

Hello.



Simplifying IT with SOA at Everything Everywhere

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everything everywhere™

Agenda

Company Background

Business & IT challenges

SOA Reference Architecture

Architecture Patterns

Challenges and issues

Q & As

Everything Everywhere : Quick Facts

One company running two of Britain's most famous brands, Orange and T-Mobile.

We have 27.5 million customers, over 15,000 employees and more than 700 stores across our brands.

Our vision: **“giving the UK the best network and best service so that our customers trust us with their digital lives.”**



T-Mobile

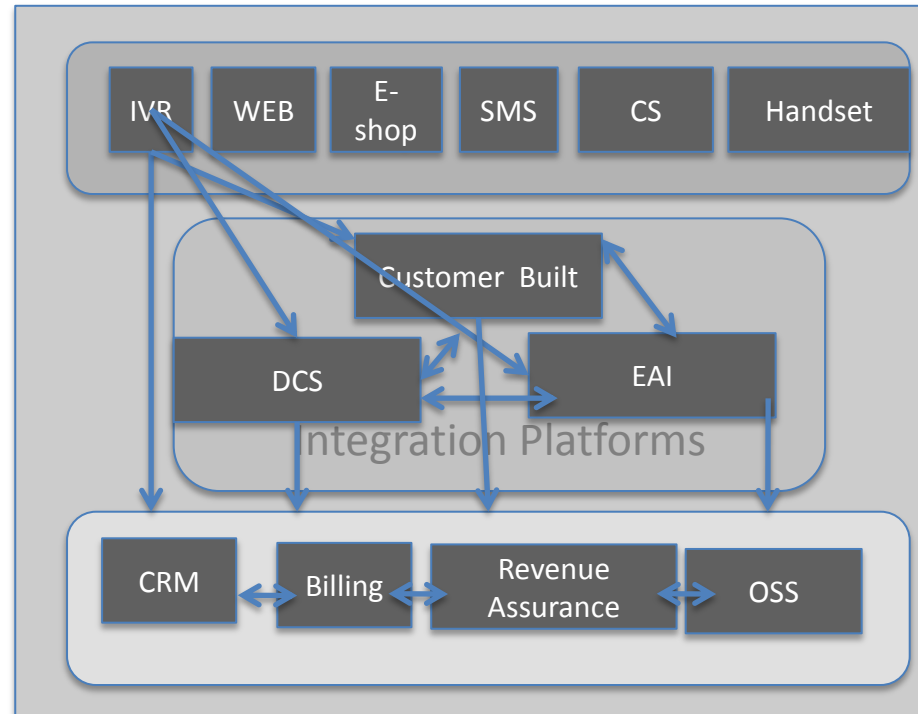
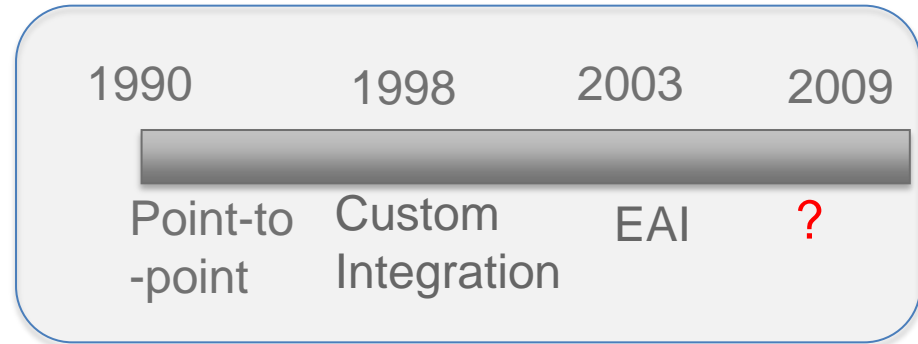


IT challenges in 2009

- Multiple Integration Platforms
- Duplicate business logic
- Heterogeneous, unsupported platforms
- Complex Architecture
- Application-centric



- Increased time to market
- Expensive to run and build
- Inconsistent customer experience
- Difficult to evolve to support changing business processes and models



SOA Initiative: objectives...

