Value Proposal for Oil & Gas domain

How can we increase your business revenue?

Key Winning Formula

- Solutions
- Service
- Growth
- Products
- Partnership

1. FQMS – Fuel Quality Monitoring System

What is FQMS ?

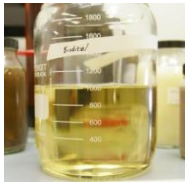
• Fuel Quality Monitoring System is web tool to monitor all work requests for performing various Fuel Quality Monitoring programs organized by companies supporting a wide range of organizations & businesses, from governments to private transportation fleets.

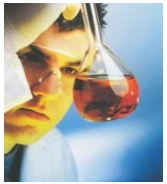
• An integrated web solution to facilitate customers & labs to interact with each other under a common interface

•Work Request for a oil sample is submitted by the customer or lab on behalf of the customer to proceed with testing of it based on selected test analysis or packaged chosen.

•FQMS monitors the life cycle of Sample starting from **New Order -> Drawn -> Dispatched -> Lab Received -> Interim -> Authorised /Cancelled**

•FQMS is a web application tool to keep customers updated about the status of their sample & with Interim & Final Reports during & after completion of testing.





1a. FQMS – Fuel Quality Monitoring System

Key Features

- Manage Orders for Samples' Testing submitted by Customers or Lab on behalf of customers
- Configure repeat request for routine samples to be inserted in the system automatically.
- Cloning of Sample Requests information
- Record Dispatch information of Sample Request orders from customers.
- Customer views Interim Reports & Authorised Final Reports. Generate COA from the application.
- Monitor the life-cycle of a fuel sample.
- Repository for Test Analysis & Packages connected to core LIMS system giving flexibility to the customers & Labs to get access to.
- Email management to control communication to customers, labs & system users with relevant reports & notifications of the same.

Potential Targets

Companies exercising any of the following :

- Government fuel quality monitoring
- Fuel refinery quality monitoring
- Fuel retailer quality monitoring
- Automotive and engine manufacturers fuel evaluation
- Fleet oil condition monitoring
- Transportation industry fuel quality
- Fuel and lubricant quality monitoring
- Public and private transportation companies

Our Customers

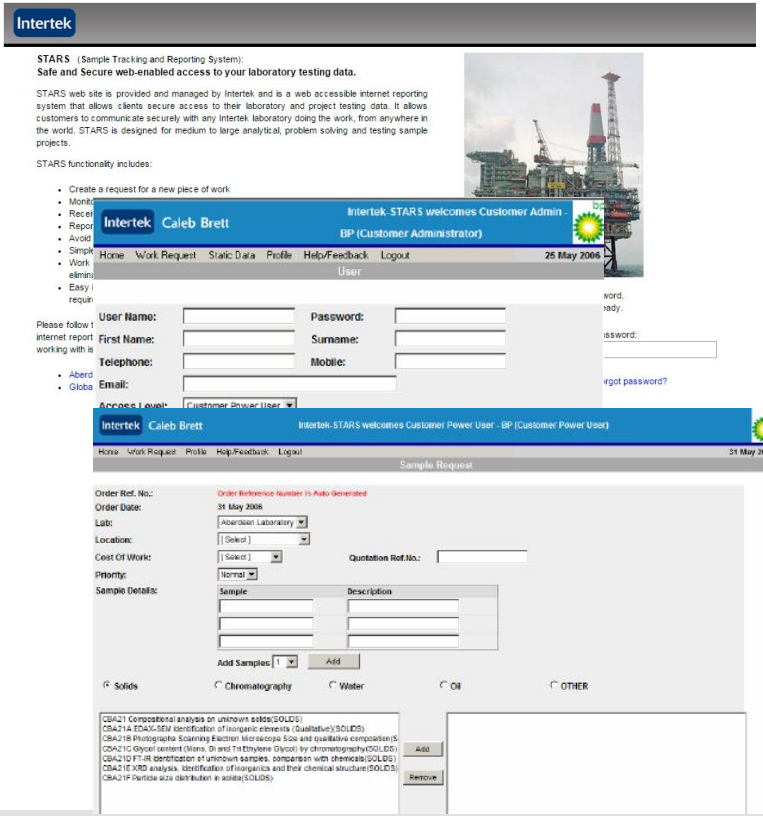
Intertek

Lloyd's Register

1b. FQMS – Fuel Quality Monitoring System

Our Expertise & Involvement [Functional & Technical]

