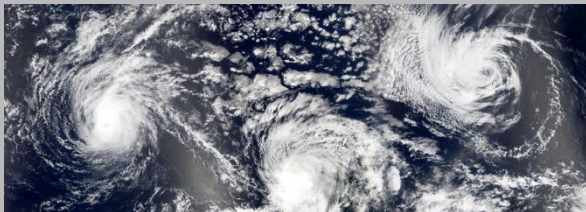# Partnering for the New Style of IT

Pierre Tedesco

HP France

Des phénomènes structurants convergent

Besoins des métiers

Cloud

Big Data

Mobilité

Securité

25-30%
des livraisons de
serveurs
dans les data centers
des Cloud
service providers'
en 2014 (1)

85%
des Fortune 500
ne pourront pas exploiter
l'avantage compétitif du
Big Data for en 2015 (2)

45%
des organisations
dépenseront au moins
500K$
pour la mobilité dans
les prochains 12 à 18
mois (3)

5.5M $
coût moyen d'une
attaque, les entreprises
subissent plus d'une
attaque réussie par
semaine en moyenne [4]

HP Confidential   (DATE)

Hewlett-Packard Enterprise : des solutions pour le "New Style of IT"

Infrastructures
fondations du New Style of IT

Services
gérer et transformer du traditionel vers le new

Software
fournir la connaissance

Cloud
Produire le New Style of IT pour l'enterprise

Faire croître le business des clients avec des solutions pérennes et innovantes qui transforment les infrastructures traditionnelles

Accélération de l'innovation FY13/14~

CI for SMB MicroServer

ProLiant Gen8 Refresh

ProLiant Bladesystem Gen8 Refresh

Moonshot

SL4500 Density Optimized Compute &Storage

EMEA ECOPODS

C7000 Blade Platinum Enclosure

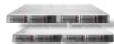High Performance Component-level Cooling Apollo

HP 6125XLG 10/40Gb Switch

Virtual Connect 4.01

SL6500 Dense, shared serviceable, infrastructure

SL2500 Dense Multinode

SmartCache

Next Gen Smart Array HP Secure Encryption & 12G SAS Capable

HP MSA Storage

HP StoreOnce Backup

HP StoreVirtual Storage

HP StoreAll Archive

HP 3PAR StoreServ Storage

Enterprise Wireless Controller

Enterprise Controller

2920 switch

HP 11900 switch

HP 12900 switch

vSwitch

OpenFlow

Datacenter Care

Flexible Capacity

Proactive Care

CloudOS

Next-Generation CloudSystem

Fusion 1.0 Blade & Rack Virtual Connect

Next Gen Smart Update

HP ConvergedSystem 100 for Hosted Desktops

HP ConvergedSystem 300 for Virtualization

HP OneView

HP ConvergedSystem for SAP HANA Gen 1.2

HP ConvergedSystem 700 for Virtualization

HP ConvergedSystem 300 for Vertica

… et ce n'est que le début

La nouvelle génération de serveurs optimise la fourniture des services IT

Efficacfcité

Valeur

Réimaginer le serveur.

Infrastructure physique, dédiée

Think Compute.

Alignement dynamique et précis des pools de ressources aux objectifs des métiers

Software-defined and cloud-ready

Converged

Workload-optimized

Technology centric

Manual

Silo'ed

Infrastructure centre de coûts

Infrastructure, différenciateur de services

Vitesse

Une offre centrée sur les besoins des entreprises

Software-defined and cloud-ready

HP OneView | **HP Helion** | **OpenStack** | **RESTful APIs**

Workload-optimized

For core business applications	For mission-critical environments	For Big Data, HPC, & web scalability	For virtualized &cloud workloads
HP MicroServer — HP ProLiant ML — HP ProLiant DL	HP ProLiant scale-up — "DragonHawk" — HP Integrity blades & Superdome — HP Integrity NonStop	HP ProLiant SL — HP Moonshot — HP Apollo Family	HP BladeSystem
Intelligence to increase productivity	**Availability** for continuous business	**Density and efficiency** to scale rapidly	**Convergence** to accelerate IT service delivery

Converged

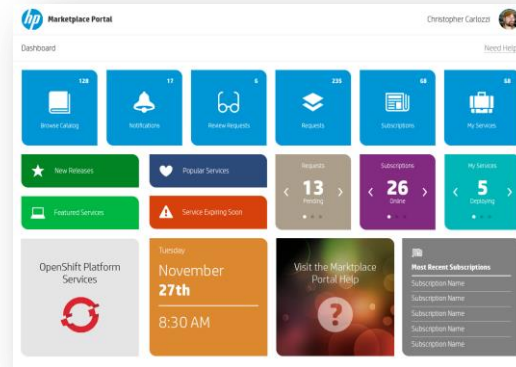| Converged network Virtual Connect	Converged management HP OneView	Converged storage HP StoreVirtual VSA	Common modular architecture

Global support and services | Best-in-class partnerships | ConvergedSystems
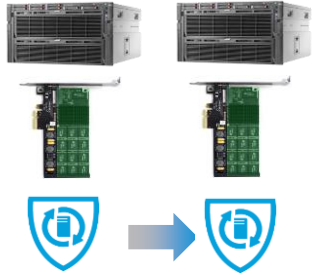
HP Converged Infrastructure for The New Style of IT

Standardization, Industrialization, Innovation

Frederic Leonetti

HP France

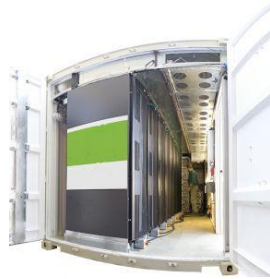# Demanding Workloads In France on HP Converged Infrastructure technologies

French Bank, Retail, Telco
« Mission Critical x86 »
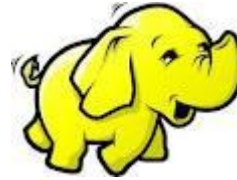
French « Gazelle »
«Big Data with HP Hadoop architecture »

Large Industrial Company

« Enhancing capabilities with HPC »

French Insurance Company
« Standardized and Industrialized Shared Services »

Large Telco Company

«Secured Public Cloud »

The only approach designed for the new style of IT

Solutions engineered, built, and delivered across three workload **design centers**

Application-centric approach

Hyperscale	Mainstream	Business-critical

Single application spanning massive volume of systems

Many applications consolidated on far less infrastructure

Systems of Record
(highly secure, up all the time)
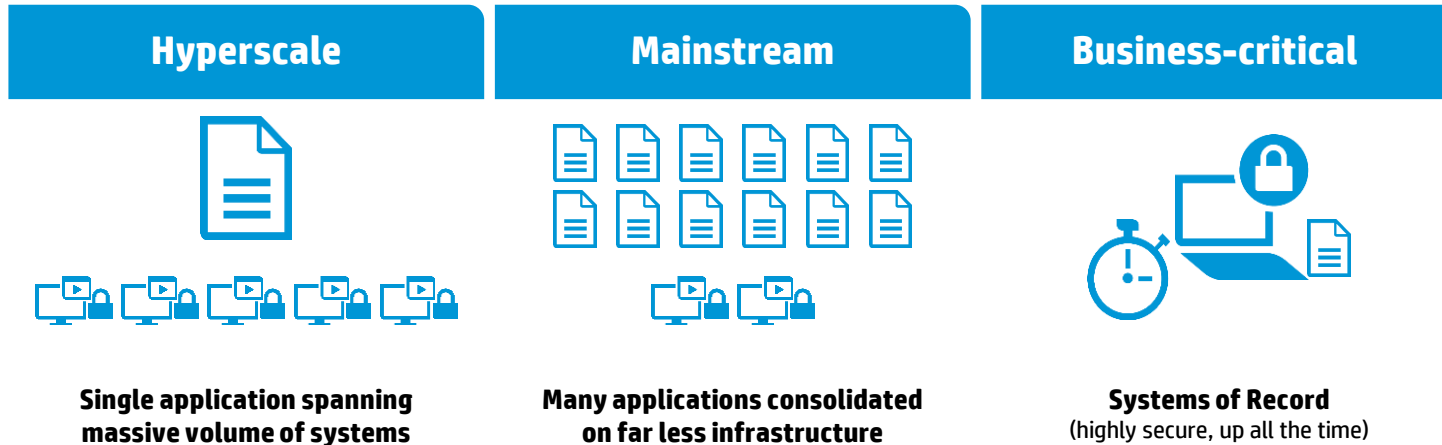
It's all about the **APP**

SDDC / Software Defined Infrastructure Solutions

Application & Business requirements

HP Converged Cloud

HP Helion   openstack

HP OneView
Unified Management

HTML5   RESTful API
GET PUT POST DELETE

SDN Ecosystem

SDN App Store Powered by HP   OpenFlow   Powered by HP SDN

HP Converged Systems

- **Virtualization**
- **HDI / VDI**
- **Big Data**
- **Mobility**
- **In Memory Database**
- **Microsoft Collaboration Suite**

Server Ecosystem

Virtualized Server   Software/ Workload defined Server

Storage Ecosystem

Software-defined storage   VSA   Utility Storage

Network Ecosystem

Security   Scalable Network

Facilities

Workload-optimized portfolio for better business outcomes

For core business applications

HP MicroServer   HP ProLiant ML   HP ProLiant DL

Intelligence to increase productivity

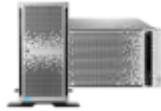## For Big Data, **HPC,** and web scalability

HP ProLiant SL   HP Moonshot   HP Apollo

Density and efficiency to scale rapidly

For mission-critical environments

HP ProLiant scale-up   "DragonHawk"   HP Integrity blades & Superdome   HP Integrity NonStop

