<table>
<thead>
<tr>
<th>Time</th>
<th>Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00-09:30</td>
<td>Registration and Welcome Coffee</td>
</tr>
<tr>
<td>09:30-09:45</td>
<td>Welcome and Introductions&lt;br&gt;<strong>Speaker:</strong> Arzu Yildirim, TSS Leader, IBM MEA</td>
</tr>
<tr>
<td>09:45-10:15</td>
<td>Innovation in customer service and support&lt;br&gt;Customer service and support in UAE banking industry - challenges and opportunities.&lt;br&gt;Omnichannel customer experience - are we there yet?&lt;br&gt;Innovation trends in automated and cognitive customer service.&lt;br&gt;<strong>Speaker:</strong> Pawel A. Stefanski, Financial Services Sector Leader, IBM MEA</td>
</tr>
<tr>
<td>10:15-10:45</td>
<td>Applying Cognitive Technologies to Detect ATM Fraud&lt;br&gt;Machine learning to detect and prevent payments fraud in real time&lt;br&gt;<strong>Speaker:</strong> Olga Parra (IBM FSS Analytics)</td>
</tr>
<tr>
<td>10:45 – 11:00</td>
<td>Coffee break</td>
</tr>
<tr>
<td>11:00-11:45</td>
<td><strong>ATM &amp; Branch Services for New Era</strong>&lt;br&gt;A discussion on operational Excellence &amp; cost cuts&lt;br&gt;<strong>Speaker:</strong> Neil Skates (IBM TSS, ATM Branch)</td>
</tr>
<tr>
<td>11:45: 12:15</td>
<td>Service Consolidation and Cost saving for Banking Infrastructure&lt;br&gt;<strong>Speaker:</strong> Ahmed Seddik (TSS Sales Leader, IBM GTS)</td>
</tr>
<tr>
<td>12:45 – 13:00</td>
<td>Closing remarks&lt;br&gt;<strong>Speaker:</strong> Asad Khan (Sales Leader, IBM GTS)</td>
</tr>
<tr>
<td>13:00- 14:00</td>
<td>Networking lunch</td>
</tr>
</tbody>
</table>
Imperative of customer service

Pawel A. Stefanski @PawelAtIBM
IBM FSS Industry Solutions Leader, Middle East and Africa
In the middle of recent economic uncertainties, trust in banking sector remains strong

Overall Impression

70% (2015) ≈ 72% (2016)

Overall impression about Banking industry remains steady in 2016.

Trust Index

70% (2015) ≈ 68% (2016)

Trust Index has remained strong and stable

UBF’s Initiative to Support SMEs

72% (Aware)
67% (Highly appreciate)

Awareness on Issues

Mobile Wallet
75% > 85%
Customer Charter
64% > 79%

Change in Perception

13% (Worsened)
41% (Improved)

Consumers who say their view of banks has improved are thrice the number who feel it has worsened

Key Market Challenges

a. Educate the customers and set the right expectations upfront
b. Offer investors better returns, help them grow their wealth
c. Move from Customer Satisfaction to Customer Delight through world class customer service

Source: http://www.uaebf.ae/Press-Release.php?id=226
Myth: branch banking is dead…

Reality:

- Branch is a dominant sales channel
- Location convenience is a key factor in institution selection
- In-branch transactions are down
- Technology lowers staffing costs
Figure 4. How do you like to interact with your financial institution? (Choose all that apply) (by Demographic)

- Online Banking (Desktop or Tablet):
  - Gen Z: 54%
  - Millennials: 73%
  - Gen X: 70%
  - Baby Boomers: 69%

- In Person at the Branch:
  - Gen Z: 52%
  - Millennials: 48%
  - Gen X: 54%
  - Baby Boomers: 68%

- On my Smartphone (Mobile Banking Application):
  - Gen Z: 65%
  - Millennials: 75%
  - Gen X: 53%
  - Baby Boomers: 27%

- ATM:
  - Gen Z: 58%
  - Millennials: 57%
  - Gen X: 55%
  - Baby Boomers: 44%

- By Phone:
  - Gen Z: 22%
  - Millennials: 27%
  - Gen X: 29%
  - Baby Boomers: 26%

Source: TimeTrade, 2016 State of Retail Banking – U.S. study
The experience revolution
Digital disappointment – why some customers aren’t fans
Top reasons consumers are disappointed with companies’ digital CX:

1. Didn’t work as expected
2. Not convenient
3. Hard to use
4. Too confusing
System Freeze
Fri Dec 25 10:35:18 2015
CASHSdcd
FLT_SdcF
ISI_SdcI
JPNTPCtH
KEYBsdCE
MCRWS23
MDSwMODE
MEI_SdcM
PRIMSDCP
RNPNTPCtH
SNDCPE50
TUCHUSBA
Diminishing Branch Traffic

Technology Advancements

Pressure for Profitability

Productivity Improvements

External Forces

Internal Forces
A hub-and-spoke model allows to balance between: *experience*, *relationship* and *transaction*

- **Hub** – Flagship branch: Focus on *experience & innovation*
- **Spoke (1st Ring)** – Satellite branches: Focus on *relationship & sales*
- **Spoke (2nd Ring)** – Self-service centers: Focus on *transactions*
A-Flagship
- One per major city
- High-profile location
- 10:90 transaction:sales ratio
- Full product and service capabilities

B-Satellites
- Configurable based on customer profile
- High-traffic location
- 30:70 transaction-sales ratio
- Supported by hub & other branches

C-Self Service
- 100% Transaction
- High-traffic location
- 24 hours access

B1-Micro
- Staff size: 5
- Teller-less
- Limited products & services

B2-Specialty
- Staff size: 5-10
- Specialist services incl. mortgage, SMB, expat, student, etc.

B3-Advisory
- Staff size: 3-5
- Teller-less

B4-In-Store
- Staff size: 3-5
- Teller service
- New account, mortgage & card sales

B5-Pop-Up
- Staff size: 2-3
- Teller-less
- New account, mortgage & cards sales
Today’s kiosks and ATMs often offer limited functionality

<table>
<thead>
<tr>
<th>Key business functions</th>
<th>Kiosk Capability</th>
<th>ATM Capability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Account Viewing</td>
<td>Yes, via internet banking</td>
<td>Limited</td>
</tr>
<tr>
<td>Change of details</td>
<td>Yes, via internet banking</td>
<td>No</td>
</tr>
<tr>
<td>Deposits and Withdrawals</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Cheque Issuance</td>
<td>Yes, via internet banking</td>
<td>No</td>
</tr>
<tr>
<td>Funds Transfer (domestic)</td>
<td>Yes, via internet banking</td>
<td>Yes</td>
</tr>
<tr>
<td>Funds Transfer (overseas)</td>
<td>Limited</td>
<td>No</td>
</tr>
<tr>
<td>New Account Opening (existing customers)</td>
<td>Limited</td>
<td>No</td>
</tr>
<tr>
<td>Product Information</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>General Financial Advice</td>
<td>Limited</td>
<td>No</td>
</tr>
<tr>
<td>Loans Advice</td>
<td>Limited</td>
<td>No</td>
</tr>
<tr>
<td>Trading</td>
<td>Yes, via portal or via internet banking</td>
<td>No</td>
</tr>
<tr>
<td>Marketing</td>
<td>Yes but general</td>
<td>Yes but general</td>
</tr>
<tr>
<td>Additional non-banking services (tickets, mobile recharge, etc)</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Banking Directory Services</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Queue Management</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
ATMs are getting more powerful

- Passbook Updating / Statement Printing / Coin dispensing
- Advertising / Cross Selling
- Money transfer
- Cash out (multi-currency) Ticket Printing Stamp Vending / Printing
- Nightsafe for bags & envelopes as backup for Envelope Free Deposit
- Voucher Printing
- Mobile Phone top-up
- Electronic Purse Upload
- Bill Payment with Barcode Reader
- Envelope Deposit or Envelope-Free Deposit (Cash-/Cheque) Payment with Notes
- Payment with Notes
### Sample list of advanced ATM functions

<table>
<thead>
<tr>
<th>Banking Specific</th>
<th>Revenue Streams</th>
<th>Rich Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Check imaging</td>
<td>• Cross-selling*</td>
<td>• News*</td>
</tr>
<tr>
<td>• Card less Cash or Tap and Cash</td>
<td>• Advertising*</td>
<td>• Stock quotes*</td>
</tr>
<tr>
<td>• Text/ Email Receipts</td>
<td>• Stamp sales</td>
<td>• Weather*</td>
</tr>
<tr>
<td>• Pre-Staged transactions</td>
<td>• Cell Phone top up</td>
<td>• Information guides*</td>
</tr>
<tr>
<td>• Statement printing</td>
<td>• License printing</td>
<td>• Special Interest*</td>
</tr>
<tr>
<td>• Lodge Applications for Loans</td>
<td>• Ticket sales</td>
<td>• Video</td>
</tr>
<tr>
<td>• Wire transfers</td>
<td>• Lottery tickets</td>
<td>• Appointments</td>
</tr>
<tr>
<td>• Money orders</td>
<td>• VISA travel money</td>
<td>• Community Alerts</td>
</tr>
<tr>
<td>• Envelope-less deposits</td>
<td>• E-commerce shopping*</td>
<td></td>
</tr>
<tr>
<td>• Bulk deposits</td>
<td>• P2P transfer</td>
<td></td>
</tr>
<tr>
<td>• Deposit split to multiple accounts</td>
<td>• Credit offers*</td>
<td></td>
</tr>
<tr>
<td>• Cheque ordering</td>
<td>• Currency conversion</td>
<td></td>
</tr>
<tr>
<td>• Cheque deposit</td>
<td>• Coupon dispensing</td>
<td></td>
</tr>
<tr>
<td>• Charity donations</td>
<td>• Pay road tolls</td>
<td></td>
</tr>
<tr>
<td>• Update personal information</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Capabilities to leverage the Customer Relationship Management (CRM) system
Accurate directions?
Available functionality?
Augmented reality integration?
Cognitive assistance?
Locations of alternative service points?
Premise
- Location optimization
- Footprint reduction & Templating