Business Objectives

- Improve time to market
- Explicitly modeled business processes
- Online driven and business centric
- Flexible and business process aligned reusable services

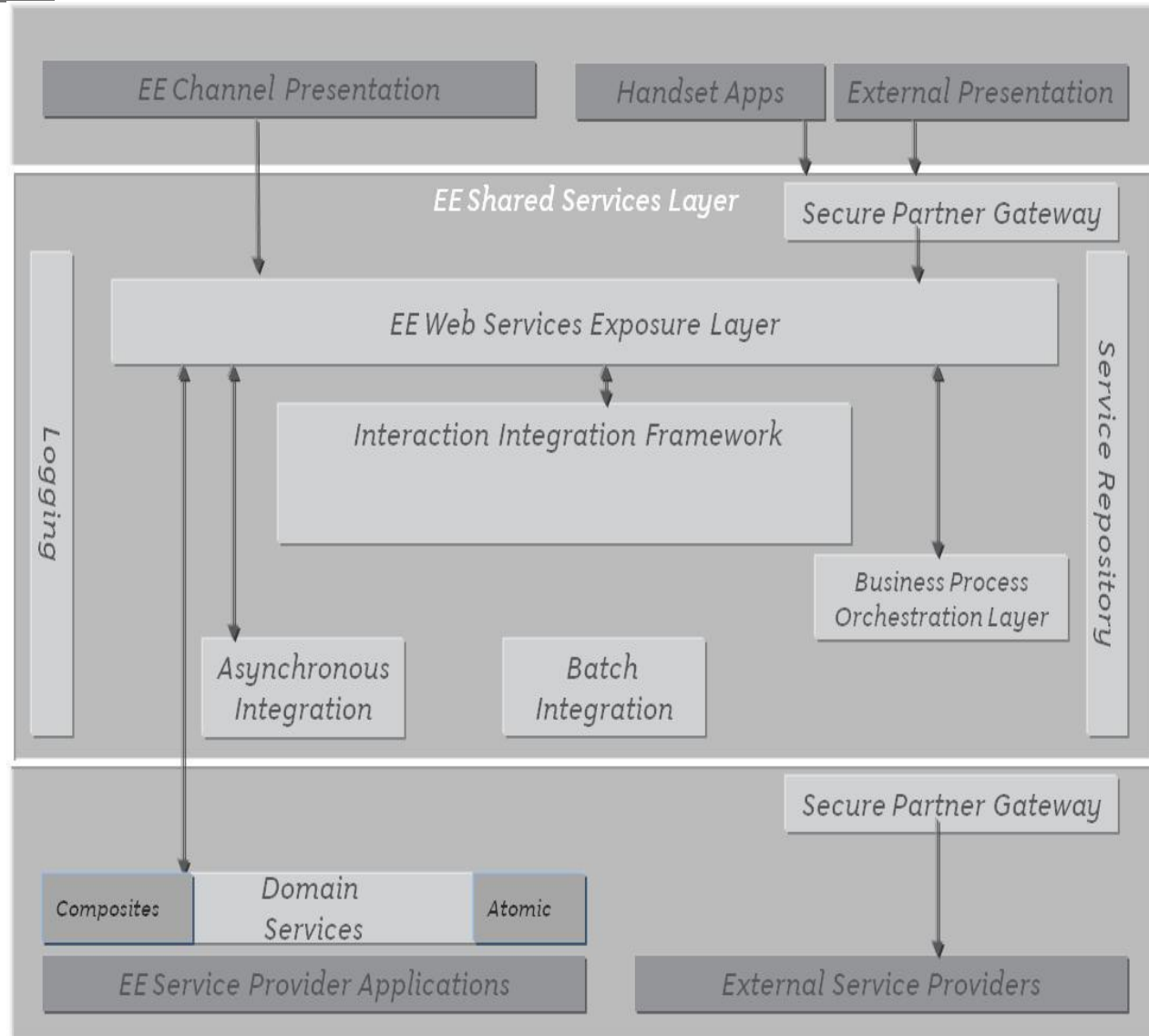
Technical Objectives

- Simplified Architecture
 - Introduce and communicate new architecture and design patterns across the enterprise.
 - Move away from EAI based integration to simplify (EAI model inversion) IT integration.
 - Deliver new flexible, reusable services that will allow us to decommission legacy services.
- Standard technologies and standard service interfaces
- Remove multiple access points.