Availability to function in real-time

For virtualized and cloud workloads

HP BladeSystem   HP OneView

Convergence to accelerate IT service delivery
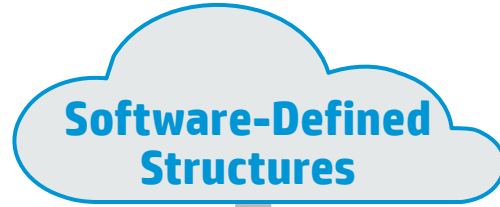
Common modular compute architecture

Global support and services | Best-in-class partnerships | Converged solutions

Converged Infrastructure Management with HP OneView

Boot Config	Storage Volumes	OS Build Plan
Drivers	vSwitch Setup	ESX Host Config
Identity	Firmware	NIC Teaming
BIOS & iLO Settings	Local RAID Config	Network Edge Connectivity

Cloud

openstack
CLOUD SOFTWARE

Virtualization

vmware redhat

Microsoft

Software-Defined Structures

REST API & CLI

Using the HP Converged Infrastructure Controller REST APIs

HTML5 User Interface
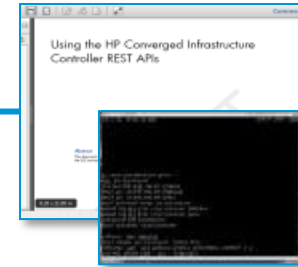
HP OneView
Management Platform

Appliance Options
Virtual Machine (OVF)
–or–
Physical Appliance

Physical Appliance

Ready-to-Run Appliance

Server   **Storage**   **Network**
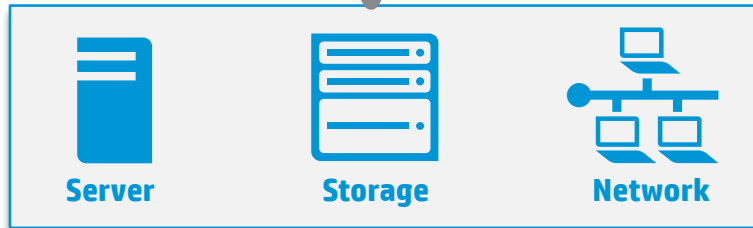
The New HP Apollo 8000 System

Advancing the science of supercomputing

NEW

Scientific Computing
- Research computing
- Climate modeling
- Protein analysis

Manufacturing
- Product modeling
- Simulations
- Material analysis

Leading teraflops per rack for accelerated results
- **4X** teraflops/sq. ft. than air-cooled systems
- > **250 teraflops/rack**

Efficient liquid cooling without the risk
- **40% more FLOPS/watt** and **28% less** energy than air-cooled systems
- **Dry-disconnect** servers, intelligent Cooling Distribution Unit (iCDU) monitoring and isolation

Redefining data center energy recycling
- Save up to **3,800 tons** of CO_2/year (790 cars)
- **Recycle water** to heat facility

4X teraflops/sq. ft.   **40%** more FLOPS/watt   **3,800** tons of CO_2

HP SL1500 Moonshot for apps at scale

Revolutionary cost and power savings for targeted applications
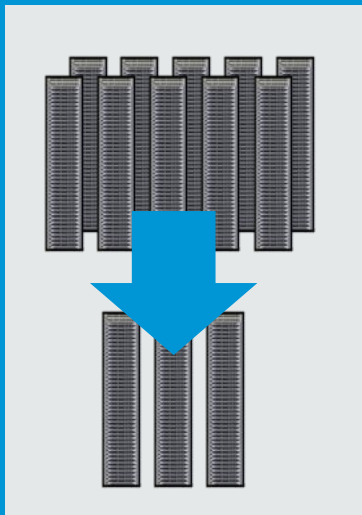
New server development model and cadence

- Identify Market
- Analyze Application
- Launch Solutions
- Optimize Cartridge
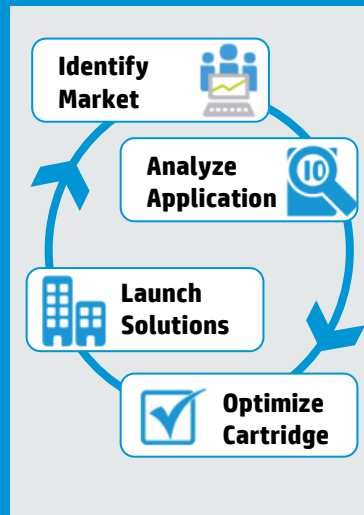
Large cartridge catalog – put the applications back in charge
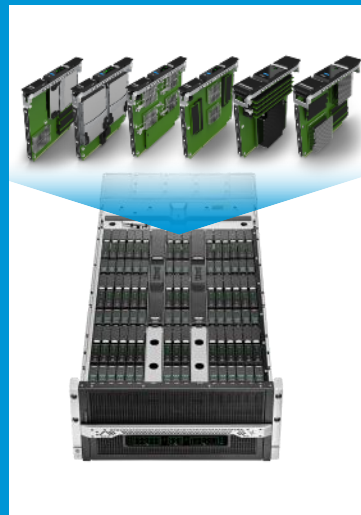
Pathfinder Innovation Ecosystem

Couchbase, ubuntu Supported by Canonical, Texas Instruments, Marvell, CITRIX, NVIDIA, ARM, VERTICA, Linaro, SUSE, AMD, redhat, applied micro, intel, CAVIUM, SRC Computers, LLC, nuoDB, cloudera, MAPR Technologies, CYWEE

New Moonshot Cartridge
As of 4QCY14

HP ProLiant m710 Server Cartridge
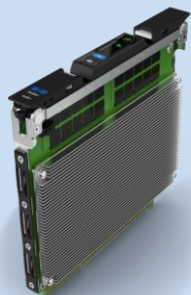
CPU	**Xeon** E3-1284Lv3 4 core / 1.8 GHz (3.4Ghz Turbo) with **Iris Pro GPU 5200** + 128MB **eDDR**
MEMORY	Total of **32GB**, dual-memory channels (4) DIMMs Total: 8GB/1600MHz, DDR3 SO-DIMMs with ECC protection
NETWORK	Onboard NIC: **Dual port 10GbE NIC per CPU** **Supported Switch(s): 45 port 10Gb Downlinks, (4) 40GbE QSFP uplinks**
STORAGE	Local M.2 120GB or 480GB m.2 (2280)
OS	Ubuntu 12.04 w/KVM, RHEL 6.5,7.0 w/KVM, SLES 11 SP3 w/KISO/KVM, Windows Server 2012 R2, CentOS 6.5, 7.0 Intel Media SDK (media libraries, OpenCL)
Cible Applicative*	**Video transcoding , Application Delivery CPU and GPU Computing**

HP ProLiant m400 Server Cartridge

CPU	APM STORM / **ARM 64bit v8** 8 cores, 2.4GHz
MEMORY	**(8) DIMMS Total – Max of 64GB** Up to 1600MHz, DDR3 UDIMM SO-DIMM ECC (8GB each)
NETWORK	Onboard NIC: **Dual port 10GbE NIC per CPU** **Supported Switch(s): 45 port 10Gb Downlinks, (4) 40GbE QSFP uplinks**
STORAGE	Local M.2 120GB or 480GB m.2 (2280)
OS	Ubuntu
Cible Applicative*	**Web Caching, ARM Development Platform**

HP ProLiant m350 Server Cartridge

CPU	Intel Atom C2730 / 8 core / 1.7GHz / 4MB L2 / 20W
MEMORY	8GB 1333MHz ECC memory per SoC (4) SO-DIMMS
NETWORK	Integrated NIC: dual 1GbE oer SoC Supported Switch(s): 180 1GbE Downlinks, (4) 40G QSFP Uplinks
STORAGE	32GB / 64 GB local SSD
OS	Ubuntu 12.04, RHEL 6.4, SLES 11 SP2, Windows2012
Cible Applicative*	**Dynamic Web , Front et Back Office**

*Non exhaustive

3PAR StoreServ Designed For The New Style Of IT

ONE Architecture

- Midrange. Flash. High-end
- Common Tier-1 Feature Set
- Interoperability end-to-end