Process
- Modernization of teller desktop
- Key business process optimization
- Form / item capture
- Self-service
- Cash handling

People
- Modernization of advisor desktop/tablet
- Recruiting & talent mgmt
- Customer ID & lead capture
- Performance mgmt
- Remote advisory
- Transformation for sales orientation
- Queue management
- Branch employee collaboration
- Meeter-greeter

Branding, layout & experience design
Interactive media
Analytics & Infrastructure
Location optimization
Footprint reduction & Templating
Modernization of teller desktop
Key business process optimization
Form / item capture
Self-service
Cash handling
Modernization of advisor desktop/tablet
Recruiting & talent mgmt
Customer ID & lead capture
Performance mgmt
Remote advisory
Transformation for sales orientation
Queue management
Branch employee collaboration
Meeter-greeter
A Cognitive Approach to Real-Time Fraud Prevention

May 2017
“Immediate payments” initiatives are becoming mainstream, driving new business possibilities and improved service...

- **For Businesses**
  - Faster availability of funds
  - Easier Reconciliation
  - Improved Risk Management

- **For Consumers**
  - 24 hour availability
  - Immediate confirmation of payments
  - Irrevocability of payment
  - Immediate use of funds
  - Facilitates Mobile Payments
  - Replaces Cash and Check Payments

From McKinsey ---- Real-time payments allow businesses to control when payments are made and to increase their certainty ----which account for an estimated $11 billion in payments volume in the U.S. alone.
But, as payment settlement quickens so must effective fraud detection

Many legacy systems are perceived as hard to adapt to new, faster, and changing cross-channel threats

Only 56% believe they are in reasonable control of fraud

Only 16% can detect fraud as it is attempted

81% say it takes over 4 weeks to discover a new pattern, then another 4 weeks to adjust the scoring engines

53% say the top need is to link criminal activities across divisions and product channels

-IBM Survey of 500 FSS Execs
How are banks doing?

Only 37% of banks have completed or are undergoing transformation of their fraud operations.

Only 16% of banks can detect fraud as it is attempted.

91% of banks say it takes over four weeks to discover a new pattern in fraud.

Source: http://ibm.bix/fightingfraud
A former Lloyds bank worker in charge of online security has been jailed for five years over a £2.4m fraud.
On Wednesday, India’s largest bank, State Bank of India, said it had blocked close to 6 lakh debit cards following a malware-related security breach in a non-SBI ATM network. Several other banks, such as Axis Bank, HDFC Bank and ICICI Bank, too have admitted being hit by similar cyber attacks — forcing Indian banks to either replace or request users to change the security codes of as many as 3.2 million debit cards over the last two months.
New threats targeting payments

- Evolving cross channel attacks
- Risks from immediate payments
- “Quick hit” episodic schemes
- Clever account takeover tactics
- “Black swan” events
“..for the first time [..] fraud decreased in France across all three major transaction categories, namely point-of-sale (POS) payments, withdrawals and card-not-present (CNP) payments”
Proven In Production: Payments Network Operator

Cartes Bancaires (STET) about 75% of French card traffic — ACH coming

- Scores all authorization traffic, debit/credit, domestic/cross-border in real-time
- Provides separate, issuing and acquiring scores
- Protects 61 million cards; 1.8 million merchants; 73,000 ATMs; mobile wallets
- Provides two-factor authentication with discretionary SMS verification
- 1 ms, end-to-end processing time for combined services running on one cluster
- Tested for 4,000 TPS sustained; 5ms roundtrip max response; operating at 1ms
Proven In Production: Corporate Cards

Corporate cards
- Have very high limits
- A premium target for criminals
- Corporate cardholders are highly sensitive to false positives

Timeline
- 2007 MasterCard portfolio
- 2009 Prepaid debit card portfolio
- 2010 Private label cards
- 2011 Comchek convenience cheque
- 2012 Anti-money laundering

“Our MasterCard portfolio had 12 basis points of fraud. With IBM Safer Payments we were able to reduce this to 2 basis points. At the same time we reduced our decline false positive rate to 1:3“

Freddy Ramirez
Vice President, Risk & Compliance, Comdata
Proven in Production: Alternative Payments Network Operator

Leading provider of next generation payment services for 17 Eastern European countries

- NASDAQ:QIWI

Quintessential Honey Pot for Fraud

- 75 million consumers / active users
- 20 million VISA pre-paid cards (virtual and plastic)
- 200,000 ATMs
- 15.5 million e-wallet accounts
- 50B rubles in payments per month
Conventional, updates limited to deviation from normal, old threats and a few current threats.

IBM Safer Payments adds direct detection of individual fraud threats as they arise.
Outthinking Fraud by Rethinking Detection

Safer Payment Capabilities

Online History + Real Time Operation + Virtual Analyst = Improved Operations

Better Detection + Lower False Positives + Standardized Operations

Better Business Outcomes

Reduced Charge-offs + Improved Customer Satisfaction + Lower Cost of Operations + Insurance Against a Black Swan

© 2017 IBM
Choice: Predict fraud 2 years hence or next week?

**Legacy Solutions**
- Locked into 80’s technology
- Consortium process requires “loose model fit” for broad application
- 40 false positives per real fraud detection is normal

**Safer Payments**
- Modern cognitive technology leads to accurate model fit
- Analytics using data digest continually refines model for better fit
- 3 false positives per real fraud detection is attainable
# Key Capabilities

<table>
<thead>
<tr>
<th>Ultra High Performance</th>
<th>Cognitive computing</th>
<th>Payments Industry ready</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ultra-low false positives</strong></td>
<td><strong>Democratize modeling</strong></td>
<td><strong>Multi-tenancy with PCI-DSS</strong></td>
</tr>
<tr>
<td>Proven in real-world environments with industry-leading false positive ratios in the 1:1-1:3 range*</td>
<td>Machine Learning with automated model generation, limiting need for scarce data scientists</td>
<td>Single software installation and fully Payment Card Industry-Data Security Standard certified</td>
</tr>
<tr>
<td><strong>Ultra-high real-time performance</strong></td>
<td><strong>White Box approach, adapt faster</strong></td>
<td><strong>No Downtime</strong></td>
</tr>
<tr>
<td>Process thousands of transactions per second with latencies of a few milliseconds</td>
<td>Customers can change models in minutes, understanding both lift and false positives</td>
<td>Inspect the rules, use production data, review the outputs and evaluate a rule’s effectiveness without stopping the system</td>
</tr>
<tr>
<td><strong>Bulletproof availability</strong></td>
<td><strong>Virtual Analyst</strong></td>
<td><strong>Short Installation Cycle</strong></td>
</tr>
<tr>
<td>Operates at high availability, active-active-active</td>
<td>Advanced analytics techniques allowing rules experts to build models with machine assistance</td>
<td>Implement in full production in weeks vs months with light footprint</td>
</tr>
</tbody>
</table>
What to Remember

IBM Safer Payments:

1) Brings advanced machine learning out of the lab and into the payments channel
2) Puts AI under the control of fraud strategists
3) Rapidly provides new models for new threats whenever needed
4) Detects more fraud with fewer errors
Operational Risk
Fraud Exposure

INVESTIGATE

RESPOND

DETECT

Multi-Layered Analytics & Business Rules
Predictive, Entity, Context, Behavioral

Decision Management

Forensic and Case Management Tools

Social Network
Geo Spatial
Context

Operational Risk
Fraud Exposure
Case Evidence

DISCOVER

Retrospective Analysis

Cybercrime Intelligence
Security Intelligence
Big Data Analysis
Point Solution Alerts
External data and intelligence
Current Line of Business Data Sources
Thank you
Next Generation ATM and Branch Services

An IBM Workshop
May 24, 2017
ATM and Branch Support Services from IBM

https://www.youtube.com/watch?v=IwMjBi5Z-fY&index=1&list=PLCCB888C9989A5252
Agenda

IBM in the world

Typical pain points

IBM Solution

Enhancing the ATM offering – over and above managed services

The future….
IBM works closely with its clients and partners to maintain and improve support of multivendor ATMs and branches.