- Work closely with business people to design & propose a suitable & optimal architecture to support the application.
- Design & define the process flow following standard documentation methodologies.
- Design & propose innovations in the front end & develop features to improve quality of the application.
- Design & documentation of the database structure for FQMS
- Skilled software engineers involved in development life cycle to the build the application.
- Maintenance of 3-layered infrastructure [DEV, STG, PROD] servers.
- Maintenance of application & database code using popular code versioning techniques.
- Support team to take care of application as well as database issues post development cycle.



2. STARS – Sample Tracking & Reporting System

What is STARS ?

• STARS is an acronym for "Sample Tracking & Reporting System" . This is a simple, web based interface which facilitates team working with minimal administration & no additional software installation required.

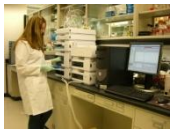
• A web solution where a new user can setup in 5 mins with no additional costs.

•Customers are an integral part of the system & has the facility to manage the level of access to users.

•STARS monitors the life cycle of a Sample starting from **New Order -> Dispatched -> Lab Received -> Test In Progress -> Authorised/Cancelled**

•STARS has a direct linkage with LIMS where it gets the feed for the sample information and all interim & final reports for the availability of customers

•Customer requests the sample, Sampler collects the sample & dispatches it, Laboratory logs the samples in LIMS after receiving.



2a. STARS - Sample Tracking & Reporting System

Key Features

- Role Management - 8 different role levels for system users to manage data security.
- User Management - Manage users with roles & mapped with Labs, Customers & Locations.
- Static Data management for Locations, Customers & Labs available only for some key user roles.
- Manage Orders for Samples' Testing submitted by Customers or Lab on behalf of customers.
- Cloning of Sample Requests information
- Record Dispatch information of Sample Request orders from customers.
- Customer views Interim Reports & Authorised Final Reports. Generate COA from the application.
- Monitor the life-cycle of a fuel sample.
- Automated repeat request program for samples with routine & periodic testing requirement

Potential Targets

- **Oil & Lubricant companies**
- **Oil refineries**
- **Oil retailers**
- **Oil Testing & monitoring companies**

Our Customers

Intertek

bp

2b. STARS - Sample Tracking & Reporting System

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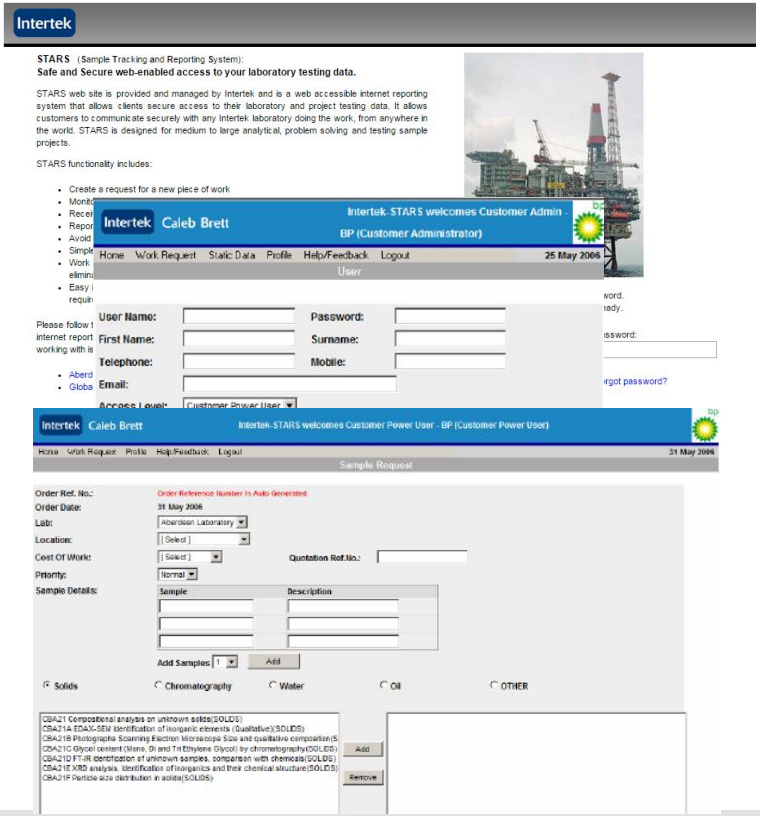