When scale matters
Up to 3.2 PB

When performance matters
Over 900K IOPS @ <.7 ms latency

When value matters
Starting at $25K

10800

10400

7450
All flash array

7400

7200
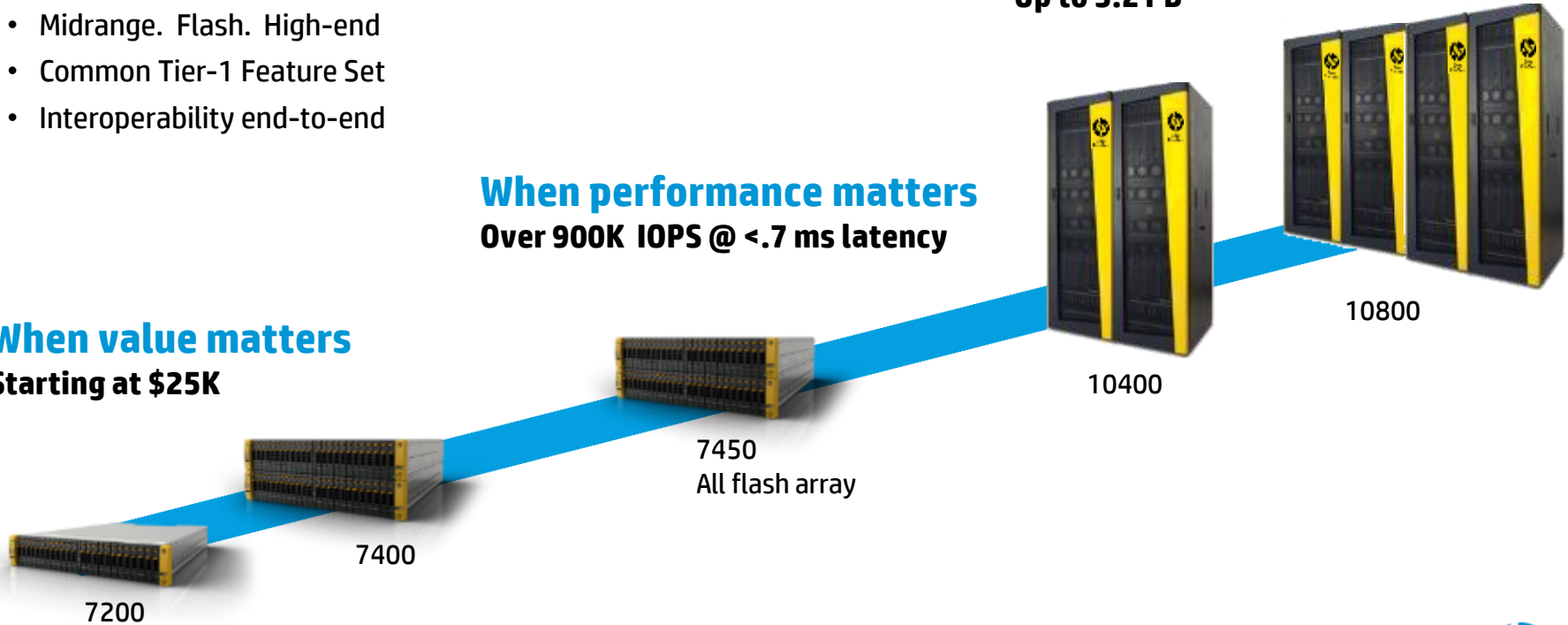
Open SDN portfolio, SDK, App Store enable Ecosystem

Programmable network aligned to business application delivers agility

SDN Architecture

Application

SDN App Store
Powered by HP

Powered by HP
SDN SDK

| Virtual Cloud | Load Balancing | UC&C (Lync) |
| Sentinel | Partner Apps | ConvergedControl |

Control

Virtual Application Networks SDN Controller

Infrastructure

Overlay
VXLAN, NVGRE

OpenFlow

Over 25 million ports across 50 Switches

10 Routers

Design Implementation & Support Services
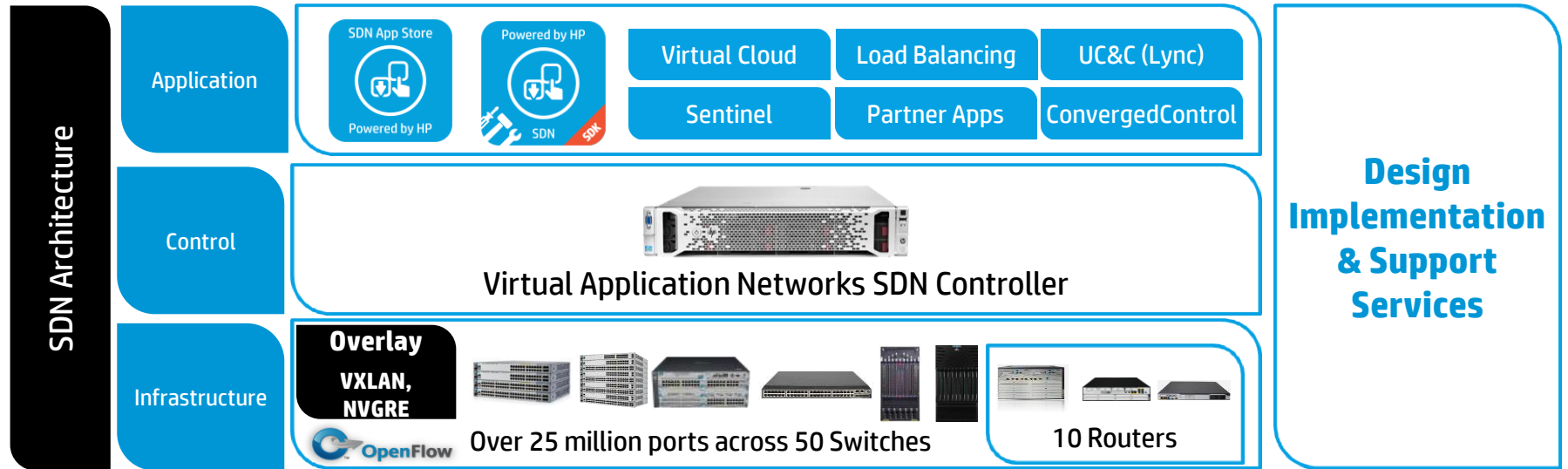
HP Labs "The Machine"

Electrons compute, photons communicate, ions store … at net-zero energy

TO massive,
universal
main memory

TO energy- and
algorithm-optimized
SoC ecosystems

TO integrated
photonics

TO OpenSource data
management platform

EMEA/France Executive Briefing, Innovation and Solution Discovery Centers

HP Les Ulis, France

Microsoft MTC/HP, Issy, France

Solution Innovation Center, Grenoble, France

Solution Technology Centre, Boeblingen, Germany

HP HAVEn
See the big picture in Big Data

Florence Laget

HP France

Accelerating innovation & time to value

Every 60 seconds

98,000+ tweets

695,000 status updates

11million instant messages

698,445 Google searches

168 million+ emails sent

1,820TB of data created

217 new mobile web users

Yottabytes

Mainframe
Kilobytes

Client/Server
Megabytes

The Internet
Gigabytes

Mobile, Social,
Big Data & The Cloud
Zettabytes

Manufacturing Projects, Product Configurator, SAP, HP, Bills of Material, CRM, MRM, SCM, Engineering, Order Entry, Quality Control, Inventory, HCM, EMC, Cost Management, Burroughs, IBM, Hitachi, Unisys

NEC, Bull, Fijitsu, ERP, HCM, Cash Management, Time and Expense, Fixed Assets, Costing, Accounts Receivable, Payroll, Billing, Activ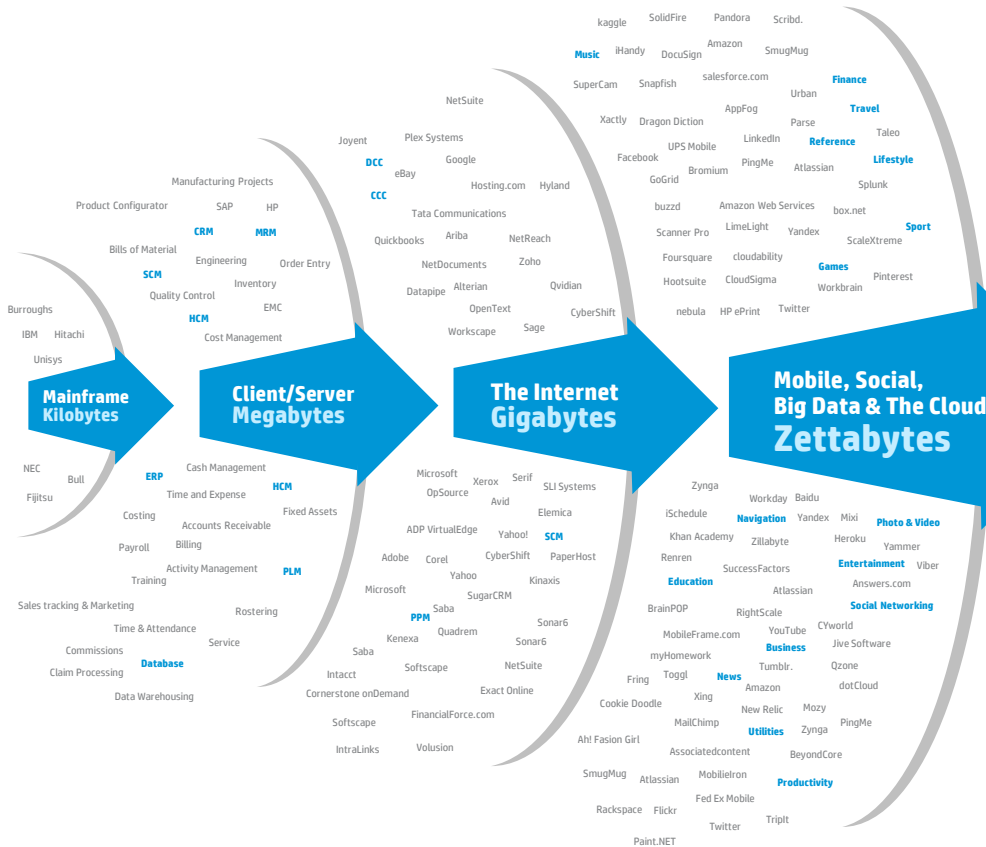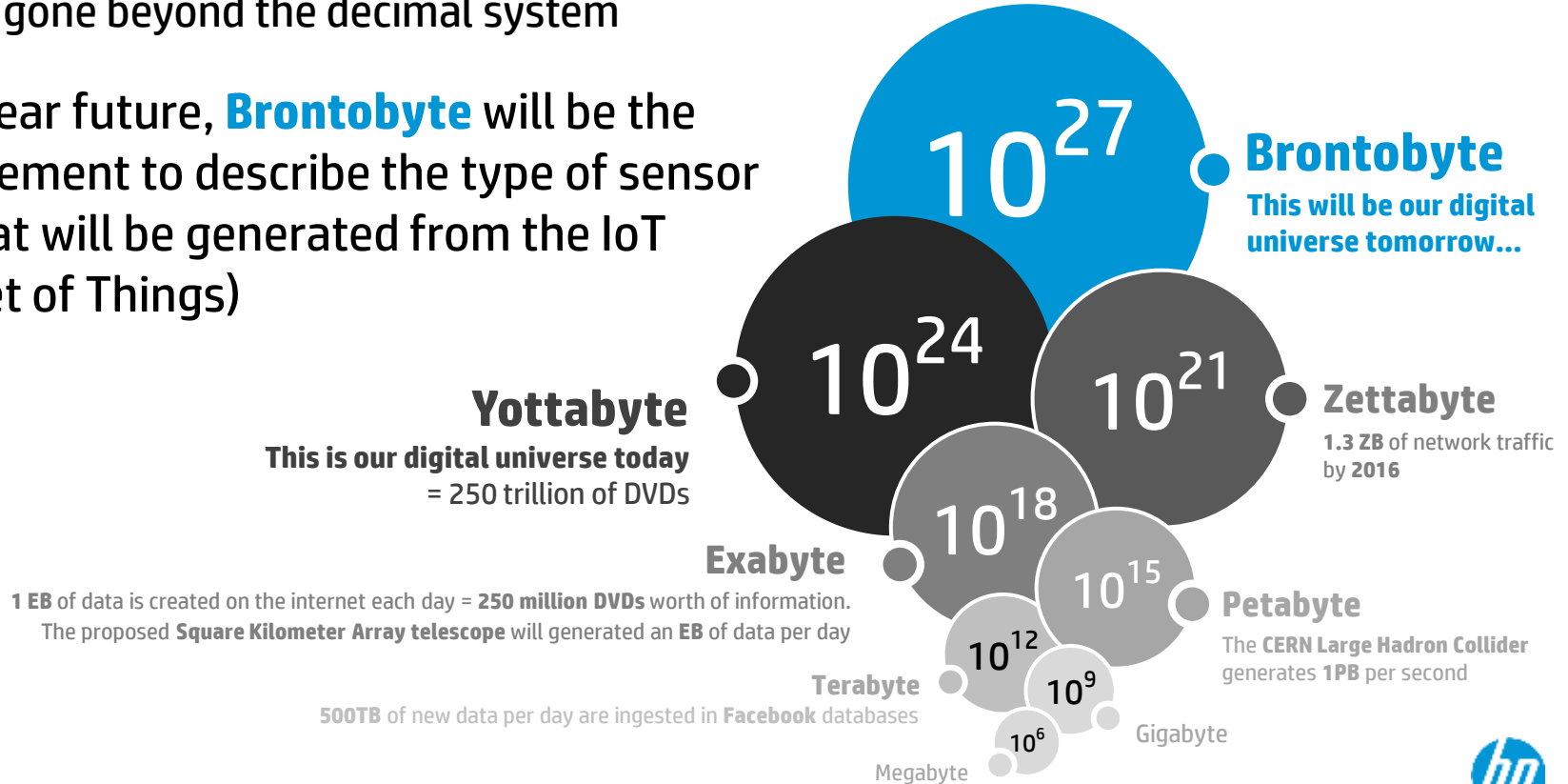ity Management, PLM, Training, Sales tracking & Marketing, Rostering, Time & Attendance, Service, Commissions, Database, Claim Processing, Data Warehousing