IBM’s Global Coverage

135,000+ ATMs supported

100 Clients
IBM's Global Coverage

**Canada Bank**
- 2,500 MV ATMs
- Problem management for all ATM issues
- Service Vendor management
- FLM/SLM
- HDD Image cert/mgmt.
- Inventory Management
- Help Desk services for Branch staff
- ATM Network monitoring
- Service Level Reporting for all vendors
- End user training
- Vandalism recovery support
- Fraud analysis
- Automated ATM incidents
- Identified fraud risk

**US Bank**
- 15% Savings
- Global service desk
- Integrated ATM & Branch support
- 1,800 branches
- 2,300 ATMs in NA
- Branch IMACs
- network refresh and analytics-driven
- Innovation

**Brazil Bank**
- Multiple vendors, contracts, processes, controls, tools and point of contacts
- Poor ATM availability
- No end-to-end view
- High operational costs
- Support model inhibited growth and expansion
- IBM remote monitoring
- On-site support technical support (preventive and corrective) and project management
- 20,000 MV ATMs
- Single point of contact
- Single SLA measurement
- Streamlined processes, operation plus tools to improve ATM availability

**Japan White Label**
- 20,000 ATM Fully Managed service
- Retailers and fuel stations
- 24 X 7 network monitoring
- Switch transactions across member
- App Dev / Maintenance
- Help desk / Monitoring
- FLM and SLM
- Vendor managed services and security
- BC & RS
- Cash forecasting/ordering o ATM IMAC

**Retail Bank, Spain**
- 16% Savings
- Branch IMACs
- network refresh and analytics-driven

**Thai Bank**
- 4500 SSD ATM Supply
- IMAC, monitoring, Cash Forecasting
- Supplier Contract Management
- FLM & SLM SLA Reporting

**Thai Bank**
- 16% Savings
- 2,000 ATMs and 1,500 branches
- 40,000 calls/year

**Japan White Label**
- 35+ member banks including
- 10,000 recycling ATMs
- 50% reduction in ATM costs due to shared network

**US Bank**
- 25% Reduced call handling time
- 11% increase in first time fixes
- 35% reduction in security costs
- 17% savings

**Brazil Bank**
- 3.7% increase in network availability
- Up to 20% cost reductions to operating costs

**Thai Bank**
- 7% Improved network availability
- 17% reduction of cost of cash
- 20% Reduction in abandoned calls
- 69% reduction in Incidents open > 24 hours
- 22% increase in device reliability
- Incident aging reduced from 20 to 1 days

**Thai Bank**
- 35+ member banks including
- 10,000 recycling ATMs
- 50% reduction in ATM costs due to shared network

**US Bank**
- 15% Savings
- Global service desk
- Integrated ATM & Branch support
- 1,800 branches
- 2,300 ATMs in NA
- Branch IMACs
- network refresh and analytics-driven
- Innovation

**Brazil Bank**
- 3,696 branch/service centers
- 16,000 ATMs
- 2,500 servers, 54,000 clients, 15,000 other assets
- 24,000 calls per month
- IoT to reduce HVAC costs
- A&B Integrated Service
- Software support/updates
- Machine refurbishment
- Vandalism service
- Vendor management
- Inventory management
- Change/warranty management
- Improved machine reliability
- Simpler governance
- Single invoicing
- Platform for innovation

**Thailand Bank**
- 4,500 SSD ATM Supply
- IMAC, monitoring, Cash Forecasting
- Supplier Contract Management
- FLM & SLM SLA Reporting
- Key benefits
- Availability up! (incl. network, power, HW, cash)
- Reduced call abandon rate.
- Reduced outages.
- Increased reliability
- Improved uptime in Metro areas

**Thai Bank**
- 4500 SSD ATM Supply
- IMAC, monitoring, Cash Forecasting
- Supplier Contract Management
- FLM & SLM SLA Reporting
- Key benefits
- Availability up! (incl. network, power, HW, cash)
- Reduced call abandon rate.
- Reduced outages.
- Increased reliability
- Improved uptime in Metro areas

**Thai Bank**
- 7% Improved network availability
- 17% reduction of cost of cash
- 20% Reduction in abandoned calls
- 69% reduction in Incidents open > 24 hours
- 22% increase in device reliability
- Incident aging reduced from 20 to 1 days
Thailand Managed Services

Client Business Challenge
Ranking as the fifth largest bank in Thailand in terms of assets, loans, and deposits, the Client was looking to:
- Minimize the number of vendors they have to manage and to move to a single point of contact
- Lower cost of monies through enhancing ATM Cash Forecasting and Optimization
- Maintain high availability of the bank’s distributed, multi-vendor self-service environment: ATMs (primarily NCRs, Diebold), Kiosks and other banking terminals
- Improve incident reporting and performance management
- Clarify maintenance responsibilities between overlapping internal organizations
- Support customer’s objective to be #1 in self-service in the marketplace

Solution (scope)
- ATM Managed Services with a fleet of more than 4,500 Self Service Devices (Wincor, NCR, Diebold, Hyosung and Hitachi Omron)
- Supply ATM Hardware
- Installation, Move and de-install Services
- Provide Cash Forecasting/Monitoring Tools
- ATM Monitoring and Cash Forecasting Services
- Liaise with 3rd Party Vendors and Contract Management
- Service Management
- Provide FLM and SLM services
- Provide Monthly SLA Reporting

Key Benefits
- Estate availability improved from 90% to 98% (total availability including network, power, hardware and cash)
- Improved the cost of cash management by approx. 17% after 2 years of implementing the cash forecasting tool.
- Reduction of vendor management effort by the bank by making IBM the single point of contact
- Reduced abandoned calls from 20-30% to 1-2% on average
- Incidents longer than 24 hours in provincial areas reduced by 69%
- Reliability improved by 22%
- Incident aging reduced from 20 to 1 days
- ATM and R-ATM Availability in metro areas improved by 22% and 46% respectively
- Improved Management visibility through regular report and real time status
Thailand Managed Services

Decrease in % unavailability time by almost 4% or almost 30 hours per month.
Agenda

IBM in the world

**Typical pain points**

IBM Solution

Enhancing the ATM offering – over and above managed services

The future....
Typical Pain Points / Objectives

- Reduce the overall ATM spend cost base
- Increase Revenue on the ATM channel
- Improve the availability of the devices
- Enhance the customers experience
- Improve operational productivity
- To focus resources on core banking activities.
Typical Outcome

Objectives

- Reduce the overall ATM spend cost base
- Increase Revenue on the ATM channel
- Improve the availability of the devices
- Enhance the customers experience
- Improve operational productivity
- To focus resources on core banking activities.

IBM Proposed Solution

What
- Provision of New or Refresh devices
- ATM Installation, Relocation & Decommission
- Cash Forecasting
- Cash-In-Transit Management
- ATM Second Level Maintenance
- ATM Monitoring and Incident Management
- Problem management
- ATM Administrative and Reporting Support
- Financing
- Asset and Configuration management
- Single point of Accountability via an ATM Command Centre
- Predictive Maintenance Analytics
- Continuous Service Improvement Planning
- Software Distribution
- Security
- Encryption Key Management
- Vendor Management via a guardian role
- Innovation
- Training
- Testing

How
- Reduce complexity by providing a centralized ATM Command Centre with common SLAs, Processes and Governance.
- Unique Single point of contact vendor management framework
- Transfer operational cost and risk management to IBM

Outcomes

Simplicity
- Single point of contact
- Vendor Management for all countries

Cost and revenue
- Pro-active monitoring
- Reduced faults/defects
- Commitment to SLA’s
- Improved cost of operation and cost of cash

Increased flexibility
- Greater agility & speed to market
- Higher productivity

Extended capability
- Local delivery & controls
- Access to global skills
- Use of industry SME’s

Value for money
- Aligned to Business
- Predictable IT Cost

Innovation
- IBM Centre of Competence
- IBM Research
- Analytics

Reduce the overall ATM spend cost base
Increase Revenue on the ATM channel
Improve the availability of the devices
Enhance the customers experience
Improve operational productivity
To focus resources on core banking activities.
Agenda

IBM in the world
Typical pain points
**IBM Solution**
Enhancing the ATM offering – over and above managed services
The future....
The ATM transaction

1. User enters card into ATM and enters PIN number

2. ATM connects to the Transaction Processor and transmits card & transaction information and encrypted PIN.

3. Transaction Processor recognises card is from its own customer based on the information encoded into the card and forwards the data to the Core Banking system

4. Core banking decrypts the PIN information, memo-debits* the card holder’s account, and transmits the authorization back to the Transaction Processor.

5. The Transaction Processor transmits the authorization to the ATM

6. The ATM dispenses the money and returns the card.

The whole process takes approximately 8-13 seconds.