SOA Reference Architecture

Highlights:

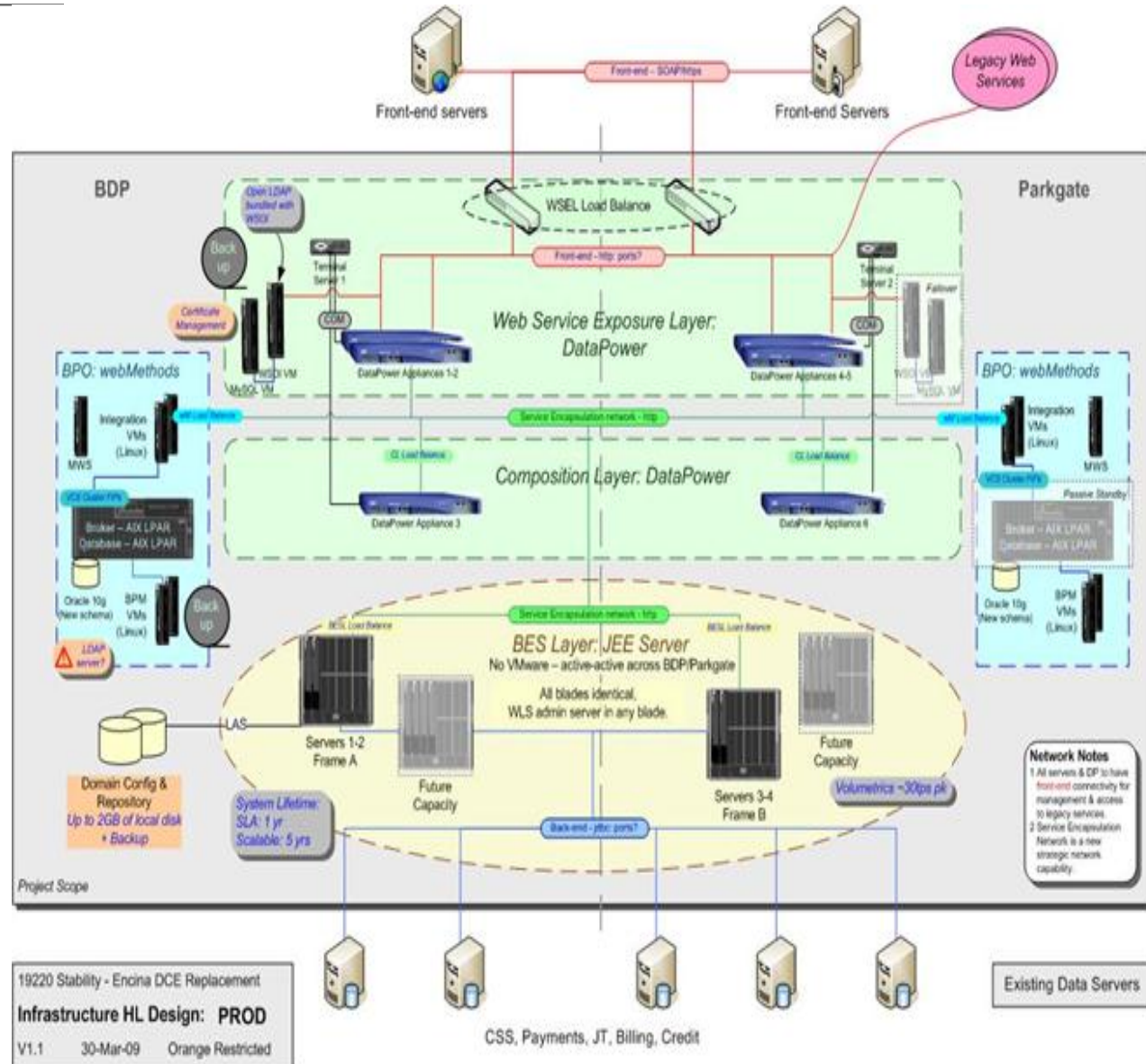
- Web Service Oriented Architecture
- DataPower as a light weight ESB and single governance point.
- DataPower as a Secure Partner Gateway
- WOA (Web Oriented Architecture) with interaction services
- Explicitly modelled business processes using BPM



SOA Reference Architecture

Technical Platforms:

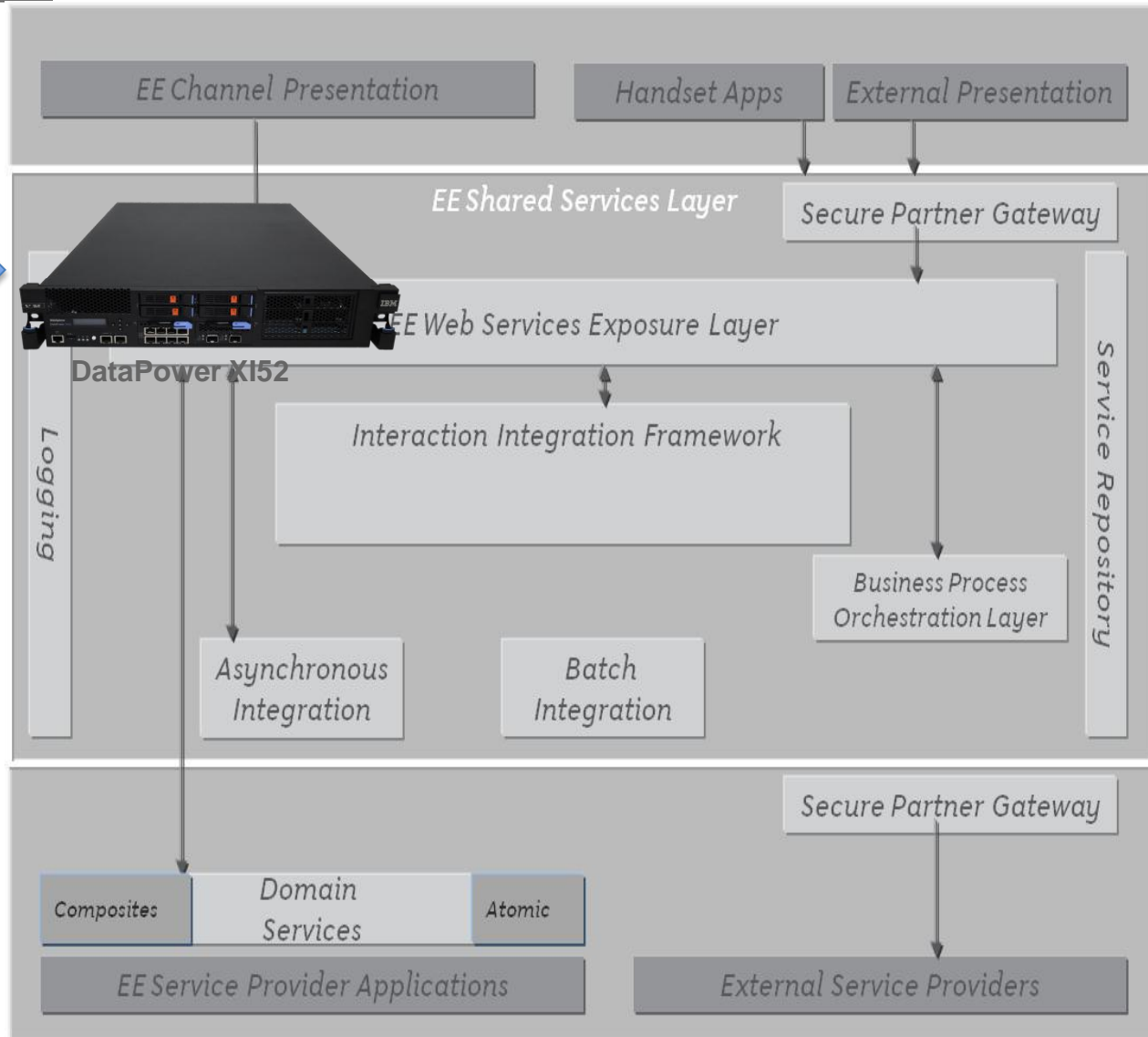
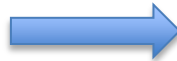
- **Web Services Exposure Layer:** DataPower XI52
- **Business Process Orchestration:** SoftwareAG BPM
- **Secure Partner Gateway:** DataPower XI52
- **Interaction Integration Framework/Asynchronous Integration:** Java



DataPower as a light-weight ESB

Web Services Exposure Layer (DataPower) responsibilities:

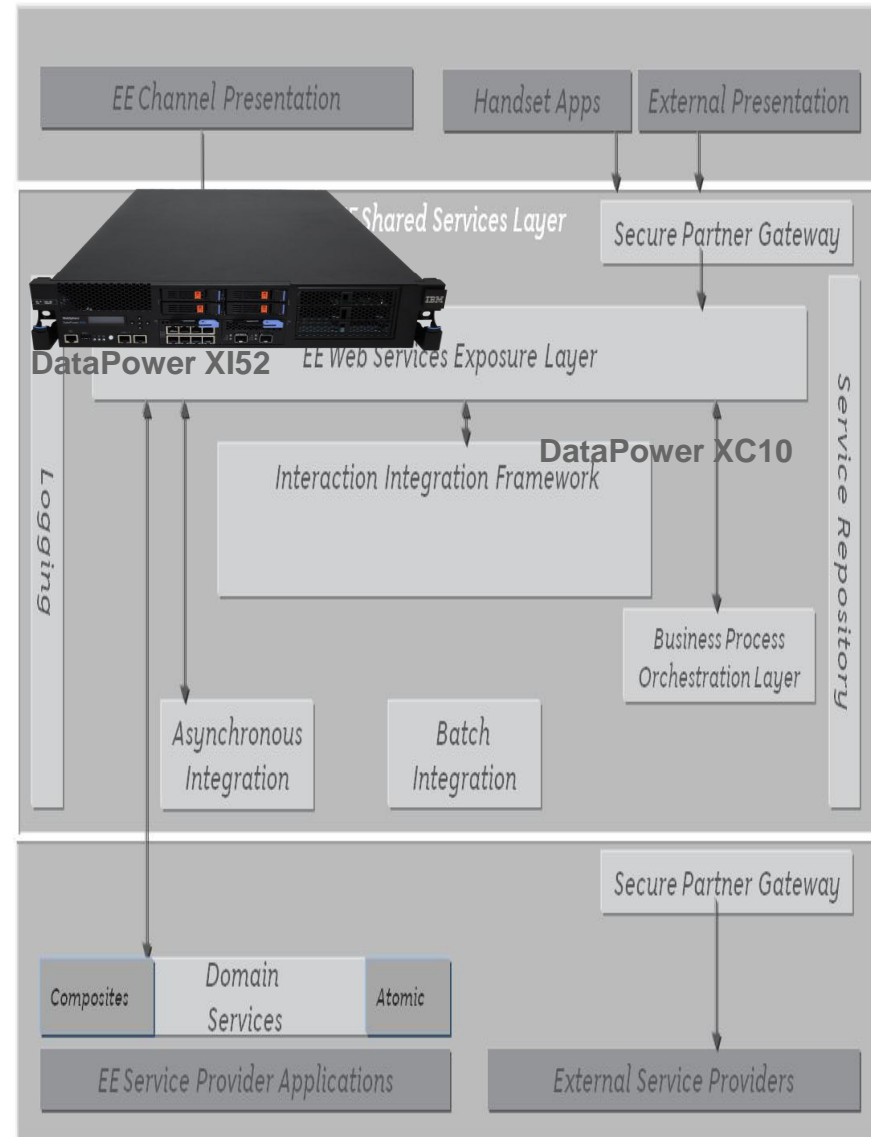
- Security, routing & Versioning
- Service Level Management
- Service Policy
- Supports SOAP & REST
- Supports XML and non-XML