Joyent, DCC, CCC, eBay, Google, Hosting.com, Hyland, Plex Systems, NetSuite, Tata Communications, Quickbooks, Ariba, NetReach, NetDocuments, Zoho, Datapipe, Alterian, Qvidian, OpenText, CyberShift, Workspace, Sage

Microsoft, OpSource, Xerox, Serif, SLI Systems, Avid, Elemica, ADP VirtualEdge, Yahoo!, SCM, Adobe, Corel, CyberShift, PaperHost, Yahoo, Kinaxis, Microsoft, SugarCRM, PPM, Saba, Quadrem, Sonar6, Kenexa, Softscape, Saba, Sonar6, Intacct, NetSuite, Cornerstone onDemand, Exact Online, Softscape, FinancialForce.com, IntraLinks, Volusion

kaggle, SolidFire, Pandora, Scribd., Music, iHandy, DocuSign, Amazon, SmugMug, SuperCam, Snapfish, salesforce.com, Finance, Xactly, Dragon Diction, AppFog, Urban, Travel, Facebook, UPS Mobile, LinkedIn, Parse, Taleo, GoGrid, Bromium, PingMe, Reference, Lifestyle, buzzd, Amazon Web Services, box.net, Splunk, Scanner Pro, LimeLight, Yandex, Sport, Foursquare, cloudability, ScaleXtreme, Hootsuite, CloudSigma, Games, Pinterest, nebula, HP ePrint, Twitter, Workbrain

Zynga, Workday, Baidu, iSchedule, Navigation, Yandex, Mixi, Khan Academy, Zillabyte, Heroku, Photo & Video, Renren, SuccessFactors, Yammer, Education, Entertainment, Viber, BrainPOP, Atlassian, Answers.com, RightScale, Social Networking, MobileFrame.com, YouTube, CYworld, Jive Software, myHomework, Business, Qzone, Fring, Toggl, News, Amazon, dotCloud, Cookie Doodle, Xing, New Relic, Mozy, PingMe, MailChimp, Utilities, Zynga, Ah! Fasion Girl, Associatedcontent, BeyondCore, SmugMug, Atlassian, Mobilieiron, Productivity, Rackspace, Flickr, Fed Ex Mobile, Twitter, TripIt, Paint.NET

Information from the Internet of things:

We have gone beyond the decimal system

In the near future, **Brontobyte** will be the measurement to describe the type of sensor data that will be generated from the IoT (Internet of Things)

10^{27}

Brontobyte
This will be our digital universe tomorrow...

10^{24}

Yottabyte
This is our digital universe today
= 250 trillion of DVDs

10^{21}

Zettabyte
1.3 ZB of network traffic by **2016**

10^{18}

Exabyte
1 EB of data is created on the internet each day = **250 million DVDs** worth of information. The proposed **Square Kilometer Array telescope** will generated an **EB** of data per day

10^{15}

Petabyte
The **CERN Large Hadron Collider** generates **1PB** per second

10^{12}

Terabyte
500TB of new data per day are ingested in **Facebook** databases

10^9

Gigabyte

10^6

Megabyte

Big Data landscape

Annual
Growth

Machine Data

Human Information

~100%

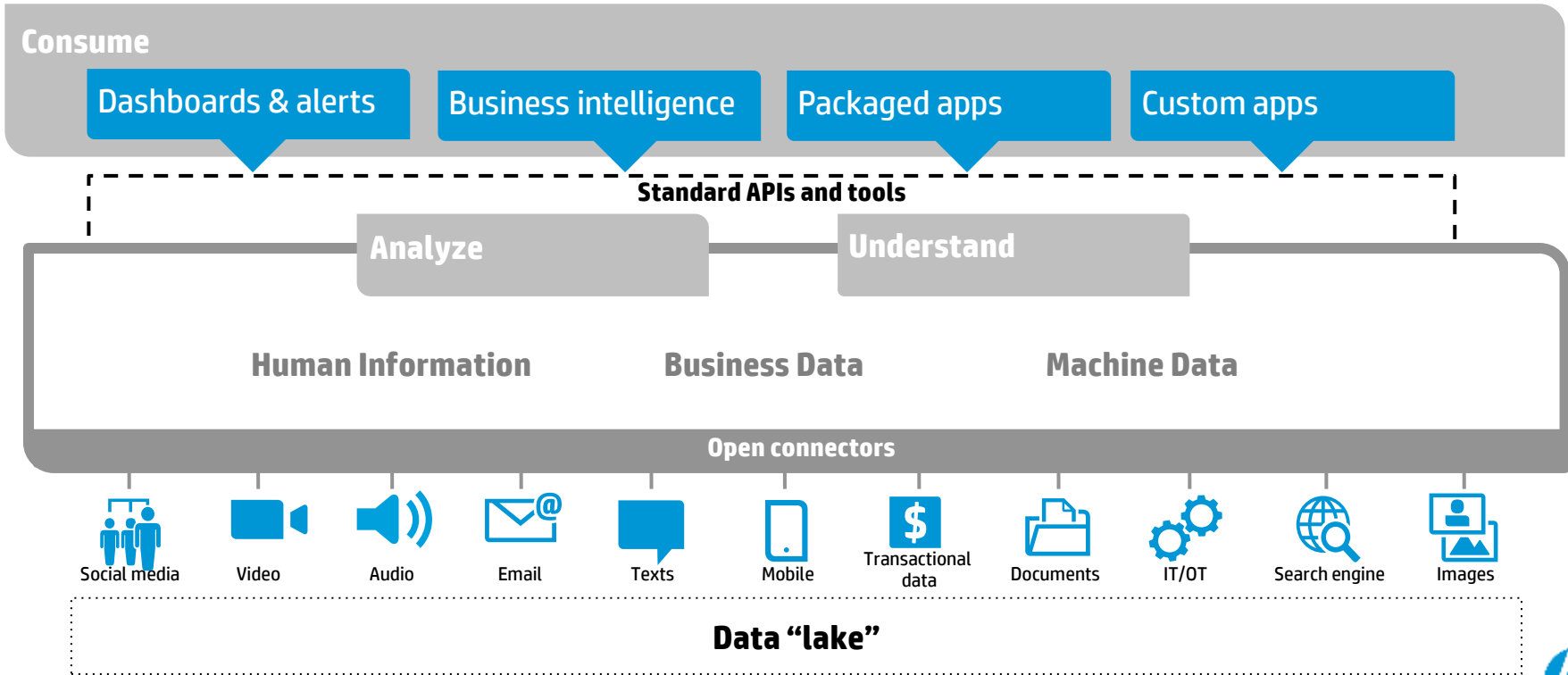| Sensors; Web logs; App logs; event monitors; security and intelligence systems. | ← **90% of Information** → | email, social media, documents and records, video, audio, and images |

