

Miracle's Hands-On Pre-Conference Workshop @ **Interconnect 2016**

From IOT to APIs | We have everything for you



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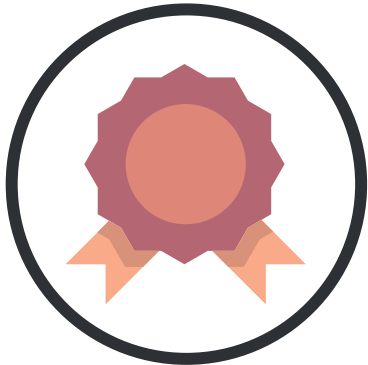
The **Miracle** Story



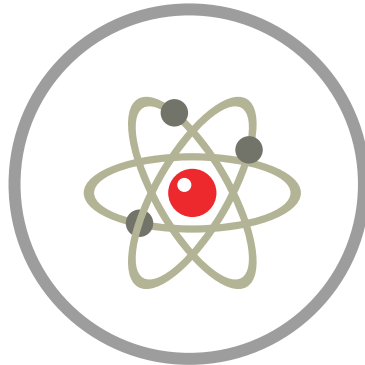
**Customer
Satisfaction**



**Affordable
Innovation**



**Quality and
Efficiency**



**Talent
Eco-System**

12
Global
Locations

15+
Technology
Partnerships

25+
Technology
Accelerators

20+
Years of
Expertise

500+
Certified
Professionals

85+
Fortune 1000
Customers

2000+
Employees
Globally



Miracle Innovation Labs

Empowering Change through Innovation

Our Teams leverage years of **real-time experience** and **applied research** to bring value-added and innovative services to **your disruptive IT initiatives**.

Cost Differentiation and Labor Savings alone are not enough for an enterprise to grow!!



MIRACLELABS
EMPOWERING CHANGE THROUGH INNOVATION

Completely **HANDS-ON** 😊

This is an Innovation Session with complete Focus on **Innovation, Digital and Technology!**



Focus on Digital
Technologies



6 Hours of
code for you 😊



Completely
Guided Labs



Innnnoooooovation
all the way!

Today's **Labs** and **Demos**



**IOT Developer
Lab(90 Minutes)**



**API Developer
Lab(90 Minutes)**



**API Manager
Lab(60 Minutes)**



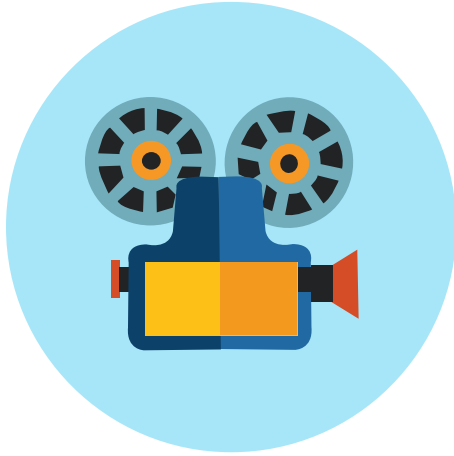
**Mobile Developer
Demo(30 Minutes)**

Node.js, StrongLoop, JavaScript, Loopback, Express and JQuery Mobile UI

Internet of Things, The API Economy, Enterprise Mobility and more

IBM Bluemix, MobileFirst, DataPower Gateway and API Management

Our **Innovation** Zone! 😊



**CHECK OUT ONE
OF OUR **DEMOS****



**TRY OUT ONE OF
OUR **DIY LABS****



****TWEET** TO OUR
COOL LIGHTS**

Come and visit us at **Booth #402 for more
information, fun and innovation!**



Goals for the Day!

- ✓ **Connect** and **Register** a Raspberry Pi to the IBM IoT Foundation
- ✓ **Create** and **Deploy** a Node Red Flow to Filter and Store the Sensor Data
- ✓ **Create** and **Expose** a REST API for the Sensor Data using StrongLoop
- ✓ **Manage** and **Publish** your REST API using IBM API Management
- ✓ **Make sure that everybody has fun** 😊



Schedule for the Day!