* A memo-debit is a tentative debit to the account. It becomes a permanent debit at the end of the banking day when the accounts are settled if it has not been reversed.
The ATM transaction

IBM can perform or manage all activities

<table>
<thead>
<tr>
<th>ATM Operational Support</th>
<th>Deployment Services</th>
<th>Manage Technology</th>
<th>Cash Services</th>
<th>Branch Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Line Maintenance</td>
<td>Dispute Management</td>
<td>ATM Hardware Refresh</td>
<td>Cash Forecasting</td>
<td>1st Line Maintenance</td>
</tr>
<tr>
<td>2nd Line Maintenance</td>
<td>Compliance Management</td>
<td>IMAC</td>
<td>Cash Replenishment</td>
<td>2nd Line Maintenance</td>
</tr>
<tr>
<td>Parts and Warehouse Facilities</td>
<td>Security and Fraud</td>
<td>Hardware/Software Procurement</td>
<td>Network Management</td>
<td>Predictive Analytics - Maintenance</td>
</tr>
<tr>
<td>Predictive Analytics - Maintenance</td>
<td>Network and Power</td>
<td>Software Development</td>
<td>Switch/Transaction Processing</td>
<td>Monitoring</td>
</tr>
<tr>
<td>Device Monitoring</td>
<td>Customer Service Desk</td>
<td>Site Management</td>
<td>Camera &amp; Alarm</td>
<td>Deposit Pick up and Delivery</td>
</tr>
<tr>
<td>Device Service Desk</td>
<td>Journal File management</td>
<td>Device/Branch Location</td>
<td>Software Maintenance</td>
<td>ATM Balancing</td>
</tr>
<tr>
<td>Availability and Reporting/Business Intelligence</td>
<td>Strategy</td>
<td></td>
<td>Supply of Power</td>
<td>Treasury Operations</td>
</tr>
<tr>
<td>Incident and Problem Management</td>
<td>Transaction Monitoring</td>
<td></td>
<td>Supply of Network</td>
<td>Deposit Processing</td>
</tr>
<tr>
<td>Encryption Key Loading</td>
<td>Testing</td>
<td></td>
<td></td>
<td>Vault Management</td>
</tr>
<tr>
<td>Content Management</td>
<td>Change Management</td>
<td></td>
<td></td>
<td>Reconciliation</td>
</tr>
<tr>
<td></td>
<td>Asset Management</td>
<td></td>
<td></td>
<td>Cash Ordering/reporting</td>
</tr>
</tbody>
</table>

Key:
- Typically Bank Owned/Managed by IBM
- Performed by IBM
- Managed by IBM
- IBM has capabilities
Managing ATM/Branch - Command Centre - 15-17% savings

COMMAND CENTER OPERATIONS

- Software Distribution
- Device Monitoring
- Cash Forecasting
- MI Reports
- SLA / KPI Management
- Offsite ATM
- For Account data / authorisation
- Core banking
- Real time Status Codes
- Batch feed of cash status
- Real time status
- Agent on devices

Data Sources
- Weather.com

Software
- Distribution
- Predictive Analytics
- OnSite Fix

Safer Payments
- Watson IoT
- ATM Placement
- Safer Payments
- EDI/ Email to Service Providers

Managing ATM/Branch - Command Centre - 15-17% savings
Operating principles

**Accountability**: The foundation for value is an ownership program that delivers operational excellence to enhance the customer experience

**Operational Excellence**

- Focus on the Client, not just on the ticket
- Deliver a vendor agnostic solution
- Measure performance and ensure transparency
- Use of Predictive Analytics to drive service improvement
- Active Preventative Maintenance program to improve operational performance and reduce cost
- One “Throat to Choke” offering single accountability, management and control across the whole delivery channel
Commitment to client value

- IBM incorporates client KPIs into the Delivery Executive’s targets, ensuring that IBM’s success is the client’s success.
- This also ensures IBM service value increases over time and remains relevant, supporting the bank’s business objectives.

Continuous Service Improvement

Led by the team responsible for ATM Availability and normally supported by the Problem Management team and extending to all groups that can impact this availability, continuous service improvement is a accepted industry best practice.

Established Problem Management processes lead to a continuous service improvement, a repeatable ongoing process, which sets out to review and recommend changes to increase availability and enhance the customer experience.

Clients expect value to be Continuously Improving

IBM’s objective – A Value Contribution that helps to grow business and reputation

‘Static’ value from transactional break-fix service that has not invested in Assets for Analytics and Innovation
Agenda

IBM in the world
Typical pain points
IBM Solution

Enhancing the ATM offering – over and above Managed Services
The future….
Enhancing the ATM offering – over and above managed services

- Predictive Maintenance
- Predictive Analytics
- Location Analysis
- Anti Fraud
- ATM and the Mobile Phone
Predictive Maintenance

Predictive capabilities can significantly improve maintenance strategy and ability to anticipate pending performance issues.

- **Reactive Maintenance** (machine fails, then fix)
- **Preventative Maintenance** (based on manufacturers’ schedules, time, or operational observations)
- **Condition-based Maintenance** (based on monitoring to assess condition of assets)
- **Predictive Maintenance** (based on usage and wear characteristics to predict failure)

Fix at a time convenient to the customer with less outage as a result

Source: Gartner
Predictive Maintenance Overview

Predictive analytics deliver predictive alerts before the problem occurs.

We are able to predict ~30% ATM service tickets before they happen.*

"Predictive maintenance increases availability and operational efficiency."

In traditional reactive maintenance, clients call IBM to dispatch engineers to fix issues on site.

*Prediction results are dependent upon data availability
Predictive Maintenance

- **Field Calls**: 20%
- **Repair Time**: 20%
- **Predictive Dispatch Rate**: 40%
- **Fleet Availability**: 20k hrs

Deploy IBM Field Force Automation solution. Provide access to Watson Technical Support to improve fix time. Deploy IBM Analytics and reporting solution to enhance/extend reporting information and to provide greater insights for business improvement/quality.
Predictive Analytics to Improve Performance

Example reports from IBM’s analytics approach that will be used in the delivery of service to XXXX.

This is one source of data that IBM will use to identify, track and manage opportunities for continuous improvement and preventative and proactive actions.

- These reports and their presentation have a broader application outside regular scope of integrated support to identify where problems can be avoided and steps taken to remove issues.
- Proactive Approach - Predictive analytics to identify and effectively manage emerging problems.
- Allows “what if?” modelling in order to validate the impact and benefits before they are implemented.
IBM proactively increased its service level commitment from 4 hours full restoration to 3.5 hours full restoration regardless of location or request type.
The IT account manager was in turn able to increase their service level commitment to their Line of Business. End user availability was increased leading to an improvement in Client Experience metrics.

IBM was achieving all required service levels including a restoration time of 4 hours. Regardless of this IBM conducted analysis on all elements of the service delivery process and time line. IBM’s analysis broke the call process down into the following time components (in summary):

- Call placement
- Call dispatch
- Engineer response time
- Engineer onsite time and coordination with Security
- Problem determination time and predictive methods
- Parts delivery including predictive dispatch
- Repair time
- Hand-over
- Call closure process

By looking at the process components that took the longest or caused frequent delays IBM put in place processes that would reduce the elapsed time. In this instance parts delivery was a significant contributor. IBM changed 4 considerations:

- Increasing engineer boot stock to cover a greater range of failures
- Changing the distribution of parts through-out the suburbs
- Using predictive methods to enable earlier ordering of parts to get the parts arrival and engineer arrival coordinated
- Reduction in the number of interstate parts requirements

This project enabled IBM to commit to a restoration time of:

3.5 hours
Regardless of Location
Sustained Reduction in Endpoint Call Rate by 50% with an associated improvement of availability

IBM provided field support for network terminals that were used by our client’s customers. The increase in availability directly increased transaction volume and revenue attainment.

Through analysis of all elements of the client’s and IBM’s service process and behaviours, including diverse factors such as device call history, location, attending personnel, rosters, times and timing and individual parts used, IBM made many improvements to process and technology to deliver the above.

For example:
• Reduced calls due to software and other intermittent errors through enhanced SW distribution. (IBM worked directly with the manufacturer)
• IBM requested, specified and deployed proactive engineering changes from the manufacturer to increase reliability of high wear components. This action proved to reduce these type of errors by 60%.
• Discovery of intermittent comms errors at 9am in one regional centre causing endpoints to log errors and recycle. Root cause was isolated to our client’s properties contractor that routed a comms cable through office lighting
• Reduced calls in repair centre hardware by changing quality assurance protocols
• 3 separate parts stock and distribution actions.
• Introduction of an automated process to monitor repeat calls (within previous 7 days) on a daily basis.
• Introduced Management Incident Reporting process for extended outages and poor performing devices.
• Enhanced the Annual PM schedule and scope shifting the emphasis to a targeted and constant care approach.
• All calls analysed to identify opportunities for faster resolution.
ATM Placement

Using Metro Pulse IBM can help Banks can predict when certain ATM locations will be in higher demand by pairing customer traffic patterns with daily events that might draw additional traffic.

ATM Placement - Approach

- **Owned ATMs**: Start by mapping your ATMs.
- **Social Media**: Add human traffic patterns to the map - where are people congregating?
- **Traffic**: Add busy traffic areas - more people?
- **Does opportunity exist for new ATM placements?**

- **Events**: Map upcoming events with larger crowds - opportunity for portable ATMs?
- **Demographics**: Such as Census and Business data - where are people moving from and to - does current placement make sense?
- **Possible placement of temporary ATMs**

- **Competitors**: Look at placement of other ATMs - Are we missing opportunity?
- **Does current ATM placement still make sense?**
Anti Fraud Initiatives

Strengthen shuttered 5886/7 (for NCR)

Proximity Sensors Mk1 (for NCR)

Latest Shutter shield (under test) – to combat cash claw in combination with integrated blocker/proximity sensors

Strengthened card reader weather shield to resist vandalism (for NCR)

Proximity Sensors with integrated blocker Mk2 (for NCR)

Work in Progress 6634 dispenser shutter shield
Anti Fraud Results
Immediate and sustained positive impact (week by week data)
Anti Fraud Results
Immediate and sustained positive impact (week by week data)

IBM Vandalism calls

Weekly Machine Availability

Vandalised Component

Installed Week
A customer can order a cash withdrawal from a mobile phone, to be withdrawn in an ATM machine by a second person having only a mobile phone, without the need of any card.

To ensure the security of the process, a couple of one-time passwords are used. One is provided by the customer ordering the withdrawal and communicated to both the bank and to the person picking up the money. A second password is generated by the bank and sent to the mobile phone of the person picking up the money by SMS message.