Business Data

~10%

ERP; CRM; EDW

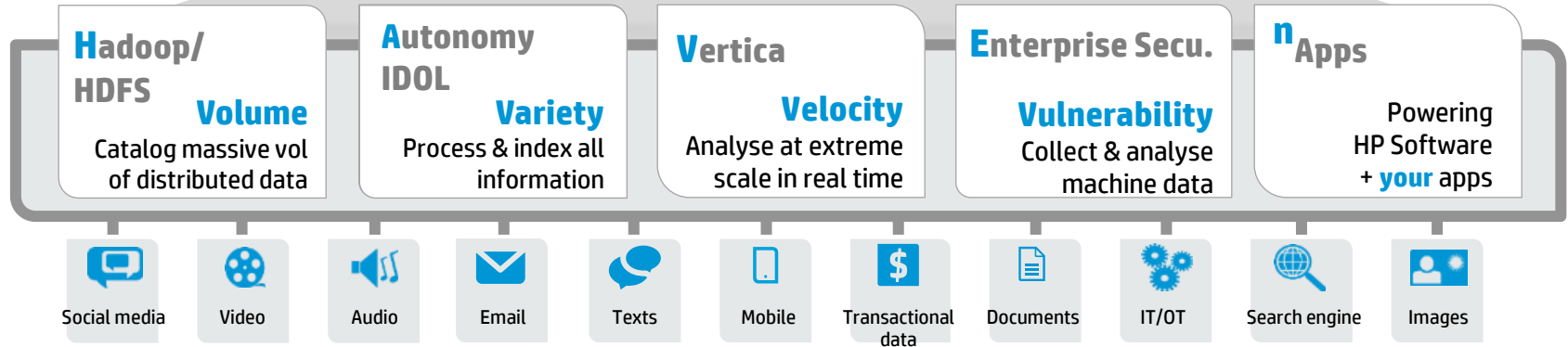**10% of Information**

Imagine if you could...

Interact with and process 100% of your data seamlessly

Consume

- Dashboards & alerts
- Business intelligence
- Packaged apps
- Custom apps

Standard APIs and tools

Analyze

Understand

Human Information   **Business Data**   **Machine Data**

Open connectors

Social media | Video | Audio | Email | Texts | Mobile | Transactional data | Documents | IT/OT | Search engine | Images

Data "lake"

Sales Play BIG DATA
HP HAVEn platform

Exploit 100% of your data

HAVEn

Hadoop/ HDFS
Volume
Catalog massive vol of distributed data

Autonomy IDOL
Variety
Process & index all information

Vertica
Velocity
Analyse at extreme scale in real time

Enterprise Secu.
Vulnerability
Collect & analyse machine data

nApps
Powering HP Software + **your** apps

Social media | Video | Audio | Email | Texts | Mobile | Transactional data | Documents | IT/OT | Search engine | Images

hp.com/haven

Better Products : NASCAR

Understands sentiment, identifies **emerging issues**, and **uncovers trends** that help the NASCAR team share and **enrich the fan and broadcast experience**

"… takes fan data, collects, it stores, and stitches it together…that **helps us understand what is being talked about** across the ecosystem of the sport."

Steve Phelps, Senior VP and CMO, NASCAR

Picture : NASCAR

Cardlytics

Cardlytics

Consumer analytics in the financial services industry

Challenge

- Migrate to a new, scalable analytics platform to accommodate a data-intensive company undergoing rapid growth

Solution

- HP Vertica Analytics Platform

Result

- Capacity to quadruple the amount of data records added on a weekly basis – from 200 million to 800 million per week

- Typical queries reduced from up to 40 minutes to only one-half or one minute on average, up to 40-to-80X faster

- 100% reliable/stable – eliminated weekly back-ups and maintenance indexing, reducing operational support time by 90%

- Increased avg. customer pipeline 10x: 200 new merchant prospects on a weekly basis, up from 20 per week on legacy platform, with additional scalability

Accelerating New Drug Discovery

NOVARTIS

Novartis Institute for Biomedical Research (NIBR)

Challenge at Novartis

- 1,000s of scientists perform analysis on tissue sample data for new drug research

- Queries with existing database taking four to five hours to complete

- Concurrency issues with existing system prevented many scientists from performing analyses

- Hardware and licensing costs with existing DB vendor prohibitive and restrictive

HP Vertica Solution

- Queries run in under five minutes; 48x – 60x faster

- Speed and concurrency allow more NIBR scientists to run tests = more drug discovery

- Use of commodity hardware cut operational costs by 30%

- Currently 20 TB of data in 37 billion row comprising 60,000 samples and 6 million measurements under HP Vertica management

- Plan to add at least 10 TB of additional capacity soon

Disease Prediction Model

Based on Infection and Weather Data

Data Sources:

- Weather data: Temperature, humidity, precipitation and dew point, time periods.
  Terrain data: Water, surface, altitude, sloping
- Disease: Location, type, crop, date and time.

Model Considers:

- Host Susceptibility
- Disease properties: Disease cycle, means and speed of spread, regions affected.
- Spreading factors: Wind, water, insects, terrain
- Seasonal effects: Crop and disease cycles, weather conditions.
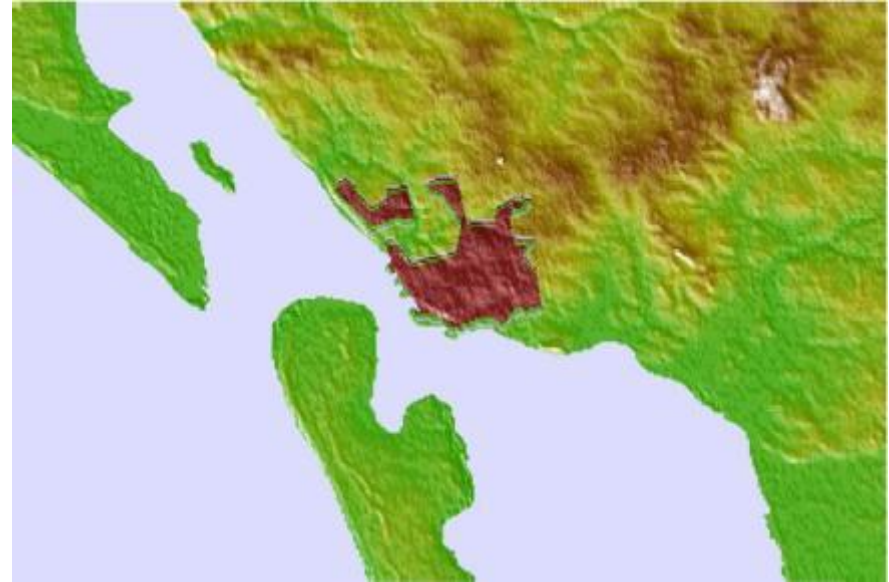
Illustrative images

Farming industry, Chemical Products

Pattern Matching example

Automated picture based disease recognition

Combine with weather forecast

Factors: Disease, location, time

Accuracy: Field

External users

Farmers

Distributers

Internal users

Sales and Marketing

R&D

No disease

Disease

Illustrative images

Video Surveillance for the City – Use Cases

Retail
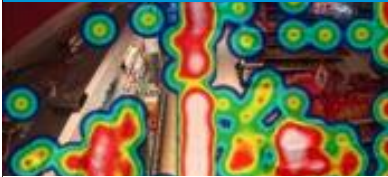
Optimize retail store performance by analyzing traffic flow based on in-store display and promotions

- People identification
- People counting
- Heat maps
- Demographic analytics
- Unusual movement
- Over-crowding
- Secure zone breaches
- Unattended packages

Law Enforcement

Analyze video and audio feeds from across the city and in social media for security events.

- Fixed camera number plate recognition
- Mobile number plate recognition
- Stolen vehicle identification
- Face recognition at entry of public buildings
- Public building perimeter security
- Graffiti alerts

Traffic Management

ID offenses and automatically detect offending vehicles .

- Illegal overtaking
- Speeding
- Cars/Bikes jumping red lights
- Traffic Jam detection
- Traffic analysis – Car/Bike counting
- Vehicle parking enforcement

Rail Systems

Detect wig-wag lights on rail crossing and identify violating cars and their numbers

- Rail-road crossing protection
- People crossing tracks
- Ticket Violations - People jumping fences or ticket barriers
- Perimeter intrusion
- People going off the end of a platform
- Tail-gating

London Metropolitan Police

Security analytics in the public sector

Challenge

- Increase the level of community engagement
- Eliminate gaps in police intelligence
- Utilize social media channels to enhance business and operational outcomes

Solution

- HP IDOL, HP Explore, HP Social Awareness Dashboard

Result

- Automatic analysis of large volumes of data, highlight 'known unknowns', resolve and address the 'needle in a haystack' problem space
- Identify witnesses and quickly spread news updates on incidents
- Faster analysis of social media trends saves time and money, improves allocation of appropriate resources
- Ensures joined-up intelligence on search criteria / topics across London

The Internet of Things

Smart buildings
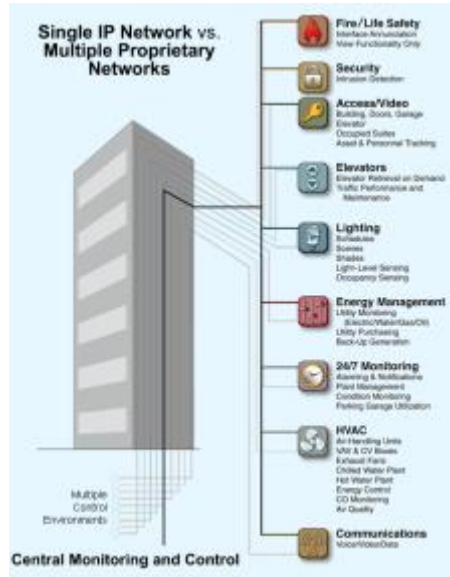
Infrastructure management