3. FOBAS - Fuel Oil Bunkering Analysis and Advisory Service

What is FOBAS ?

• FOBAS provides a comprehensive fuel testing programme to marine clients worldwide which is backed up by strategically located laboratories and technical fuel consultants with extensive engineering experience.

• One stop solution with secured login accessed only by using a browser, to facilitate a 12-level Role Management system to different level of system usage world-wide from anywhere.

•A comprehensive Bunker Quantity Survey Service (BQS) to its clients with access to surveyors, in many worldwide ports, who can attend throughout the bunkering operation.

•A web interface which enables easy & quick regular fuel sampling, analysis and quality assessment which can help the client determine that their fuel is within specified limits, satisfactory for safe use and unlikely to cause operational problems or damage to a ship's machinery

•Low maintenance cost application that helps to manage Marine fuel testing which is of significant cost for ship operators.

3a. FOBAS - Fuel Oil Bunkering Analysis and Advisory Service

Key Features

- Role Management - 12 different role levels for system users to manage data security
- User Management - Manage users with roles & mapped with Labs, Customers & Locations.
- Static Data management for Locations, Customers & Labs available only for some key user roles.
- Document Management System [Store test reports with historical data]
- Bottle Management System [New Order, Dispatch & Stock]
- Client & Contact Management System
- Invoice management system [ICB Invoices, Lloyds Invoices]
- Bunker Quantity Survey system [Nomination, Coordination, ICB Review, LR Review]
- Work Order Management system (manage JDEs)
- Review & Comment Management system
- Report Management system [Performance reports, Bunker Reports, Test Reports & COAs]

Potential Targets

- Oil & Lubricant companies
- Oil refineries
- Oil retailers
- Oil Testing & monitoring companies
- Bunker Quantity Survey companies
- Oil Testing companies
- Large & medium sized shipping companies
- Bunker analysis companies
- Shipping & Marine Inspection companies

Our Customers

Intertek

Lloyd's Register

3b. FOBAS - Fuel Oil Bunkering Analysis and Advisory Service

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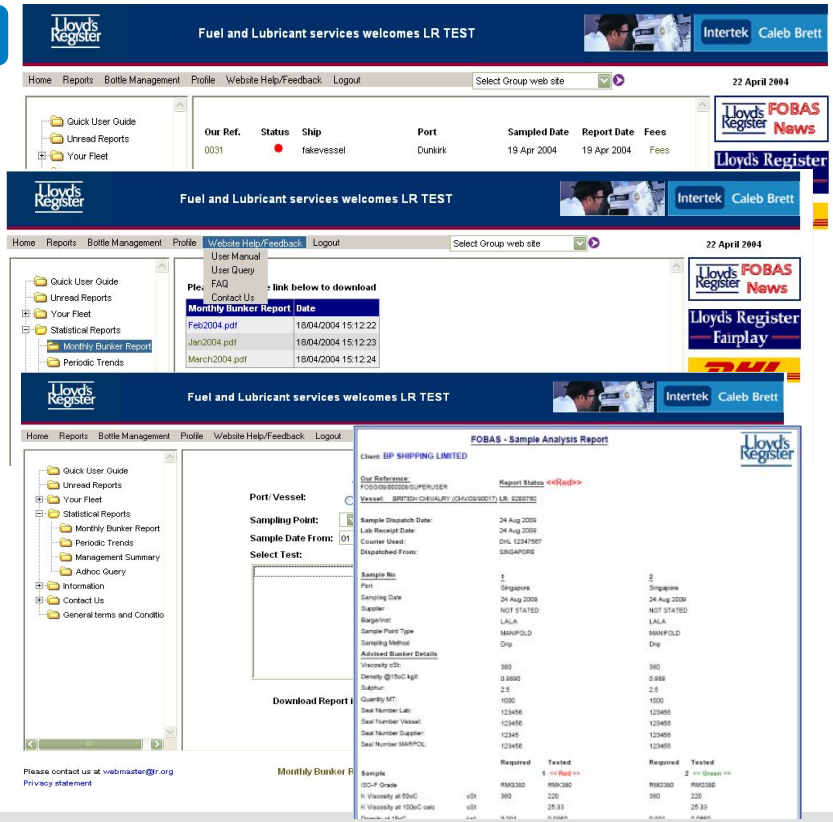