DataPower as a Single Governance Point

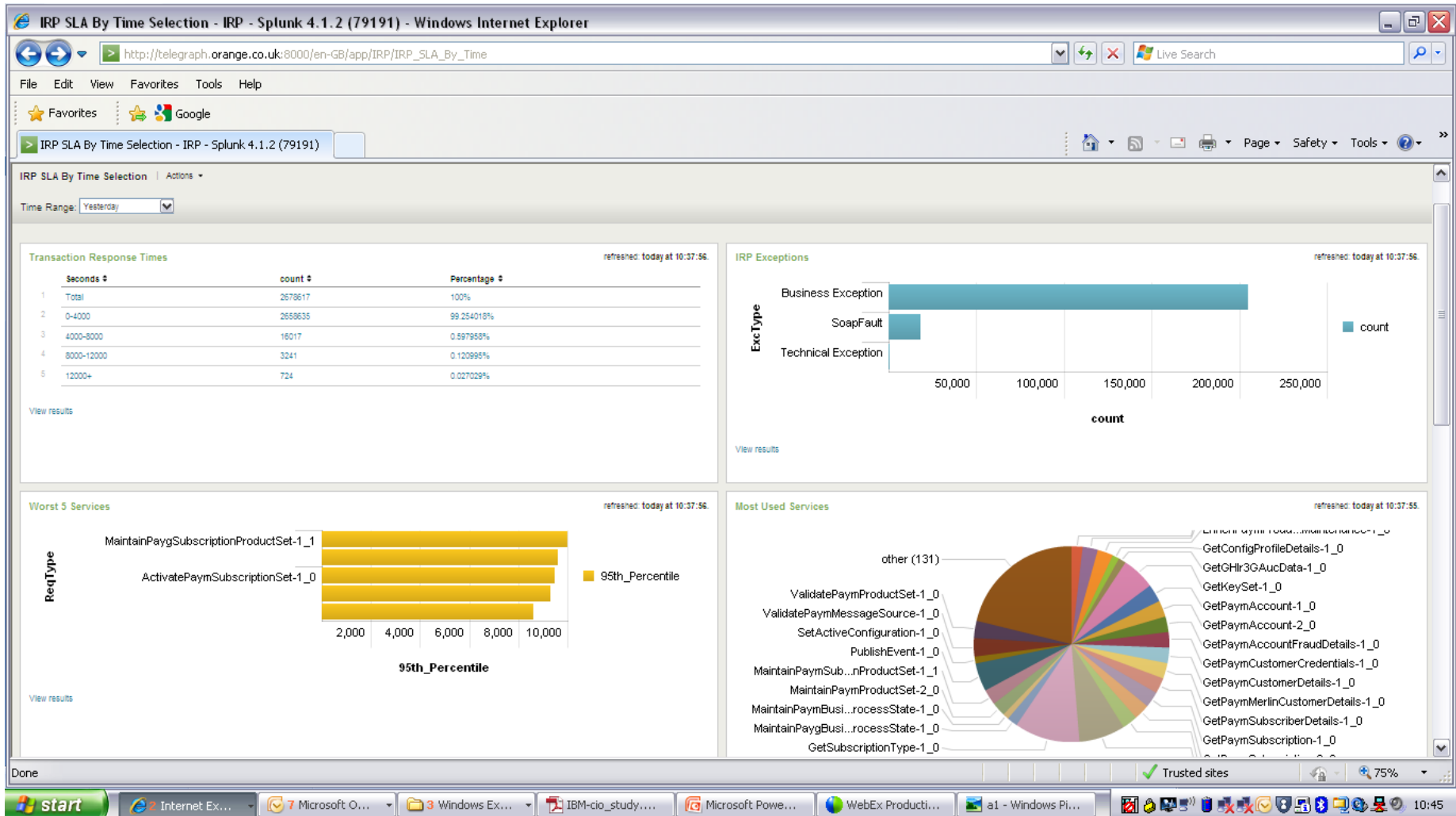
Web Services Exposure Layer(WSEL): Single Governance Point

- All SOA services are exposed only through WSEL
- All SOA can be consumed only via WSEL
- Each web service consumer (WSC) consumes the web services from WSEL domain and does not know the address (URI) of the actual web service provider (WSP)
- WSEL enforces service contract that includes contract addresses non-functional aspects such as response time, number of requests per unit of time & volume.