And many, many more possibilities

Use case: Smart metering for a large utility

Objective: quantify the performance of HP Vertica as a sensor data analytics platform under realistic conditions

Study parameters
40 million sensors
-each records a reading every 10 minutes
8-node (HP ProLiant DL380p gen8) Vertica cluster

	HP Vertica 6.1.2	HP Vertica 7.0.0
Total sensor readings	15.1 trillion	22.8 trillion
Data duration	7 years 2 months	10 years 10 months
Raw data size	0.478 PB	0.726 PB

Loading data
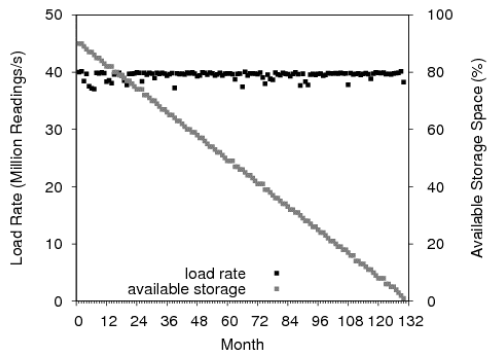
Analyzing data
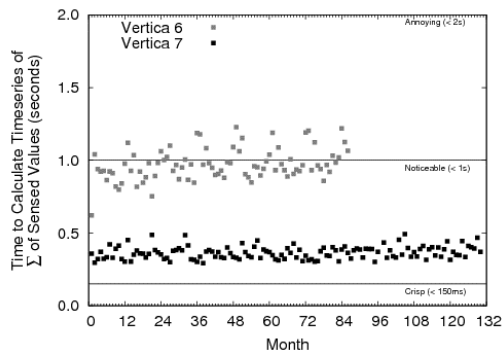
Visualizing analysis results
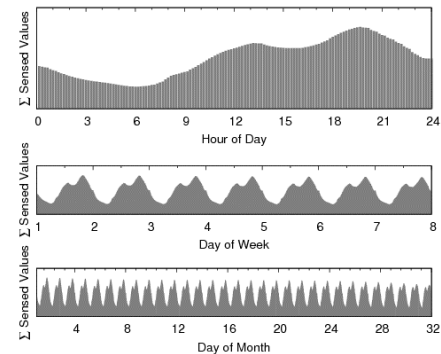
Big Data for Smart Energy

Leader in smart metering

Collect and manage meter data

130 Millions smart meters

8 000 customers over100 countries

1.9 B$ in 2013

75 locations in 35 countries

Managed services for smart metering

Itron analytics is an analytics platform for Utilities

Visualization and reporting tools included

Real time, analytics

Statistical and predictive analytics:

Energy Forecasting (PV, DG)

Asset overloading and failures

Impedance estimations, voltage pattern matching

Machine Data for Warranty Impact

HP IT

Challenge at HP IT

- Current data warehouses could not provide iterative or predictive analytics in a timely, cost-effective manner

- HP Gen8 servers call-out feature provide telemetry data 24x7, generating massive amounts of data

- HP would like to be proactive about notifying server customers before a warranty event, increasing satisfaction and reducing support costs

HP Vertica Solution

- Speed and compression allow HP to load and query on the massive amounts of telemetry data provided by Gen8 servers

- Discovered a memory change followed quickly by a processor change leads to a warranty event 24.5% of the time – HP was proactive with customers to fix issues before problems

- Determined for every 1% improvement in quality for their servers provides millions in potential benefit for HP

Big Data – Center of Excellence

Use-cases available for demo

- Use-cases addressing: HAVEn, Vertica, Autonomy, Hadoop, SAS Visual Analytics
- Local or Remote
- On-line Registration
- Presenters trained on the demo or Big data COE presenters

Remote   On-site

Workshop

- On-site 1-2 day event
- Build agenda with account team
- Big Data presentations from CxO to tech people
- Discuss technical details of HP capability

Proof of Concept

- Functional to Performance testing
- Help the customer to refine their requirements
- Full access is given to customers on all/part of the Big Data solution environment

Remote   On-site

HP Big Data customers Reference

Gartner Top 10 Strategic Technology Trends for 2014

- **Mobile Device Diversity and Management**
- **Mobile Apps and Applications**
- **The Internet of Everything**
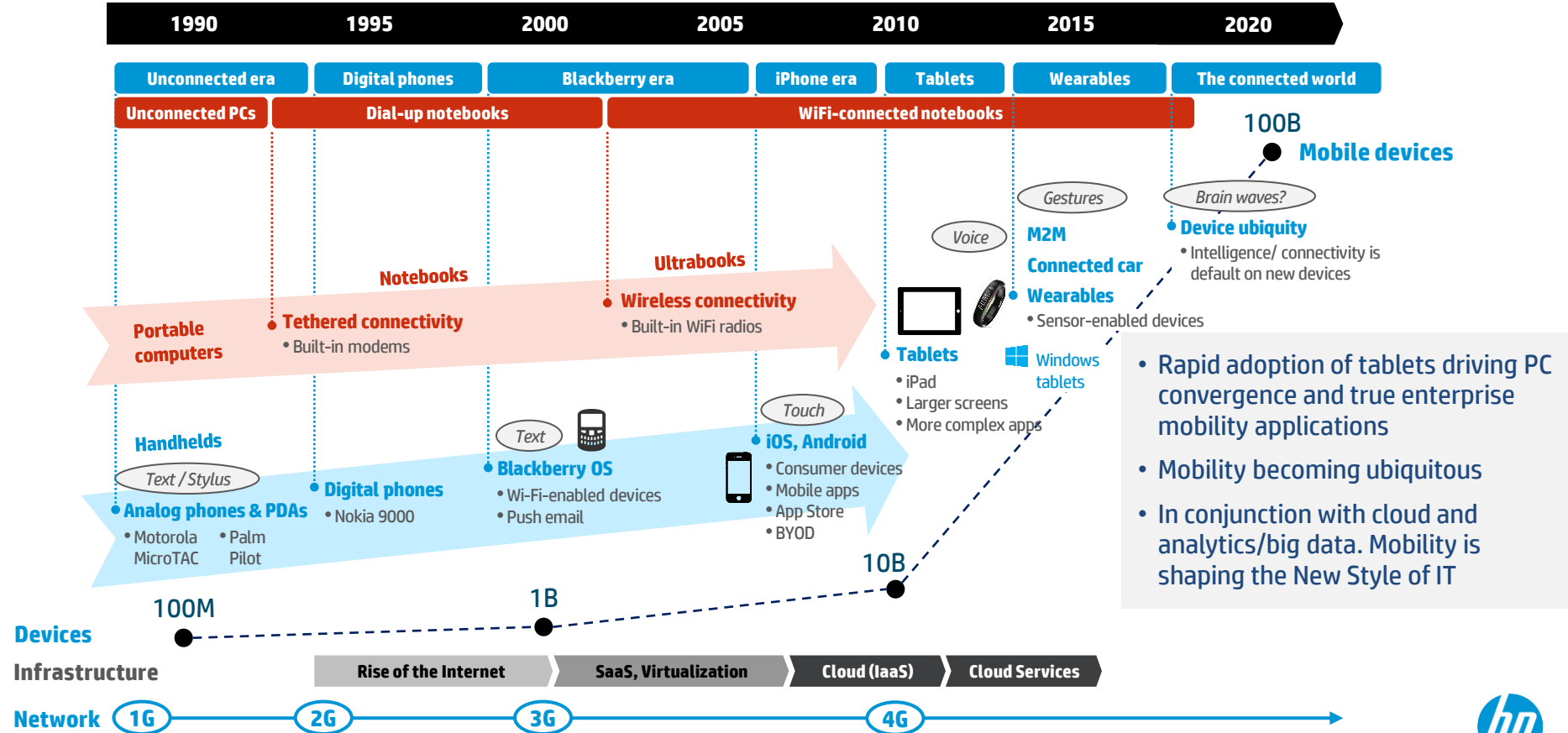
- ..
- ..

- **The Era of Personal Cloud**
- ..
- ..
- ..
- ..

Mobility Great Challenges

1990	1995	2000	2005	2010	2015	2020

Unconnected era	Digital phones	Blackberry era	iPhone era	Tablets	Wearables	The connected world

| Unconnected PCs | Dial-up notebooks | | WiFi-connected notebooks | | | |

100B
● **Mobile devices**

Gestures

Brain waves?