Then, the person picking up the money can go to an ATM, that will provide a transaction activated by this couple of one time passwords to get the money without the need of any card.
Obtaining cash via the mobile NFC function

Transaction preprocessing in a mobile phone and transaction activation at the ATM through an NFC mobile phone. The example shows how an application deployed in a NFC enabled phone can have predefined preferred transactions that are executed when approaching the mobile phone to the ATM NFC reader.
Obtaining cash via a QR code

A customer using a mobile phone, can withdraw cash in an ATM without the need of any card. Customer selects the **QR Code Withdrawal** transaction in the OFN mobile app, specifies the account and the amount to be withdrawn, and the transaction is ready to be used.

At the ATM, the mobile application reads the QR Code generated at ATM and sends to the core banking application the transaction data, which in turn informs the ATM about the amount to be withdrawn.

ATM will ask for the customer’s PIN and once entered will dispense the cash.
Agenda

IBM in the world

Typical pain points

IBM Solution

Enhancing the ATM offering – over and above Managed Services

The future….
<table>
<thead>
<tr>
<th>Banking Specific</th>
<th>Revenue Streams</th>
<th>Rich Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>▪ Card less Cash or Tap and Cash</td>
<td>▪ Cross-selling*</td>
<td>▪ News*</td>
</tr>
<tr>
<td>▪ Text / Email Receipts</td>
<td>▪ Advertising*</td>
<td>▪ Stock quotes*</td>
</tr>
<tr>
<td>▪ Pre-Staged transactions</td>
<td>▪ Stamp sales</td>
<td>▪ Weather*</td>
</tr>
<tr>
<td>▪ Statements</td>
<td>▪ Cell Phone top up</td>
<td>▪ Information guides*</td>
</tr>
<tr>
<td>▪ Loan Applications</td>
<td>▪ Pay bills</td>
<td>▪ Special Interest*</td>
</tr>
<tr>
<td>▪ New accounts</td>
<td>▪ Pay fines</td>
<td>▪ Video</td>
</tr>
<tr>
<td>▪ Wire transfers</td>
<td>▪ Ticket sales</td>
<td>▪ Appointments</td>
</tr>
<tr>
<td>▪ Money orders</td>
<td>▪ Lottery tickets</td>
<td>▪ Community Alerts</td>
</tr>
<tr>
<td>▪ Envelope-less deposits</td>
<td>▪ VISA travel money</td>
<td></td>
</tr>
<tr>
<td>▪ Bulk deposits</td>
<td>▪ E-commerce shopping*</td>
<td></td>
</tr>
<tr>
<td>▪ Deposit split to multiple accounts</td>
<td>▪ P2P transfer</td>
<td></td>
</tr>
<tr>
<td>▪ Cheque ordering</td>
<td>▪ Credit offers*</td>
<td></td>
</tr>
<tr>
<td>▪ Cheque deposit / Imaging</td>
<td>▪ Currency conversion</td>
<td></td>
</tr>
<tr>
<td>▪ Charity donations</td>
<td>▪ Coupon dispensing</td>
<td></td>
</tr>
<tr>
<td>▪ Personal information</td>
<td>▪ Pay road tolls</td>
<td></td>
</tr>
</tbody>
</table>

* Capabilities to leverage the Customer Relationship Management (CRM) system
Devices

Mobile Bank

Cash Recycler

Kiosk

Video Teller

Video Kiosk

Cash Pillar / barrel

Smart Teller

Retail Teller
Channel Integration

Single channel

Multi channel

Cross channel

Omni channel

ATM

24

ATM

24

ATM

24

ATM
Channel Integration

Moving beyond multi-channel to effective integration across all customer touchpoints - both digital and physical channels

Source: IBV Analysis; IBM Multi-Channel Strategy
Thank You
Change has to happen

Challenges

- High operational costs
- Fragmented, manual cash order management
- Manual incident handling
- Lack of visibility
- Difficult vendor management

Expected Outcomes

Lower Costs
- Cash inventory
- Transportation
- ATM Maintenance

Customer Experience
- Increased availability
- Improved branch productivity

Efficiency & Compliance
- Standardize & automate processes
- Better control & visibility
- Real-time SLA tracking and escalation
The ATM and Branch Model

**Problem**: Retail banks face significant challenges delivering an integrated branch experience due to a fragmented support model.

---

**Reactive & Fragmented Support Model**

---

**Customer Experience**

- NCR ATM
- Wincor ATM
- Kiosk
- Print
- PC
- Mobile
- Server
- Data
- Voice

---

**Vendor Management, Governance, Inventory, Reporting, Escalations**

---

**Service**
- Machine & Ticket-focused
- Reactive, Interval-based Support
- Vendor-biased, Siloed Contracts
- ‘Gray Areas’ Inhibit Synergies
- Inconsistent Branch Experience

---

**Financial**
- More Vendors, More Costs
- High Administration Costs
- Capital Intensive Growth
- Hidden Total Cost of Ownership
- Reactive Cash Management

---

**Physical**
- Branch Strategy
- One Size Fits All Locations
- Access to Local Solutions
- Traditional Technology
- Front & Back Office Segmentation
**The ATM and Branch Model**

**Solution**: IBM’s integrated, multivendor support model focuses on the customer and brings competitive advantages to enable transformation

**Proactive & Integrated Support Model**

- **Customer Experience**
  - Governance, Inventory, Reporting, Data Driven Analysis and Insight
  - Stream-lined Vendor Agnostic Management & Coordination
  - Consistent reliability, availability, serviceability
  - “As A Service” Business Models

- **Strategic imperatives**

- **External environment**

<table>
<thead>
<tr>
<th>Service</th>
<th>Financial</th>
<th>Physical</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Customer &amp; Service Level-focused</td>
<td>• Less Vendors, Less Costs</td>
<td>• Omni-channel Strategy</td>
</tr>
<tr>
<td>• Preventative, Conditions-based Support</td>
<td>• Low Management Overhead</td>
<td>• Flexible, Open Design Options</td>
</tr>
<tr>
<td>• Product Agnostic, Multivendor Solution</td>
<td>• As-A-Service Business Model</td>
<td>• Entry Point to All Solutions</td>
</tr>
<tr>
<td>• Accountability Rewards Innovation</td>
<td>• Transparent ‘All In’ Costs</td>
<td>• Digital Technology</td>
</tr>
<tr>
<td>• Common Processes &amp; Training</td>
<td>• Optimized Cash Management</td>
<td>• Front &amp; Back Office Integration</td>
</tr>
</tbody>
</table>
ATM costs

ATM TCO - Global average

- Insurance
- Occupancy
- Communications
- Processing services
- Depreciation
- Installation
- User Maintenance
- Consumables
- HW Maintenance
- Cash Provision

Costs breakdown:
- 13.4%
- 11.5%
- 12.2%
- 1.5%
- 6.8%
- 8.4%
- 10.9%
- 2.1%
- 8.8%
- 8.5%
- 14.7%
## Cost and Revenue

### COST ITEMS
- Communication lines
- Rental of space for device
- Maintenance for Financial Switch
- ATM depreciation
- Financial switch hardware and software depreciation
- Cost of salaries of people directly involved in ATM channel
- Cost of other teams involved (overhead)
- Utility Expenses e.g. water, electricity
- Locksmith
- Fixtures and fittings
- Consumables expense
- ATM Software Costs
- CIT Costs
- Rates of locations
- Insurance
- Vandalism

### REVENUE ITEMS
- Visa / MC Commission
- Exchange commission if FX offered
- Charge for products on the device (e.g. internal marketing)
- External marketing on device or surround
- Phone top up revenue
- Commission from ticket sales
- Revenue from companies for locating device (rent)
- Revenue from them on us transactions (interchange)
- Captured card collection
- Cost of ATM surrounds e.g. booth
- Cost of cash (interest)
- Cost of marketing
- Interchange fees (us on them)
- Cost of cleaning – device and surrounding area
- ATM depreciation
- Cost of tools (monitoring, software distribution)
- Cost of managing and fulfilling disputes
- Cost of parts out of warranty
- ATM maintenance cost
- ATM software maintenance cost
- Testing labs – space and devices
- Application development – ATM and Switch
- Application maintenance – ATM and Switch
- Disaster recovery
Enabling an Agile Multivendor IT.
Disruption drives our industry through waves of change

1980s
Centralized Mainframes

1990s
Distributed Computing

1990s
Distributed Computing

2000s
E-Business

2000s
E-Business

2010s
Smarter Planet

2010s
Smarter Planet

2016+
Cognitive Era

2016+
Cognitive Era

Personal Computer

Client/Server

Internet

Big Data & Analytics

Mobile

Social Business

Cloud

Cognitive

Systems Integration

✓ Balance sheet and technical know-how

✓ Global resources and process excellence

✓ New Enterprise IT and cognitive computing

Infrastructure Services

Technology Support Services

Large deals characterized by “asset takeover”

Global centers and supply chain optimization

Hybrid and service automation / analytics

“Break-fix” maintenance

Practitioners deployed to address automated maintenance alerts

Vendor agnostic maintenance

88
ITaaS and Hybrid IT Is The New Normal For Enterprise IT

7 in 10 decision makers report they will always have a blend of traditional IT and cloud.\(^1\)

9 in 10 leading organizations say hybrid cloud gives them greater return on investment (ROI) than either an all-traditional or all-cloud environment.\(^2\)

90% of enterprise-scale organizations plan to make use of multiple clouds in the next several years.\(^3\)

85% of leading organizations report that hybrid cloud is accelerating digital transformation in their organization.\(^4\)

Source: IDC
**Benefits & challenges in the journey to an Agile Hybrid ITaaS**

**Motivators:**
- $$$
- Speed
- Scalability and Flexibility
- Automation
- Better align to business needs
- 7X24

**Challenges:**
- Security
- App readiness & migration
- Performance
- Integration & Interoperability
- Connectivity
- Service Management
- Skills / SLA’s
- Governance
- Compliance

**Enabled Through**

Self Service – Automation – Management – Digital Eco-system

---

More than 80% of IT Organizations will commit to Hybrid IT Architectures by 2017

“Enterprise IT as a Service” framework provides a modular, open and integrated way of having an Agile IT with flexibility and control.