4. BQS – Bunker Quantity Survey

What is BQS?

• Bunker fuel oil quantity survey supports the world's shipping industry, helping reduce the risk of engine problems and failures. Bunker fuel inspection and testing services help ensure the fuel quality and quantity.

• Effective fuel management starts with the correct quantity and quality of fuel being delivered to the vessel. BQS involves the surveyor taking measurements on board the barge or at the shore tank, and on board the receiving vessel, before and after delivery takes place. The surveyor's measurements are used to determine the quantity of fuel delivered. The surveyor will also check for any evidence of entrained air (the 'cappuccino effect').

4a. BQS – Our Expertise

Our Expertise

- Built **BQS web application** for tracking the oil samples collected from engines of big vessels.
- Features include - **Sample Registration, Inspection, Sample Points, Sampling Methods, Sample Results, Generate Reports, Review & Approval, Invoicing, Graphical analysis**.
- Also include other useful modules like **Nomination Survey, Notification framework, Review Process, Manage & Track Orders etc.**
- **BQS Mobile application** is available in Android and iOS.

Potential Targets

- Company that provide bunkering services
- Sample collectors
- Shipping companies
- Fuel retailers and refiners

Our Customers

Intertek

Lloyd's Register

4b. BQS Mobile – App Screenshots

5. KEY CHALLENGES – OCM Labs face dealing with customer requirements

1 Challenges for OCM Lab "business"

- Difficult to track lab service **performance and forecast** to next business planning.
- Difficult to automate lab and **decision processes** to reduce costs and streamline operations.
- Difficult to control **increasing operating cost** to cover for the same on various departments.
- Difficult to expand **lab services** and reach more customers.

2 Challenges for OCM Lab "customers"

- Difficult to manage **increasing customer jobs** (lab service for testing) at a time
- Difficult to manage **increasing customer issues**, complaints and requests running manually
- Difficult to maintain **quick and effective delivery** to clients
- Difficult to keep **customer satisfaction** on top of increasing customer orders/jobs

3 Challenges for OCM Lab "operational process"

- Difficult to minimize the **long time consumption on manual search and record collection** for samples & other elements
- Difficult to improve performance in terms of **sample turnaround** and the quality of reported data
- Difficult to remove **errors during manual calculation** processing, eliminating costly retesting
- Difficult to deliver fast and **on-demand specific reports** from customer against job

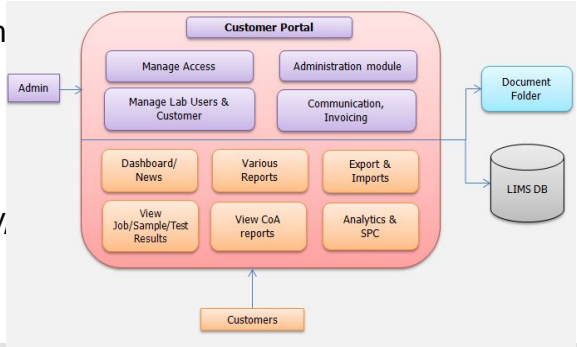
5a. SOLUTION? – OCM CUSTOMER FACING PORTAL