8:30 AM	Introductions, Configurations and Kick-Off
9:15 AM	IoT, Bluemix and NodeRed Lightning Talk
9:30 AM	Connecting your RPi to the IBM IoT Foundation
11:00 AM	The API Economy and REST Lightning Talk
11:15 AM	Create and Expose the REST API with StrongLoop
12:45 PM	Interactive Lunch with Innovative Conversation
1:15 PM	API Management Lightning Talk
1:30 PM	Manage and Publish your APIs with IBM API M
2:30 PM	Live Demo : Consuming APIs on MobileFirst

An **Explosion** of Possibilities

50 Billion Connected Devices that
can compute and communicate!

Digital Transformation



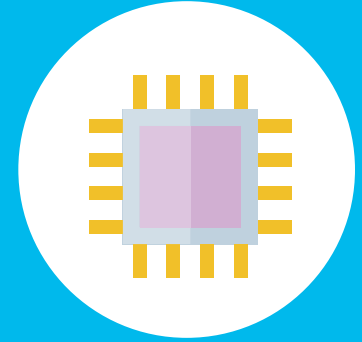
**2.5
Quintillion**
bytes of data will
be created daily



85%
of enterprises
Will use external
cloud services



**534
Billion USD**
will be made in
mobile transactions



**4.9
Billion**
connected things in
use today

75%

of Fortune 1000 companies will have public APIs

GET

POST

PUT

DELETE

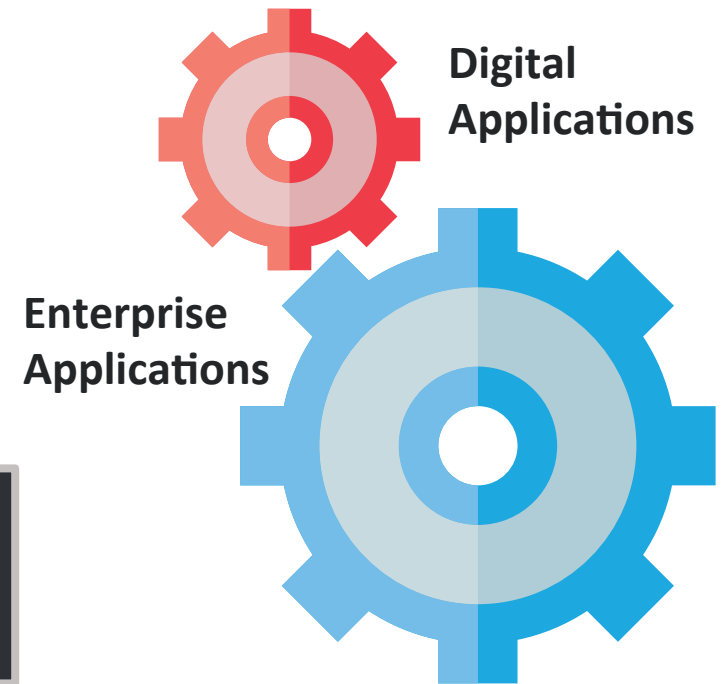
API Economy

The World of 2-Speed IT

Today's Enterprise IT is divided into 2 different spheres of applications :

- **Digital Applications**
 - Rapid Change Cycles
 - Innovative Developers
 - DevOps and Agile Principles
- **Enterprise Applications**
 - Slow Change Life Cycles
 - Mission Critical Legacy Systems

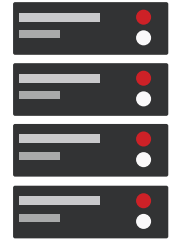
Multi-Speed IT helps enterprises to make changes to systems at **varied speeds** independently, but helps to ensure that both systems are **aligned** at required points.