Voice

M2M
● **Device ubiquity**
- Intelligence/ connectivity is default on new devices

Connected car

Ultrabooks

Notebooks

● **Wireless connectivity**
- Built-in WiFi radios

Wearables
- Sensor-enabled devices

Portable computers

● **Tethered connectivity**
- Built-in modems

● **Tablets**
- iPad
- Larger screens
- More complex apps

Windows tablets

Touch

Handhelds

Text

Text / Stylus

● **Blackberry OS**
- Wi-Fi-enabled devices
- Push email

● **iOS, Android**
- Consumer devices
- Mobile apps
- App Store
- BYOD

● **Digital phones**
- Nokia 9000

● **Analog phones & PDAs**
- Motorola MicroTAC
- Palm Pilot

- **Rapid adoption of tablets driving PC convergence and true enterprise mobility applications**
- **Mobility becoming ubiquitous**
- **In conjunction with cloud and analytics/big data. Mobility is shaping the New Style of IT**

10B

1B

Devices

100M

Infrastructure

Rise of the Internet	SaaS, Virtualization	Cloud (IaaS)	Cloud Services

Network — 1G — 2G — 3G — 4G →

HP mobility offering

Personal Systems

HP ElitePad 1000
HP EliteBook Folio 1040
HP EliteBook Revolve
HP Pro x2 612
Business Laptops

Networks

HP Unified Wired/Wireless Network
HP Intelligent Management Center (IMC)
HP IMC Unified Communications Health Manager
HP WiFi Clear Connect
HP FlexNetwork Architecture
HP Network Protector - SDN
HP Network Optimizer for MS Lync - SDN
HP Mobile Printing

Security

HP Fortify
HP ArcSight
HP TippingPoint

Infrastructure

Moonshot HDI
BladeSystem
Graphic Server
Storage

Platform-as-a-Service

HP Anywhere Platform
SAP Mobile Platform
Kony One Platform
Citrix Zenprise Platform

Infrastructure-as-a-Service

HP Virtual Private Cloud
HP Enterprise Cloud Services – Mobility

Services

Mobile Consulting
Mobile UX Design
Mobile Apps Development
Mobile Testing
Mobile Integration
Mobile Management
Client Virtualization
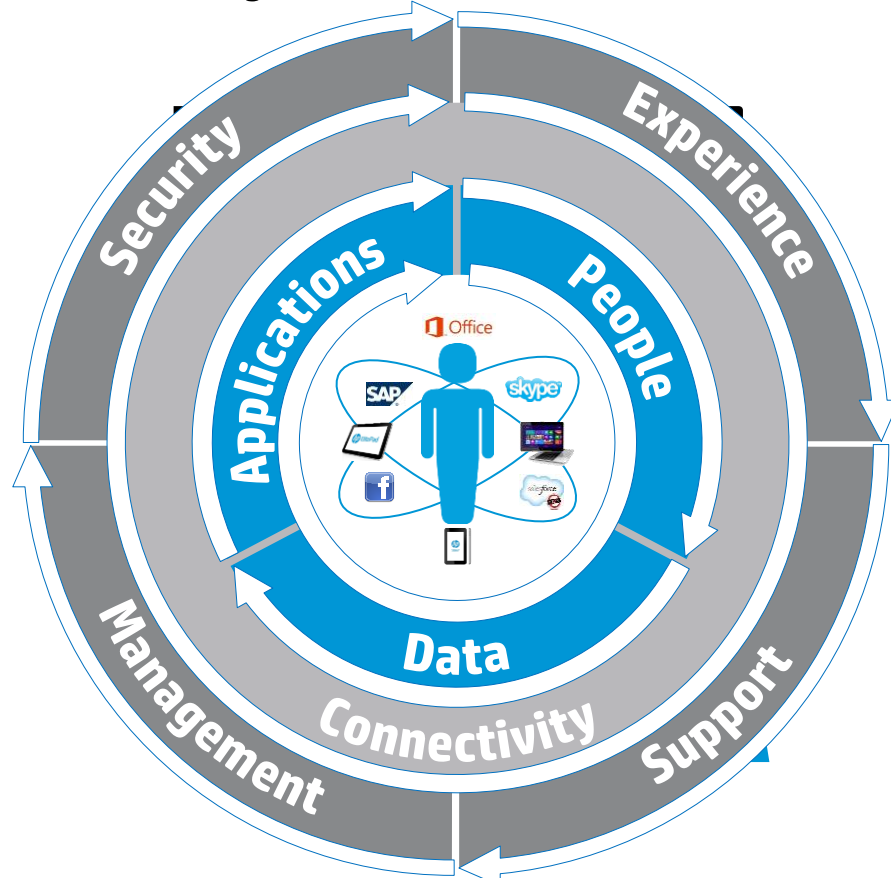Mobility Transformation Experience Workshop

Software

HP Aurasma
HP Autonomy
HP Anywhere
HP Vertica
HP Agile Manager
HP ALM / Quality Center
HP LoadRunner
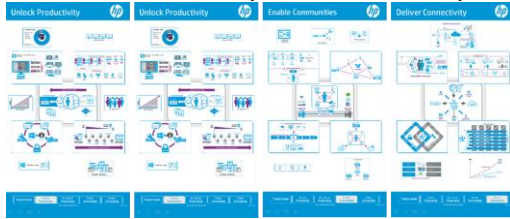HP Business Service Management
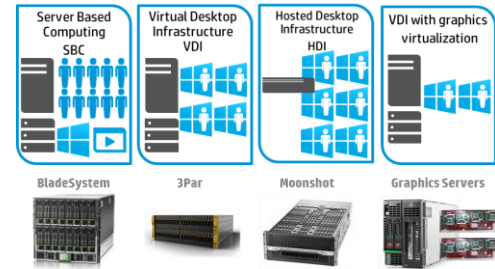HP Fortify

HP enterprise mobility framework

The way forward
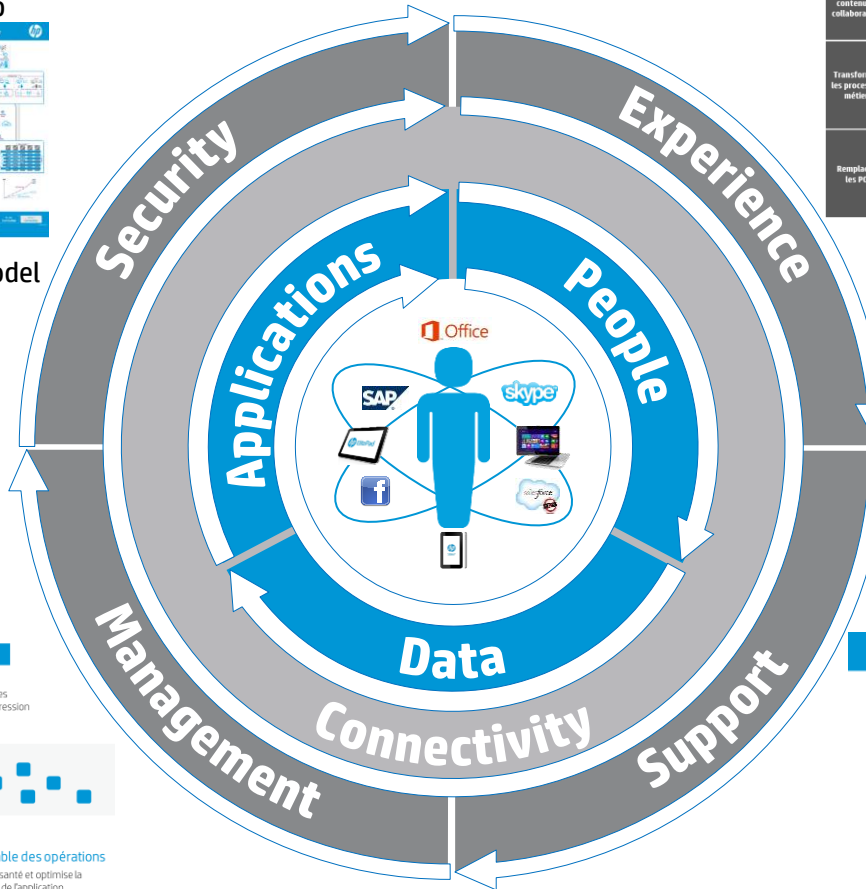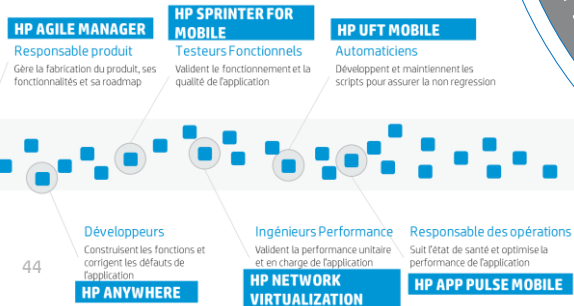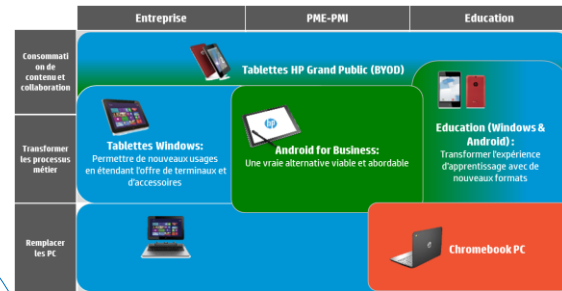
HP Mobility Strategy

Transformation Experience Workshop

Re-architect your dominant productivity model

Develop new mobile apps

HP AGILE MANAGER
Responsable produit
Gère la fabrication du produit, ses fonctionnalités et sa roadmap

HP SPRINTER FOR MOBILE
Testeurs Fonctionnels
Valident le fonctionnement et la qualité de l'application

HP UFT MOBILE
Automaticiens
Développent et maintiennent les scripts pour assurer la non regression

Développeurs
Construisent les fonctions et corrigent les défauts de l'application

Ingénieurs Performance
Valident la performance unitaire et en charge de l'application

Responsable des opérations
Suit l'état de santé et optimise la performance de l'application
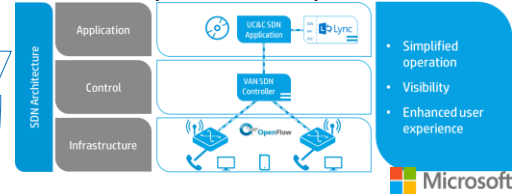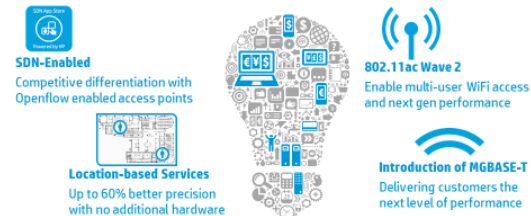
HP ANYWHERE   **HP NETWORK VIRTUALIZATION**   **HP APP PULSE MOBILE**

Device strategy

Fuel mobility with UCC and superior user experience

Connectivity strategy

VERTICAL MOBILITY OPPORTUNITIES

What is driving the Mobility conversation in vertical markets?