Solution

- Bit Wave offers **Customer facing portal** for **OCM lab customers** which will pull details from Lab/LIMS database to allow lab customers to enter test requests and to retrieve reports, pay invoices and to get support from the lab in no time.
- It offers excellent functionalities for lab customers include Sample Management, Reports, Communication, Invoicing, Document Management, Log Management, etc. is a web based Online System permitting you to manage Sample related enquiries, view Sample Status, Test status, Invoices, Customer Statements through PDA and mobile devices.

Easy Integration with Lab/LIMS system

- We can seamlessly integrate our customer portal with any LIMS database. The integration will enable the key data to be viewed on web and also on mobile extension as well and enable reports for decision makers.
- Application is hosted in cloud platform (Windows Azure Platform) to gives customers and client opportunity to enjoy the maximum benefits of cloud including data storage, security, cost saving for installation and IT infrastructure etc. It is highly secure with all data managed over server (cloud) and provides simultaneous access for all users.



5b. How OCM customer portal help your customers?

Key CUSTOMER modules – Glimpse..

My Dashboard

Customers can view Lab Performance

My Samples

Customers can view their Samples & Current Status

My Reports

Customers can view their reports on various parameters

My Invoices

Customers can view their lab invoice, outstanding & Pay online

My Enquiry

Customers can lodge Enquiry, Issue & get instant support

My Documents

Customers can view / download documents in different formats

6. Business Challenge & Solution - OCM

Business Challenge

- Every year shipping and automotive companies **spend hundreds of thousands, even millions of dollars** on the operating and maintenance of their equipments and mechanics. But what if they could prevent a lot of these maintenance costs, extend the life of their equipment, lower unscheduled downtime and save their company money?

Solution – iOCM Reporting & Analytics Solutions

- Bit Wave Solutions can help them do just that, with our fully integrated condition monitoring and oil analysis reporting software solution, **iOCM**. It is designed to allow oil testing laboratories to do better oil analysis conducting detailed statistical analysis for two important aspects, the condition of the oil being analyzed, and the condition of the equipment involved.

- This will result in a detailed Diagnostic Report to be presented to the customer describing the condition of the oil/lubricant. iOCM present in an easy-to-read and understandable report of **all kind of oil and lube test** results. It provide a series of **excellent reports and graphical analytics** of the oil samples which accurately tested from the OCM laboratories.

Oil Condition Testing

Fuel Testing

Lubricant Testing

Grease Testing

Fluid Testing

BIT WAVE SOLUTIONS

6a. How iOCM helps?

Excellent Sample Management

- Organized sample inventory with simple and advanced search in just one click .
- Keeps track of all tests and analysis conducted on each sample by tightly integrating all the steps and all processes
- Stage wise sample analysis recording various stages of the testing process and all information related to each stages and more

Advance Reporting

- Powerful Reporting providing critical facts for organization's better analysis and decision making
- Reports can be classified according to various users and tailored needs – getting clear information of various details in a glimpse
- Provides both analytical and graphical reports which give a detailed insight of analysis

Statistical Analytics

- Advanced analytics dashboard showing all testing related activities along with results and analysis
- SPC chart is fully functional in providing minute Statistical Report, Sample analysis data
- Historical analysis and condition monitoring data in flexible formats