2016 Cloud Investments

24%

IT Spend will
be on Cloud



Investment Areas

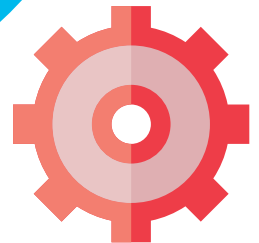
24%

49%
Software as
a Service

28%
Infrastructure
as a Service

28%
Platform as
a Service

5%
Other



The **Hybrid** Compute Path

Enterprise Investments are being spread across on-premise, private clouds and public services

Enterprise Applications and Data

Consume your Applications and Data as a Service through Public Clouds(SaaS)

Keep your Applications and Data with a On-Prem (or) Private Cloud Infrastructure

Move your Applications and Data to a Public Cloud Provider in a IaaS Model

Decision == Where do I put what?



**Operational
Factors**



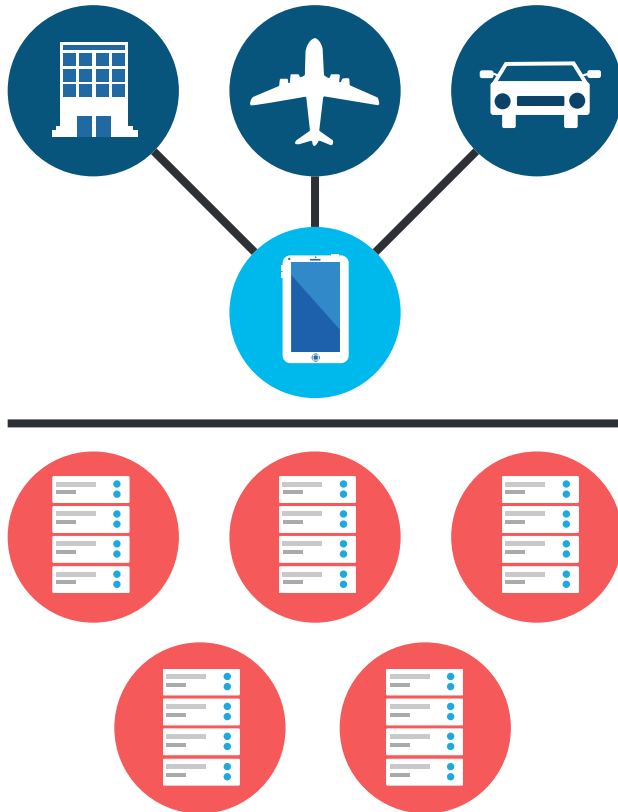
**Economic
Factors**



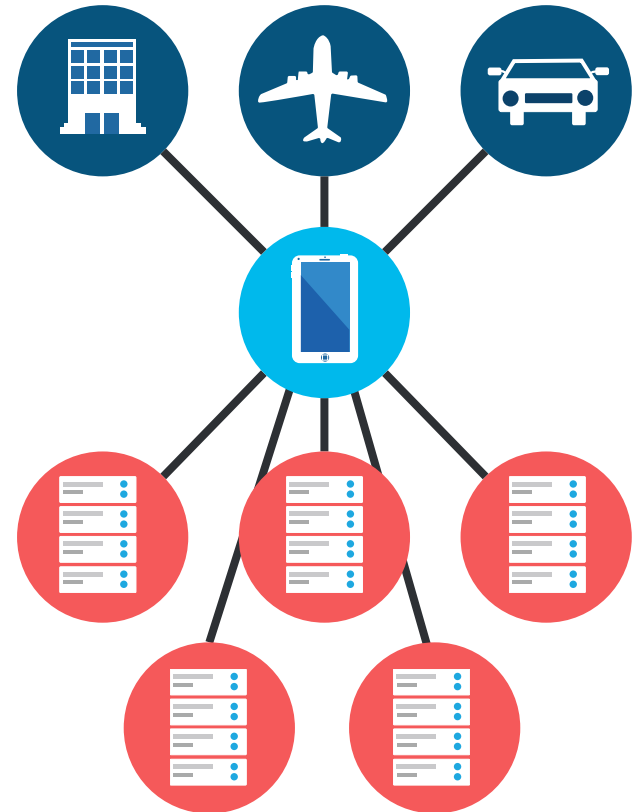
**Security
Factors**

Not **Connected** = Not **Engaging**

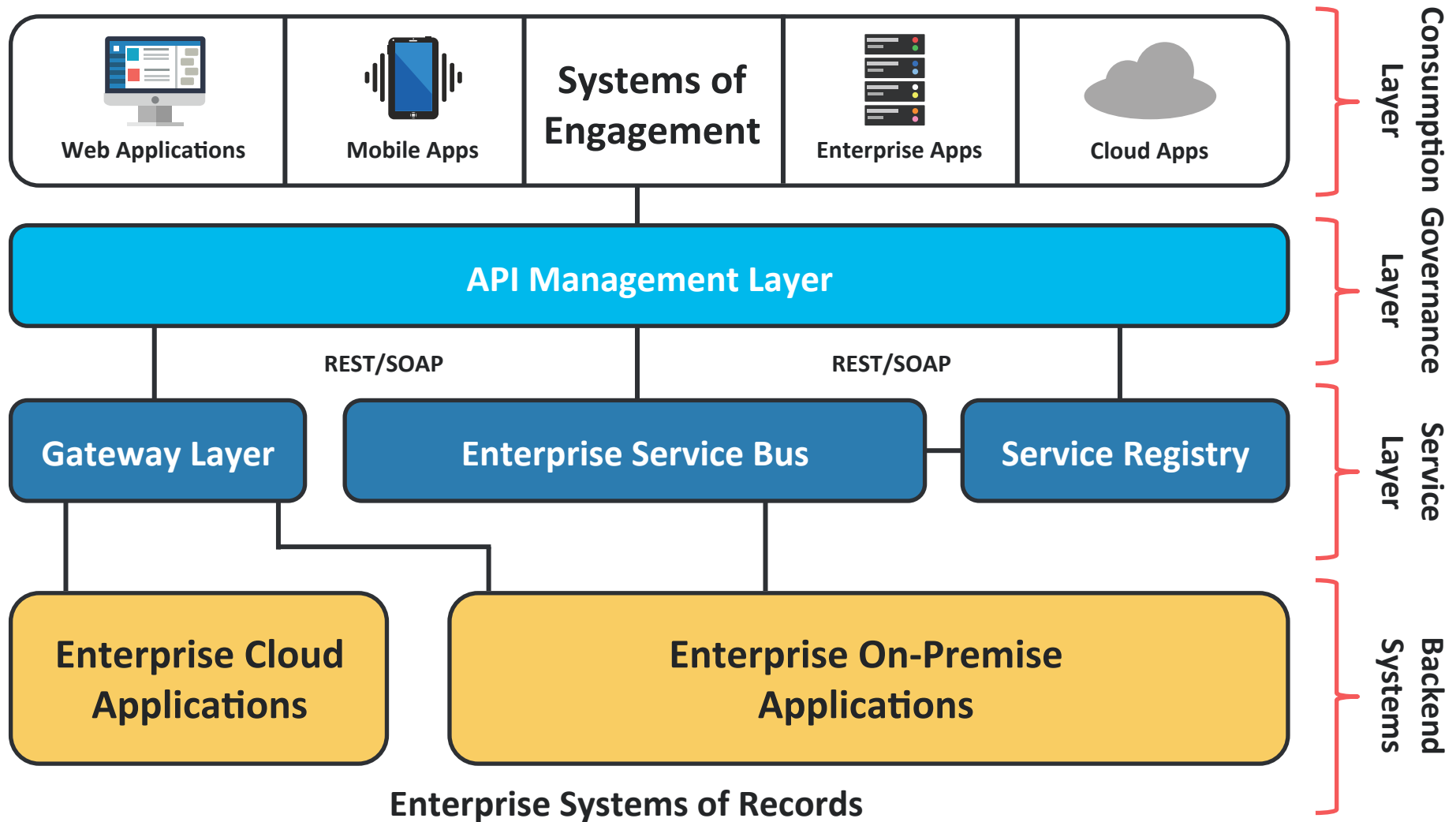
Unconnected



Connected



API Layers for an Enterprise Backend



Continuous Engineering? Agile and Lean?

Agile Methodologies taught developers to breakdown software development into smaller chunks to accelerate feedback loops and product changes for market need

Rapid Changes and Deployments of applications pose a problem for **QA/Ops Teams** which follow manual and traditional processes