AIRLINES

- Optimize pilot efficiencies in the air and on the ground
- Modernise in-flight crew tasks
- Streamline communications with a dispersed workforce
- Maximize ancillary revenues – e.g. inflight shopping
- Delight customers
- Empower flight attendants with detailed passenger information
- Provide a modern inflight entertainment experience

RETAIL

- Delight customers
- Arm sales associates with detailed product information
- Facilitate smooth cross-selling and upselling
- Empower associates to close sales efficiently
  Increase efficiencies
  Analyze customer buying patterns
- Communicate and collaborate internally in real-time
- Streamline stocking and ordering tasks

RETAIL BANKING

- Strengthen customer relationships
- Arm sales associates with detailed product information and customer data
- Simplify account opening and maintenance processes
- Serve customers wherever they are
- Arm financial advisors with decision support
- Increase efficiencies
- Deliver a single view of enterprise risk
- Liberate staff from their desks

HEALTHCARE

- Providing informed Medical decisions
- Delivering first class patient care and treatment
- Maintaining patient data integrity
- Leveraging Medical technology to deliver solutions and treatment across areas of healthcare delivery
- Reduce patient waiting times
- Communicate and collaborate in real time across all medical procedure operations – e.g. A&E to Outpatient

AIRLINE MOBILITY

FLIGHT INFORMATION DISPLAYS
Ensure clear and up to date communication with your passengers, either in the terminal or in the Airline lounge

ABOVE THE WING

IN-FLIGHT ENTERTAINMENT (IFE)
Personalize passenger experiences with modern In-flight entertainment tools. Adopt flexible IFE with simple deployment & management

TERMINAL

QUEUE BUSTING
Connect with premium passengers and provide a first class service. Mitigate the waiting time for passengers in check in or lounge queues.

ABOVE THE WING

ONBOARD SERVICE
Help flight crew improve customer service, boost productivity, increase in-flight sales. Give crew insight to passenger history & preferences

TERMINAL

CURB SIDE EXPERIENCE
Deliver best-in-class customer service to premium passengers. Use insight to the profile of passengers – history, preferences etc.

BELOW THE WING

MAINTENANCE
Maximize below-the-wing maintenance & operational efficiencies. Rugged devices. Create efficiency with digital forms, manuals and plans

AIRLINE OPERATIONS

CREW SCHEDULING
Ensure crew are provided with all operational and flight details ahead of time on mobile devices. Provides access to passenger manifest, route details etc.

COCKPIT

ELECTRONIC FLIGHT BAG
Help pilots maximize efficiencies on the ground and in the air. Replace flight bags, EFB devices, and laptops with thin, light professional devices.

RETAIL MOBILITY

POINT OF SALE

MOBILE POS (mPOS)
Reduce check-out wait times with "line busting" mobile cashiers who can scan barcodes and swipe credit cards on the tablet.

CUSTOMER SERVICE

ASSISTED SALES
Provide instant access to product information through associates' devices. Give associates insight into customers' purchase history and loyalty program data.

STORE ROOM

STORE OPERATIONS
Deliver real-time account and sales data that reps need to maintain brand appearance and keep shelves stocked.

BACK OFFICE

STORE OPERATIONS
Managers track and replenish inventory from in store. Increase store managers' floor time and monitor store KPI's in real time.
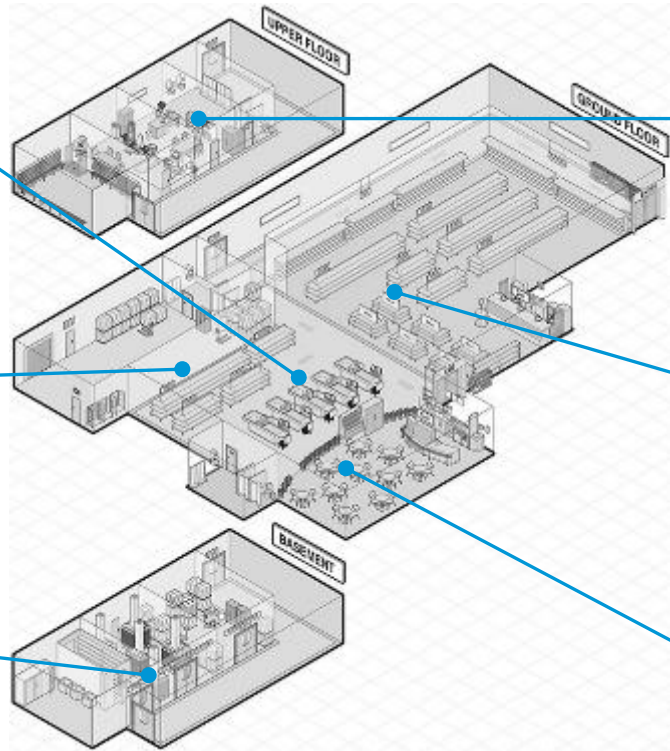
SHOP FLOOR

RETAIL EXECUITON
Grant seamless access to sales history, inventory levels, and warehouse availability. Enable "On the Go" communication and collaboration with LOBs.

CUSTOMER REFRESHMENT

F&B OUTLETS
Mobile devices can be used by servers to help capture customer orders and requests and feed real time to the kitchen and also for inventory management.

RETAIL BANKING MOBILITY

OPEN AREA

ASSISTED SERVICE
Personalized engagement with the customer to review products and offerings to suit customers needs. Utilize touch screen capabilities.

TELLER ZONE

TELLER SERVICE
Tellers are freed up from cash handling and can focus more on selling activities . Integrated with a "360 Pop-up on Arrival" display tailored to the customers profile

CUSTOMER SERVICE ZONE

PERSONALISED SERVICE
1 to 1 personal experience for more specific banking needs. Leverage Mobile devices to display customers financial profile – ensure informed sell

BRANCH WALLS

DIGITAL SIGNAGE
Communicate directly and dynamically with customers. Update on latest offers, exchange rates or general communications.

ENTRANCE LOBBY

SELF SERVICE
Customer swiping their credit card at a self service kiosk can then be appropriately dealt with based on identified customer type, profile and transaction type.

WELCOME DESK

QUEUE BUSTING
"Meeter & Greeter" approach the customer using a tablet device capturing details from Bank Card and then handled accordingly. High net worth prioritized.

HEALTHCARE MOBILITY

OPERATING ROOM

OPERATING THEATRE
Utilize tablets that can be displayed or affixed in the OR to give surgeons access to data, manuals or input to other areas of a hospital inc. real time notes.

WARD

CLINICAN SCHEDULING
Providing Clinicians with a mobile devices allows them to roam more freely around a ward, always ensuring they have real time patient data and schedules

PATIENT ARRIVAL

WARD MANAGEMENT
In A&E, mobile devices can be used to capture patient data on arrival. This data is then cascaded throughout the treatment process and follows the patient.

BEDSIDE

BED SIDE SYSTEMS
Personalize patient experiences with modern bedside entertainment tools. Device can be used to communicate out as well as receive messages.
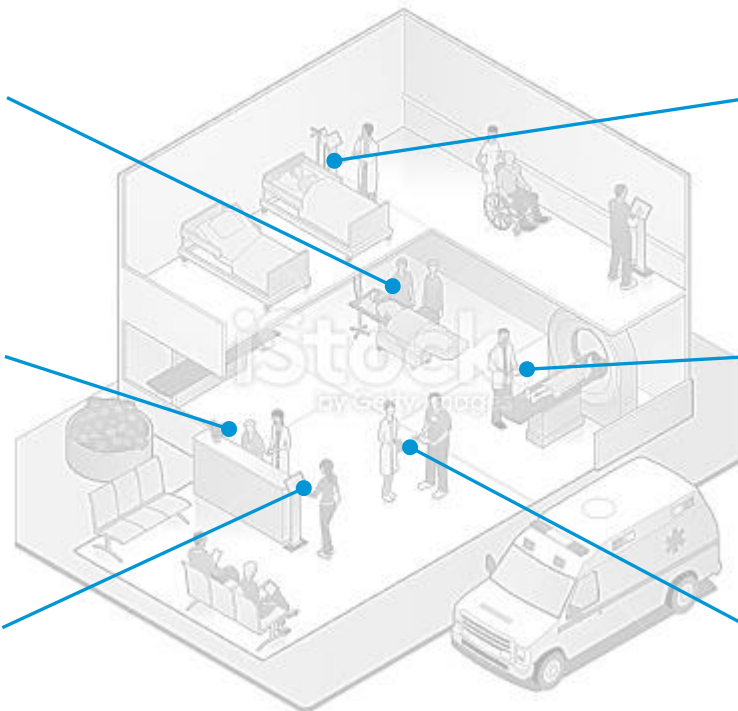
TREATMENT ENGAGEMENT

MEDICAL RECORDS
Utilising a tablet, a care giver can share with the patient on a more personal basis their recovery program, ailment notes etc. at a bedside level

OUTPATIENT

AFTER CARE
Clinicians can use real time patient medical records (PACS) to call up data on recovery periods, medication and schedule further visits.

Mobility – Next Steps

HP & Its partners have lots of assets

Workshop

- On-site 1-2 day event
- Build agenda with account team
- Mobility presentations from CxO to tech people
- Discuss technical details of HP capability

Proof of Concept

- Functional to Performance testing
- Help the customer to refine their requirements
- Full access is given to customers on the Mobility solutions

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Mobiliy components

You build it – You run it

HP Partner eco-system

Supported by HP

HP Mobility Services

We build it – You run it

HP Technology services

Supported by partners

HP Managed Mobility Services

We build it – We run it

HP Enterprise Services

Merci