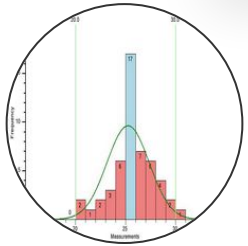
Quick Documenting & Communication

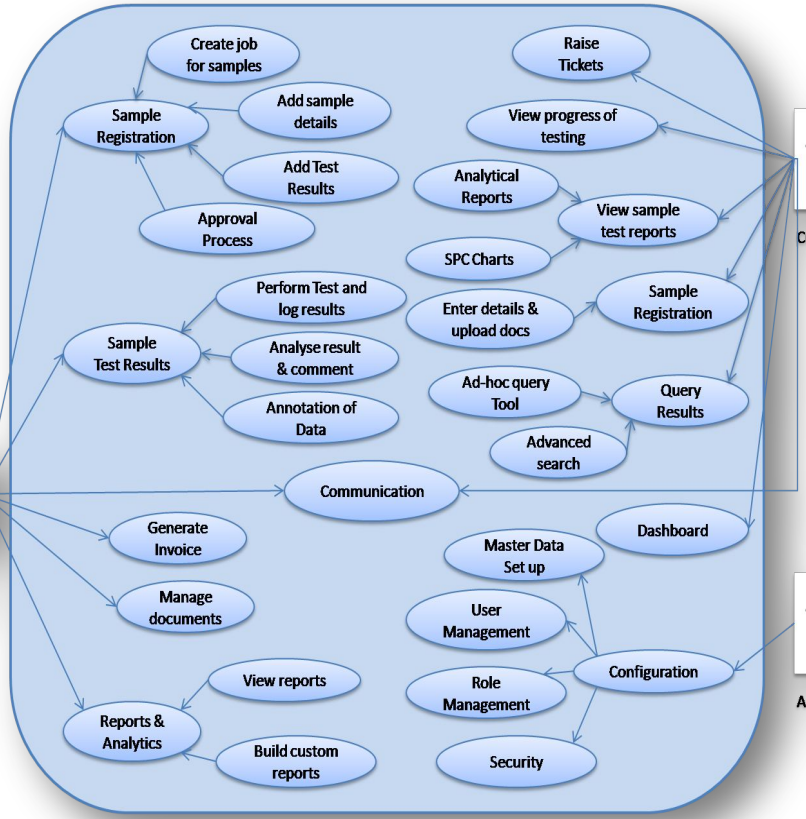
- Provide effective document and data management to allow search and access all the relevant and critical data in quick time
- Equipped with powerful communication tool that will enable users to create communication templates and pre assign to users to be sent automatically according to an event
- Optimum security for both elements all the time

Organized Customer Platform

- Allowing lab customers to enter test requests and to retrieve reports, pay invoices and to get support from the lab in no time
- Allowing customer the opportunity to access information pertaining to their samples easily from anywhere in their smart phone or tablet
- Allowing customer to log their issues online and giving instant support in minutes

6b. iOCM Operation Flow - Glimpse





- An use-case diagram shows the glimpse of activities performed by different users interacting with the iOCM.

7. OCM Mobile App - Our Proposal

BIT WAVE SOLUTIONS

Solution

- As technological differentiation becomes a key point in **oil industry**, mobile and tablet solutions is easily focusing on the value that application software can bring. Mobile Applications' **Popularity and Usage** is growing rapidly in the market.
- Bit Wave Solutions would like to propose **Mobile based solutions** to Lab for their existing and new OCM customers. **BWS OCM Mobile app** is designed for organization to expand the benefit of Lab workers and customers in the field and on the move.
- Lab Manager, Lab coordinators, Lab customers and even key decision makers will be able to connect with the Lab on the go with the mobile version of LIMS.
- Mobile versions of Lab **Customer Portals** (for LIMS and GLIMS) can optimize the applications' capability and usability to a whole new level.
- Comes with most advances Mobile **Middleware Control** (EMM) which controls Security, licensing, subscription. Available in all popular mobile platforms.
- Solution will also **increase your sales** and it will add instant revenue. You can use it as a powerful brand management & marketing tool to build brand value and reach out to billions of mobile customers round the globe.

Key Success with Clients

How our mobile apps has helped business to more faster than normal?