Enterprise IT as a Service Framework

**Digital Business Solutions**
- Workloads for Customer-facing Solutions
- Workloads for Business Partner Solutions
- Workloads for Workforce Enablement Solutions

**Consumable IT Services and Apps**
- Brokerage
  - IBM Services
    - Cloud
    - Mobility
    - Networking
    - Resiliency
    - Systems
    - Technology Support
    - Security
    - IBM App
  - 3rd Party Services
    - Oracle ERP
    - SAP
    - Developers
    - 3rd Party Service
    - 3rd Party Service
    - Client App

**Integrate Optimal Mix of Services**
- Orchestration (Migration and Deployment)
- Operations

**Hybrid Cloud Infrastructure**
- Software-Defined Hybrid Cloud Infrastructure
  - Traditional On-premises IT Client-based
  - Managed Services On- Premises Modular approach
  - Private Cloud Client-based
  - Public Cloud IBM Bluemix
  - Public Cloud AWS
  - Public Cloud Azure

- Mix of Public Clouds

**Analytics, Cognitive, Automation, DevOps & Security**
The outcome is…

<table>
<thead>
<tr>
<th></th>
<th>Client Manages</th>
<th>Provider Manages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional I/T</td>
<td>Infrastructure as a Service</td>
<td>Business Process as a Service</td>
</tr>
<tr>
<td>On Prem</td>
<td>IaaS</td>
<td>BPaaS</td>
</tr>
<tr>
<td></td>
<td>Process</td>
<td>Process &amp; People</td>
</tr>
<tr>
<td></td>
<td>Applications</td>
<td>Applications</td>
</tr>
<tr>
<td></td>
<td>Middleware</td>
<td>Middleware</td>
</tr>
<tr>
<td></td>
<td>Infrastructure</td>
<td>Infrastructure</td>
</tr>
</tbody>
</table>

Control & Responsibility

Speed & Financial Flexibility
Dynamic Automation Produces Real Results

Cognitive analytics reduce the number of incidents. Virtual Engineers learn and resolve more incidents.

Number of Incidents

<table>
<thead>
<tr>
<th>Month 1</th>
<th>Month 2</th>
<th>Month 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>172 Incidents</td>
<td>488 Incidents</td>
<td>430 Incidents</td>
</tr>
<tr>
<td>136 Incidents</td>
<td>261 Incidents</td>
<td>154 Incidents</td>
</tr>
<tr>
<td>79 Incidents</td>
<td>47 Incidents</td>
<td>50 Incidents</td>
</tr>
</tbody>
</table>

% Resolved by Dynamic Automation

Cognitive Analytics reduced the number of incidents.
Review your thoughts regarding top “MOTIVATORS” for Hybrid IT

<table>
<thead>
<tr>
<th>#</th>
<th>Motivators</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Improve flexibility by moving workloads to meet changing business demands</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Support business innovation</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Greater Scalability</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Improve IT agility: Faster time-to-market</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Business Continuity</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Higher Performance</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Improve data access, analysis and utilization</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Move CapEx to OpEx: Pay-for-use business model</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Increase resource utilization and IT staff efficiency</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Reduce Costs and/or liabilities</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Improve collaboration: work with partners and suppliers more easily</td>
<td></td>
</tr>
</tbody>
</table>
Review your thoughts regarding top “CHALLENGES” for Hybrid IT

<table>
<thead>
<tr>
<th>#</th>
<th>Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lack of resources / expertise / skills</td>
</tr>
<tr>
<td>2</td>
<td>Security or risk concerns</td>
</tr>
<tr>
<td>3</td>
<td>Compliance and / or regulatory environment</td>
</tr>
<tr>
<td>4</td>
<td>Managing multiple cloud services</td>
</tr>
<tr>
<td>5</td>
<td>Managing costs</td>
</tr>
<tr>
<td>6</td>
<td>Lack of overall cloud strategy or plan</td>
</tr>
<tr>
<td>7</td>
<td>Lack of formalized business need or financial case</td>
</tr>
<tr>
<td>8</td>
<td>Governance / control</td>
</tr>
<tr>
<td>9</td>
<td>Performance concerns</td>
</tr>
<tr>
<td>10</td>
<td>Resistance to change</td>
</tr>
<tr>
<td>11</td>
<td>Integration of cloud applications with existing systems and services</td>
</tr>
<tr>
<td>12</td>
<td>Others:</td>
</tr>
</tbody>
</table>
And....$$$

Analyze the multi-dimensional financial impact

➢ Total Cost vs NPV
➢ Cash-flow
➢ Capex vs Opex
➢ Tax benefits
➢ Avoid unpredictable expenses
<table>
<thead>
<tr>
<th>IT Agility (cycle time impact)</th>
<th>IT Cost Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank Australia</td>
<td>-95%</td>
</tr>
<tr>
<td>Global Tire Manufacturer</td>
<td>-50%</td>
</tr>
<tr>
<td>Financial Services US</td>
<td>-80%</td>
</tr>
<tr>
<td>Bank Germany</td>
<td>-90%</td>
</tr>
<tr>
<td>Global Logistics Leader</td>
<td>-90%</td>
</tr>
<tr>
<td>Global Electronics</td>
<td>-95%</td>
</tr>
<tr>
<td>Bank Netherlands</td>
<td>-50%</td>
</tr>
</tbody>
</table>

Source: Accelerate your transformation to Enterprise IT as a Service, 2016 CORE Conference, Toronto, Erik Werner Radtke, IBM Fellow
Benefits of agile Hybrid IT

✓ $$$: Lower TCO, Opex, Tax, Avoid additional expenses & surprises
✓ Concentrate Resources to value-add activities
✓ Scalability
✓ Speed
✓ Improve SLA
✓ Standardize the app portfolio

Traditional IT Model

Hybrid IT Model
Next Steps And Outcomes For Each Stage Of Engagements.

**Due Diligence**

- Solution overview
  - Respond to Infrastructure questionnaires, financial analysis, TCO study,
  - Client requirements for managing hybrid cloud
  - Client opportunity for value creation
  - Solution overview
  - IBM PoV and recommendation of next steps

**1 month**

- Strategy and roadmap
  - Discuss the IBM/SABB enterprise strategy
    - Business constraints and requirements
    - IT Infrastructure, applications, data, organization and processes
    - Process maturity, gaps and scorecard
  - Review IBM / SABB options

- High-level design analysis
  - Migration planning
  - Resource planning
  - Schedule estimate
  - IT budget/Finance
  - Cost-benefit analysis

**3 months**

- Architect and design
  - Develop solution overview and implementation plan
    - Business requirements workshop
    - Technical requirements workshop
    - Solution design session
    - Pricing (cost estimate workshop)
    - Bill of materials and/or IBM services proposal

**Implement and manage**

- Managed services
  - IBM enterprise ITaaS solution bundle (3 months to value)
  - IBM enterprise IT dedicated solution bundle (12+ months to value)

- Project services
  - IBM consultants help you build and integrate the toolsets (9-18 months to value)
Gustavo Alvarez
Systems Services Leader
Middle East and Africa
After Adoption Comes Management

Hybrid IT
Integration of one or more off premise clouds to on-premises systems and/or the integration of one or more clouds to other clouds

Critical Management Requirements
(IBM’s Approach)
- Service Catalog
- Orchestration
- Provisioning
- Systems Integration Capability
- Skills and Structure
- Systems Management
- Network Management
- IT Service Management
- DevOps

*In order to manage Hybrid IT, IT organizations need to run the whole PaaS stack.*
What’s Next? A Full Cloud Supply Chain Strategy

End-to-End Brokerage Service

Analytics Driven decision making and optimization

Plan

Assess App for Cloud

Compare Different Services

Collaboratively Design Solution Blueprints

Add Managed Services

View Estimated Bill of IT

Buy

Order from IT Approved Marketplace

Get Approval through Workflow

Manage

Orchestrate and Provision

Track Usage and Cost

Change

Change

Change

Service Store
Pre-approved Blueprints
Pre-approved IaaS Packages

Living Order Management

IBM Confidential
Hybrid Cloud Adoption is Accelerating

More than **80%** of Enterprise IT Organizations will commit to Hybrid Cloud Architectures by 2017¹

At least **82%** of enterprises have a multi-cloud strategy as of 2016²

Approximately **79%** businesses use multi-vendor public cloud in 2016³

**Clients spent $36B**
On cloud professional services in 2015, 40% CAGR⁴

Yet less than **10%** of them have the proper people, process, technology in place⁵

