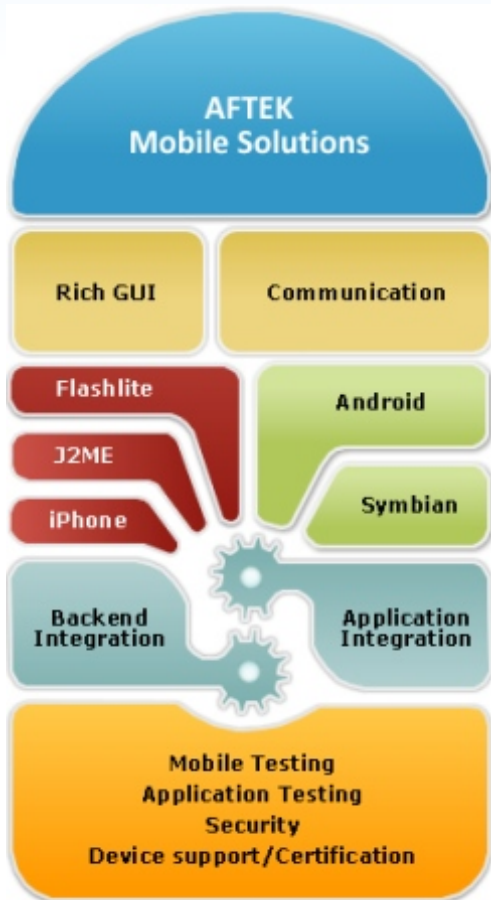
- Developer need to develop basic GUI components which consumes significant amount of time.
- Since there are inherent memory limitations on most of the mobile devices; developed components need to be optimized for memory and speed.
- Available third party component libraries are not optimized for memory neither they are as user friendly and robust. More often these libraries are very expensive.

Over the years Aftek has gained significant expertise in developing mobile applications including security system, m-commerce applications, mine logistics systems, stock trading applications etc. We have a proven track record of delivering



### Mobile Platforms

- Symbian
  - FlashLite
  - J2ME
  - Symbian C++
- iPhone
- Android
- Windows CE



## Mobile Solutions

Aftek has expertise in developing mobile applications using J2ME, FlashLite, Android, iPhone and Symbian C++. Aftek provides support for various mobile platform like Symbian (Nokia, Sony Ericsson, BenQ, Motorola, Siemens, LG), iPhone, Blackberry, Android. While developing mobile solution one need to consider various device idiosyncrasies like rich GUI, various screen size, keyboard mappings, backend integration, limited memory and storage handling.

Following matrix provides an overview of our expertise on various aspects of mobile solution across platforms.

Platforms	Symbian			iPhone	Android	WinCE
	FlashLite	J2ME	Symbian C++	iPhone	Android	WinCE PDA
Rich GUI	✓	✓	✓	✓	✓	✓
Backend Integration	✓	✓	✓	✓	✓	✓
Application Integration	✓	✓	✓	NA	✓	NA
SMS Communication	✓	✓	✓	✓	✓	✓
GPRS communication	✓	✓	✓	✓	✓	✓
Wi-Fi Communication	✓	✓	✓	✓	✓	✓
NFC communication	NA	✓	NA	NA	NA	NA
Bluetooth Communication	Yes (using third party library)	✓	✓	NA	NA	NA
Testing on various Devices	✓	✓	✓	iPhone	Googles phones	✓

## 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.

**Following aspects of mobile application will explain the matrix in more depth.**

### Rich GUI

Main focus of Aftek mobile solution is rich GUI which mainly includes flexible user interface, animation, and effortless visual effects. Another key feature in our solution is, various screen sizes support is taken into consideration, which will fit the GUI into various handsets seamlessly.

### Backend Integration

The clean interface provided by each mobile solution makes it easy to separate business logic from its presentation layer. One can communicate with any backend server using any of the above mentioned components.

### Application Integration

We also support combined solutions for better performance and result e.g. Symbian C++ and FlashLite communication. J2ME and FlashLite communication. Using such combined approach one can have better looking GUI along with strong backend communicators.

### Device Support

Our mobile solution supports wide range of devices like Symbian (Nokia, Sony Ericsson, BenQ, Motorola, Siemens, LG), iPhone, Blackberry, Android, HTC.

### Communications

GPRS, SMS, Wi-Fi, NFC

### Mobile Testing

We ensure that the mobile solution will work on wide variety of devices. We also provide solutions for mobile testing viz. TestQuest, compatibility checker application (for J2ME) which will be mainly used for testing various feature support on different devices.

## Aftek Component Library

In order to create good looking user interfaces for mobile applications, developers must either write their own custom low level GUI components or use those from an existing library. The process of writing these components from scratch is a time consuming and expensive and needs to take device

### Benefits of Component Library

- Reduces development time by 30% to 40%. Reduces recurring testing efforts, as the components are tried and tested.
- Reduces the overall maintenance efforts as well.
- Enables faster time to market solution