- **iReport for BP(British Petroleum)** for winning tender
  iLMS for Intertek making customer intact with the company.
  Reporting & Analytics for Techenomics, Australia
  iLIMS for Envirodyne, US and more

7a. Solution Glimpse – iOCM Mobile App

BIT WAVE SOLUTIONS

- **VIEW** Certificates other Report PDFs in mobile
- **ADVANCED Push Notification** and various alerts to Lab user & customer in real time
- **TRACK** oil samples, result and analysis in Mobile
- **BRINGS** live updates and reports from the Laboratory
- **PROVISION** to enter results in tablets on the go
- **POWERED** by best reporting tool Quinn Curtis
- **GENERATE** and view multiple Reports & Analytics

- **RECEIVE** Sample – At docking Stations
- **ADD** Photos, Videos and Geographic Location during sample collection
- **COMMUNICATE** instantly with Lab and take key Decisions
- **STAY** connected with the laboratory on the MOVE
- **PERFORMANCE** dashboard with improved KPI for stakeholders to check lab performance
- **INTEGRATE** instantly with existing system in minutes

- **IMPROVED** search functionality & Result Display
- **OFFLINE** connectivity to use the system when in offline mode
- **LOCATE** Ports on Google maps
- **OTHER** interesting features

7b. Screenshots Glimpse– iOCM Mobile App

BIT WAVE SOLUTIONS

7c. How it works? Easy Integration and roll-out

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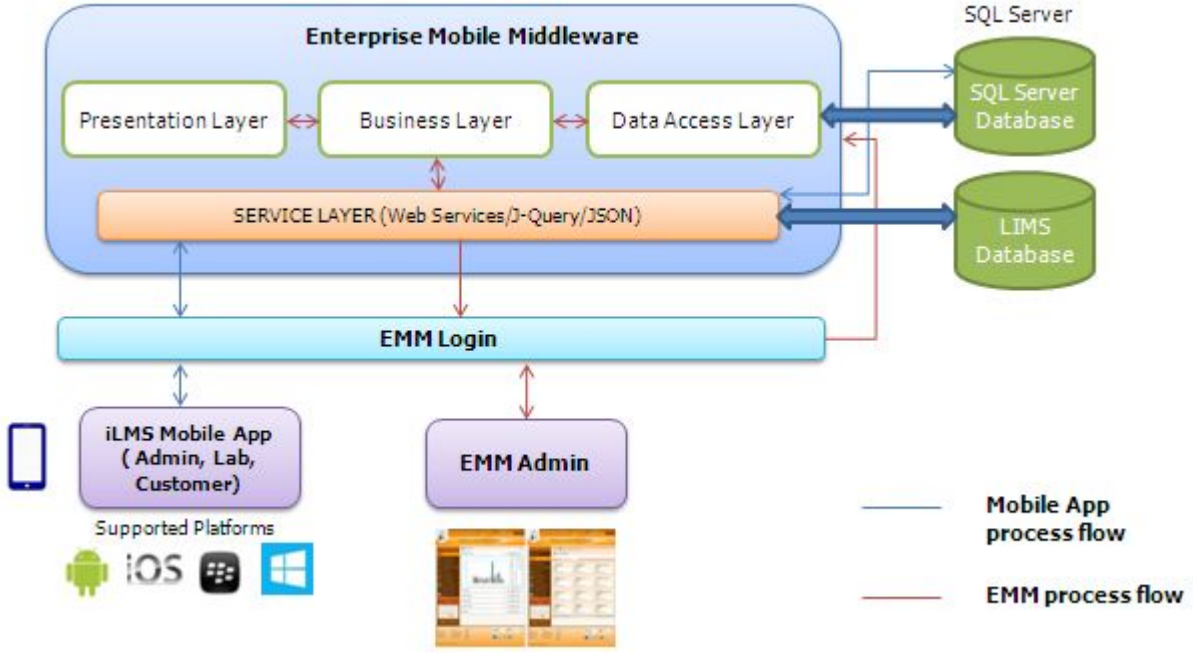
- We can seamlessly **integrate** our mobile app with any LIMS database. Can work with any **popular databases**.
- We have written web-services and XML to interact with the database. We will work with your IT team for smooth integration. Once the integration is defined, mobile app can be rolled out within couple of week's time
- Through EMM you can **control users of mobile app at application, role and modules levels**. All the Mobile Apps are hosted in market place and EMM is hosted within company network to control various security activities.