DataPower integration with Splunk

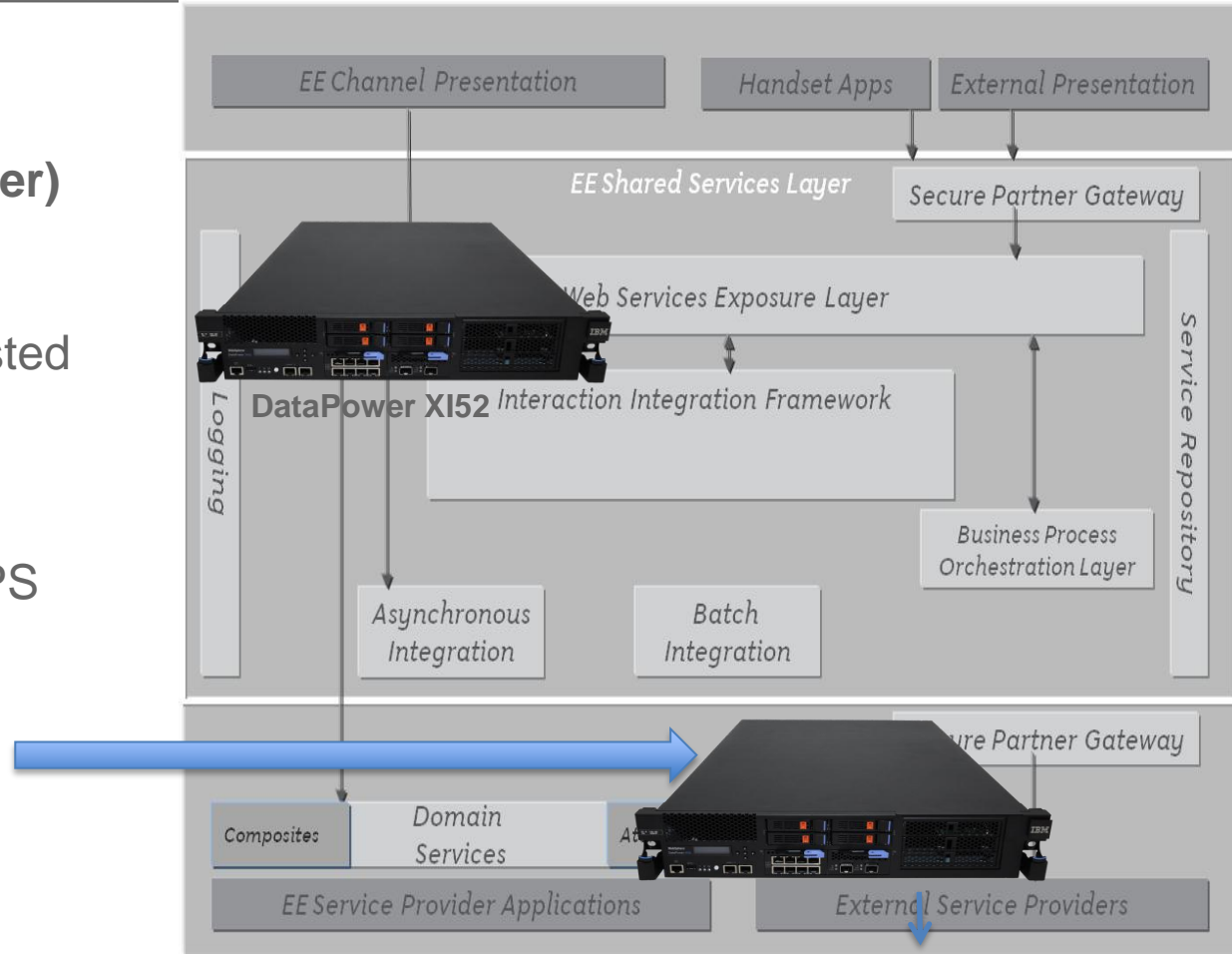
Performance monitoring and reporting



DataPower as a Secure Partner Gateway

Secure Partner Gateway (DataPower) responsibilities:

- Integration with trusted 3rd parties
- Mutual SSL authentication HTTPS
- Technical Transformation.



Experian

DT

FT

BT

DataPower as a Caching Platform

EE-Cache(
DataPower) Use Case:

PAYG Customer
topping up his
account at retail shop,
using his swipe card



IBM DataPower XI52



Backend
Systems



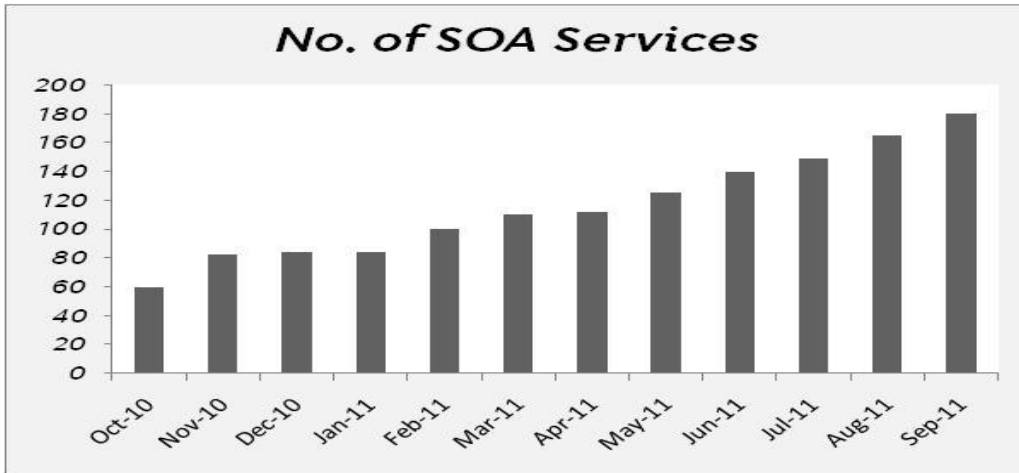
IBM DataPower XC10

E.g. Data Grid

Telephone Number	Swipe Card Number
0777979099	4234234234
0798923232	8984324324

SOA Initiative : Benefits Delivered

During last 18 months, we have delivered 200+ reusable, flexible SOA Services.

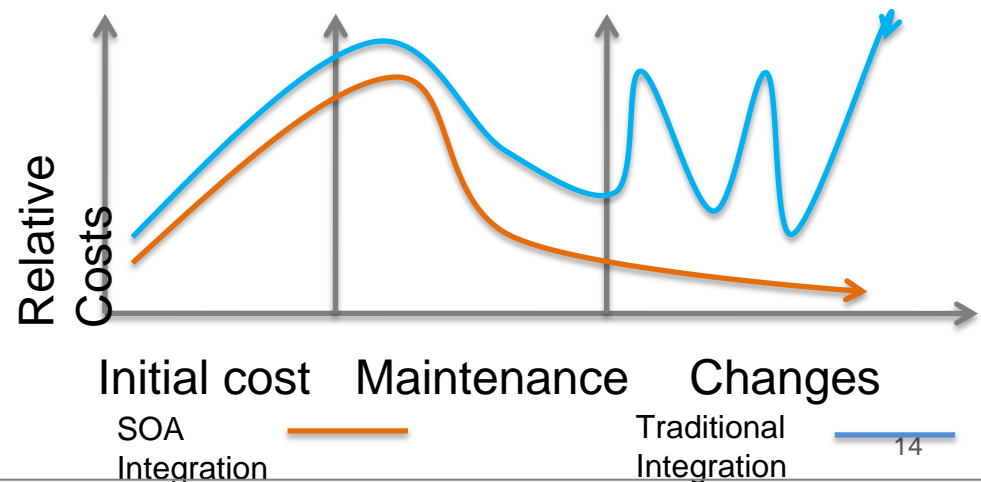


In excess of 520m calls, 99.5% within SLAs.

SLAs	No. of transactions	%
Less than 4 seconds	525,408,059	99.56%
Between 4 & 8	1,852,316	0.35%
Between 8 & 12	260,795	0.05%
More than 12 secpnds	191,316	0.04%

Demonstrable Benefits:

- Reuse
- Flexibility
- Improved Governance
- Low Maintenance
- Reduced integration cost
- Improved Time to Market.



SOA Initiative : Challenges and focus areas

Challenges

- Business Sponsorship
- Mindset change
- Service Identification
- Service Modelling

Focus Areas

Vision : SOA Reference Architecture

- SOA Governance
- Business outcomes
- Standards, Patterns, guidelines and frameworks

EE SOA: Enabling business transformation

Integrated Multi-brand Platform

- provides an integration framework for integrating IMP with other retained applications and partners and enables a multi-channel, consistent customer experience

IT Consolidation

- delivers an end to end integration stack enabling application transformation and consolidates the 2 legacy platforms

APIs and Big Data

- exposes EE's capabilities as APIs for 3rd party consumption – including personalisation and data monetisation

Business Transformation

- maximises the capabilities of legacy technology platforms to support strategic business initiatives

Cloud Aggregator

- enables the cloud aggregator to combine and integrate services from EE and other vendors to provide proprietary offerings

Digital Strategy

- provides multi-brand interaction services for easy integration

Questions.



Thank you.