---

**Hosted Infrastructure Services by Type**

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hosted Private Cloud</td>
<td>50%</td>
</tr>
<tr>
<td>Basic Website Hosting</td>
<td>40%</td>
</tr>
<tr>
<td>Dedicated Server</td>
<td>30%</td>
</tr>
<tr>
<td>Public Cloud/laaS</td>
<td>20%</td>
</tr>
<tr>
<td>Bare Metal Servers</td>
<td>10%</td>
</tr>
<tr>
<td>None</td>
<td>0%</td>
</tr>
</tbody>
</table>

Deliver unified planning, consumption, delivery and governance across the IT supply chain with IBM Cloud Brokerage Services

Hybrid Cloud Environment

**Plan**
- Assess App for Cloud
- Compare Different Services
- Collaboratively Design Solution
- Add IT and Managed Services
- View Estimated Bill of IT

**Buy**
- Order from IT Approved Service Store
- Design and Buy Multi-Vendor Solutions
- Manage and syndicate IT content in Federated Catalog

**Operate**
- Integrate with IBM and 3rd party tools and vendors – ITSM, DevOps and more
- Order fulfillment and assurance
- Orchestrate and provision through integrated fulfillment

**Manage**
- Manage Bills and Budget
- Get Visibility into Cost and Assets
- Set up Policies and View Reports
- Approve Users and Orders

*Accelerate the move to cloud* with analytics-based decision framework and apples-to-apples comparison of vendor services

*Reduce shadow IT* – flexibility of choice for end users within the organization’s compliance framework.

*Integrated service management* across traditional and cloud IT services – enabling the virtual data center.

*Rapid financial decision making* for the CIO by consolidating all cloud service costs on a single dashboard.
Managed services is modular: One size does not fit all !!!

- IaaS
  - Application
  - Data
  - Runtime
  - Middleware
  - OS
  - Servers
  - Storage
  - Network
  - End User

- Platform as a Service
  - Application
  - Data
  - Runtime
  - Middleware
  - OS
  - Servers
  - Storage
  - Network
  - End User

- SaaS
  - Application (IBM, SAP, Orcl, others)
  - Data
  - Runtime
  - Middleware
  - OS
  - Back-up
  - Servers
  - Storage
  - Network
  - End User

- Management
  - IBM Project Management
  - Reporting
  - Monitoring

- Technical leaders
- People to support the customer
- 8X5 / 16X5 / 7 x 24

Managed by user
Managed by IBM

Dedicated On
Client's Premises

Dedicated in country's
Data Center

In the Cloud
Adaptive Sourcing and IT Service Delivery

**Service Catalog**
- Architected Technology Stacks (use-cases)
- Standardized Services (with SLAs)
- Pre-configured with IBM and Client standard workloads

**Orchestration**
- Streamlined, customizable, and automated process workflows
- Extensible to all infrastructure types (x86, UNIX, z/OS, iSeries) and all major public external IT providers

**Provisioning**
- Native automated provisioning through OpenStack, IBM capabilities & API extensions (x86, AIX)
- Manual or augmented process templates for other infrastructure types

**Systems Integration**
- Each capability can be delivered via 3-4 options, with certain combinations pre-integrated
- Modular capabilities designed as “building blocks” to allow client choice; new combinations require integration

**Managing**
- Systems and service management, IT support & maintenance (24x7x365 with SLAs)
- IBM provides transparent financial and vendor management
- Combination of fixed costs / utility consumption models

**People & Organization**
- Build public cloud management capabilities and new cloud management platforms

**IT Services Provider**
- In order to be an IT Services Provider, one needs to serve as a Service Broker
- Provide IT services, not hardware, to the business

**Network Management**
- Management of planning, tracking, and managing the Internet Protocol (IP) address space used in a network within a cloud environment

**IT Service Management**
- Need to integrate with existing ITSM toolsets and processes
- SIAM, an emerging industry capability without widely accepted standards, is being implemented by IBM internally and with clients

**DevOps**
- Collaboration and communication of application development and systems operations teams while automating software delivery and infrastructure changes. (40% operations, 60% development)
IBM Presentation

May 22, 2017

Ahmed Seddik
Gulf & Levant Sales Leader
Agenda

1- Introduction.
2- Business Drivers for Cost Saving.
3- IBM Managed Technical Support Services “MTSS”.
4- IBM Back Systems.
Our mission:

We are the women and men who design, build, and run the foundational systems that the world relies on.

The backbone of the world’s economy.
The IBM Services portfolio is the backbone of IT infrastructures

**Systems Services**
- 450+ PetaBytes of storage
- 420K+ servers, including 290K+ virtual servers
- 2000+ mainframes
- 300K+ databases

**Mobility Services**
- 3M+ mobile devices under management
- 40 call centers, over four dozen languages
- 250+ Business Partners

**Resiliency Services**
- 146 dedicated resiliency data centers served
- 330 IBM data centers served
- 2.3 Exabytes backed up annually

**Networking Services**
- 92,000+ network devices under management
- 650K telephony endpoints under management

**Technical Support Services**
- 585 parts centers with 1.3M IBM and non-IBM parts
- Multi-Vendor Services covering more than 30,000 products

**Cloud Services**
- 5.5M client transactions daily through IBM’s public cloud
- 40 global Cloud data centers

**Security Services**
- 133 countries monitored
- 270M endpoints protected
- 15B events managed per day
2- Business Drivers for Cost Saving.
3- IBM Managed Technical Support Services “MTSS”.
4- IBM Back Systems.
In a multivendor IT environment, the merely challenging becomes deeply complex … and a strain on IT resources

Common support issues

- Managing multiple service contracts from different vendors “Time, Resources”
- Establishing – and achieving – consistent service levels “Consistency”
- Keeping end users happy “productivity, user experience/Revenue”
- Running a responsive, effective help desk “Availability?”
- Meeting service cost objectives “forecast/planning?”
- Managing growth and change “Operational Running Cost”
Business drivers: Reasons clients taking action now (1 of 2)

Financial
- Reducing costs and optimizing existing resources
- Driving savings in core IT operations that can be reinvested in revenue-producing projects (ROI)
- Expense variability / surprises / unplanned expenses
- Reducing overhead cost to improve margin
- Reduce the administrative burden associated with processing a large number of invoices each month to pay a large number of vendors

Operations
- Providing infrastructure reliability and availability to support business operations
- Managing complex heterogeneous environments
- Simplifying monitoring and management of IT infrastructure
- Need to unify support services in order to achieve economies of scale while still providing quality services
- Streamlining the technical architecture
- Easier, faster and reliable enterprise access to corporate data (internal and external)
- Executing operational changes – heighten speed to market
- Managing increasing amounts of risk
- Need to go through significant virtualization and or consolidation across their IT environment
- Need to communicate, coordinate & ensure consistency between multiple locations
- Maintaining security of systems and infrastructure – protecting from external threats
Client Experience / Service / Loyalty
- Improving their end-user client experience and loyalty
- Increasing need to meet clients’ global requirements – varies by industry
- Pressure to adapt / deal with change – often dictated by their clients

Regulatory
- Managing to government regulations / compliance (HIPPA, SOX, Patriot Act)
- Operational issues (e.g. hard drive erasing procedure) related to compliance

Competition
- Responding to increased competitive pressure including downward pressure on prices and margins / improving competitiveness
- Dealing with new competitive threats – from unexpected sources including globalization and new technology. Maintaining their competitive edge
- Manage the changing business environment – globalization, global economic conditions, acquisition, etc.
The Gartner Top 10 Recommended IT Cost Optimization Ideas, 2016

Published: 29 February 2016   ID: G00301094

Analyst(s): Jim McGittigan | Sanil Solanki

Summary
Gartner has advised hundreds of organizations on IT cost optimization during the past several years. Here, we highlight 10 ideas we most frequently recommend to CIOs and IT leaders.

Table of Contents
Introduction
Analysis
   No. 1: Create a Shared-Service Organization for Some or All IT Services
   No. 2: Centralize, Consolidate, Modernize, Integrate and Standardize Technologies
   No. 3: Leverage Cloud Services
   No. 4: Increase IT Financial Transparency to Better Manage Both Supply and Demand
   No. 5: Utilize Zero-Based Budgeting on the Right Cost Categories
   No. 6: Rationalize and Standardize Applications
   No. 7: Optimize Software Licensing Management and ITAM Capabilities
   No. 8: Improve Procurement and Sourcing Capabilities
   No. 9: Invest in Mode 2 Capabilities Such as Agile and DevOps
   No. 10: Re-examine How End-User Computing Is Delivered
3- IBM Managed Technical Support Services “MTSS”
4- IBM Back end Systems.
IBM Managed Support Services
Managed Technical Support solution description (MTSS)

Managed Technical Support Services (MTSS) is an integrated and automated service delivery model that can be tailored to align with client-specific business strategies. Designed to establish a single point of accountability and provide management support services for multi-vendor hardware and software support across a heterogeneous IT environment, offering consistent enterprise-wide support and simplified business processes across IT silos.

MTSS provides nine service elements:

- HW & SW Service Delivery Management.
- Inventory Management.
- Availability Management.
- Change Management.
- Reports and reviews.
- Vendor Management.
- Warranty Management.
- Electronic Link Option.
- Tailored Invoicing.
IBM maintenance services helps you manage your IT environment better.

The IBM difference:
Comprehensive hardware maintenance for both IBM and non-IBM products

from a single source

Get consolidated support for products from:
- IBM
- Cisco
- Sun
- Dell
- Brocade
- EMC
- Hitachi
- NetApp
- HP
- Juniper
- Avaya
- Adva
- Motorola
- Nokia
- Lenovo
- Citrix
- InfoPrint
- Lexmark
- F5
- Checkpoint
- Arbor
- And more

Backed up by:
- Unmatched experience and know-how
- An industry-leading global support network
- Best practices based on vendor partnerships
- Vendors 3rd level Support → up to 30,000 OEM
- Access to Cisco.com Knowledgebase
Managed Technical Support Services  
IT Support Metrics Identification & Evaluation

**Increased performance & flexibility** to adopt to business needs

<table>
<thead>
<tr>
<th>Consistent Service Levels</th>
<th>MTSS Business Value</th>
<th>Improve availability &amp; reliability while reducing downtime</th>
<th>MTSS Indicative Business Value</th>
<th>Reduce operational costs</th>
<th>MTSS Business Value</th>
<th>Free client IT staff for other priorities</th>
<th>MTSS Business Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean time between failure (MTBF)</td>
<td>BP ≠?</td>
<td>Business Improvement</td>
<td>BP ≠?</td>
<td>Improved contract management</td>
<td>BP ≠?</td>
<td>Administrative Cost Saving</td>
<td>BP ≠?</td>
</tr>
<tr>
<td>Mean time to Repair (MTTR)</td>
<td>BP ≠?</td>
<td>Mean time between failure (MTBF)</td>
<td>BP ≠?</td>
<td>Lower warranty contract costs</td>
<td>BP ≠?</td>
<td>Time and material billing cost savings</td>
<td>BP ≠?</td>
</tr>
<tr>
<td>Mean time between system/service incidents (MTBSI)</td>
<td>BP ≠?</td>
<td>Mean time to Repair (MTTR)</td>
<td>BP ≠?</td>
<td>Lower maintenance contract costs</td>
<td>BP ≠?</td>
<td>IT billing/invoice costs savings</td>
<td>BP ≠?</td>
</tr>
<tr>
<td>Productivity Improvement</td>
<td>BP ≠?</td>
<td>Mean time between system/service incidents (MTBSI)</td>
<td>BP ≠?</td>
<td>Balanced Scorecard</td>
<td>BP ≠?</td>
<td>Dashboard</td>
<td>BP ≠?</td>
</tr>
<tr>
<td>Total</td>
<td>BP ≠?</td>
<td>Total</td>
<td>BP ≠?</td>
<td>Total</td>
<td>BP ≠?</td>
<td>Total</td>
<td>BP ≠?</td>
</tr>
</tbody>
</table>

**Effective & efficient IT support management**

Deliver consistent service levels  
Reducing downtime  
Freeing client IT staff  
**Cost**
Managed Technical Support Services: Integrated support management for the entire IT infrastructure

Increased performance & flexibility to adopt to business needs

- Effective & efficient IT support management

- IT operation cost savings due to:
  - improvement of SLAs
  - lower IT SLA operational cost
  - reduction in # of failures
  - improved time to repair failure
  - reduction in systems/service incidents
  - lower # of repeat problems/Incidents
  - lower IT administrator cost
  - lower IT support staff cost
  - improved asset management
  - process improvements
  - lower procurement & vendor mgmt cost

- Business cost savings due to:
  - reduced internal mgmt of maintenance budget
  - reduced total # of external contracts
  - proactive contract management
  - reduced administrative overhead
  - lower total warranty & maintenance contract costs
  - lower „time & material“ billing
  - lower business productivity loss

- Cost
  - Delivery consistent service levels
  - Reducing downtime
  - Reduce operational costs
  - Free the client’s IT staff
  - 15-30%

- Consolidation of multiple support contracts into a single agreement can save 10%-20% of maintenance budgets before reducing coverage to reduce cost further.

- MTS offers holistic Managed Support for a multi-vendor environment with 9 Service elements covering the main aspects of a truly integrated support in a Dynamic Infrastructure

- 5-10% Availability

- Deliver consistent service levels
- Improve availability and reliability
- Free the client’s IT staff and resources
Through sourcing with IBM, clients are able to reduce the costs of IT operations, free up spending and resources to weather current economic conditions, and/or invest in new solutions to drive their transformation.

- Skilled Resources
- On-Site & Remote MVS Certified Resources.
- Remote Industry Experts.
- Documentation & Knowledge Transfer
- Similar Faced Incidents.

Customer SLA’s

On Site

24X7 Shift Plan

Remote

Store room

Parts on Site

People
IBM Integrated Technical Support Framework Cont..

IBM L3 Support / Back End Systems

Customer SLA’s

IBM Assets / Science

- IBM/Cisco La Guade development Lab in France
- IBM back end Analytics “Smart Knowledge Base”
- IBM / Vendor failure rates studies “prediction”.
- IBM WW Call Centers “Follow the Sun”
- IBM WW Entitlement Systems “Inventory tracking”
- Availability Management
- Reporting.

Resolution
RCA
Smart Analytics
Cost Reduction
Knowledge Transfer
Availability Prediction
IBM Integrated Technical Support Framework Cont...

IBM Service Delivery Management “Framework”

- Service Delivery Insurance “ITIL, ISO”.
- Resource Management.
- Vendor Management.
- Best Practices.
- Periodical Reporting / Reviews.
- Standards Compliance.
- Escalation Management

IBM MTSS

Customer SLA’s
IBM Integrated Technical Support Framework Cont...

B2B Vendor Support

Customer SLA's

- B2B Support from EMC, Cisco, HP, F5, etc....
- RMA Services / Spares Planning.
- HW/SW updates/Upgrades.
- IBM Tivoli Maintenance.

Vendor Support

Warranty

Availability

Replenishment

Knowledge

Asurance Insurance Policy

Technology
Agenda

4- IBM Back Systems.
Technical Support Appliance Process

**Collect**

- Technical Support Appliance
  - IBM owned System x server installed at the customer site
  - Agent less discovery technology (TADDM)
  - MDC and DSA technology
  - Custom probes

**Analyze**

- Server data
- Storage data
- Network device data
- IBM and Non IBM products
- Global Information Warehouse

**Report**

- TSS Analysis
- Software levels
- Microcode levels
- Contract data

**Reporting**

- (prioritize, consolidate, reconcile)

- Client Reports
- Executive Dashboards
  - Operational Details
  - Proactive recommendations

IBM Confidential
The most important success factor in any IT optimization engagement is obtaining complete and accurate IT infrastructure information early in the project.

LDM (Logical Dependency Mapping) for IT optimization


Deliver seamless transition to end users
- Identify ~100% of the assets which need to move
- Apply advanced analytics from IBM Research to identify server to server dependencies
- Logically migrate data and images to meet application availability requirements

Reduces risk
- Identify and remediate risks before the move
- Rehearse move and fall back plans
- Leverage experienced relocation practitioners to reduce project uncertainties

Leverage the relocation to reduce infrastructure costs and improve resiliency
- Standardize the IT environment before the move
- Replace up to 30% of end-of-life assets
- Identify areas of potential IT optimization
How smarter asset management contributes to return on assets and shareholder value.

**Value drivers**

- Increase service quality and reliability for customers
- Increase asset availability and utilization
- Increase labor productivity
- Reduce maintenance cost
- Reduce equipment and facilities required “LCM, EOS, EOL”
- Reduce spares and materials

- Decreased cost
- Increased revenue
- Increased operating dexterity

Price/Rate \* Revenue

Sellable/Units = Revenue

Operating Costs

Fixed Capital

Working Capital

= Profit

= Return on Assets

= Capital
Automation is re-ordering the way we deliver services

**Server Process Automation Technology**

- **Example**
  - "File System Full" Event
  - Improves by 100 minutes per instance

- **Example**
  - Agent "Problem Determination"
  - Improves by 37%

**Watson Cognitive Technology**

- **Example**
  - "File System Full" Event
  - Improves by 100 minutes per instance

- **Example**
  - Agent "Problem Determination"
  - Improves by 37%

**IBM and Client Early Application of Automation**

- **FROM** 110 minutes
- **TO** < 10 minutes
- 64% of incidents auto-resolved / assisted
- 14% average productivity

- **FROM** 27 minutes
- **TO** 17 minutes
- 65% average server penetration

**What’s Next?**

- **Watson Agent Assist for Multi-vendor product sets**
- **Watson Client Self-assist on cross-IBM web support portal**

$4.3M saved in parts cost alone

IBM and Client Early Application of Automation

Client alerts, Incidents, Problems, changes

© 2015 IBM Corporation
Life Cycle Management Saving Graph

My data center has equipment that we refresh every

- Up to 3 years
- 3 - 5 years
- 5 - 7 years
- Over 7 years

3rd year

Optimize your equipment and save up to 57%* vs buying new
- IBM is Transforming the Customer maintenance services experience.

- Maintenance Services in IBM is based on SCIENCE.

- Technical Support Services “TSS” Engineers Tool Set/Tool Box is Transformed.
▪ IBM Multivendor Support Centre
  – https://www.youtube.com/watch?v=jHBWnzKBh0U

▪ IBM Multivendor Support
  – https://www.youtube.com/watch?v=4qRzuVRlb8Y

▪ IBM Managed Technical Support Service.
  – https://www.youtube.com/watch?v=eT6BXWYEk3M
Thank You