SUPPLIESNETWORK
WE SUPPLY TRUST

Operational Excellence—THE Key to MPS Profitability

Value, innovation, reliability. **Trust.**

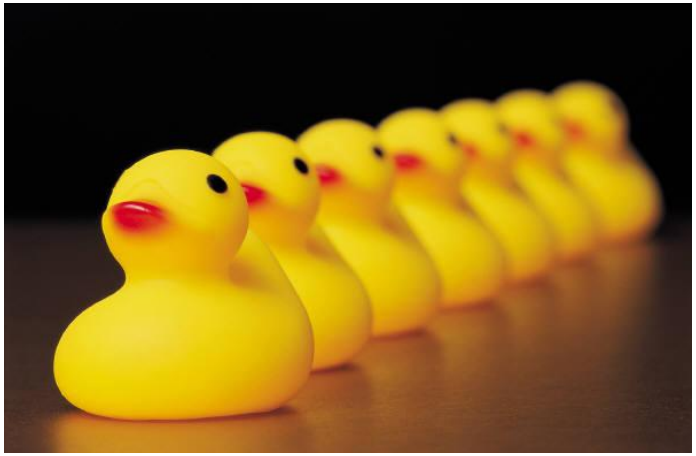
Doug Johnson
SVP—Strategic Businesses

BTA Business Technology Association®

SUPPLIESNETWORK
WE SUPPLY TRUST

Today's Agenda

- Setting Context--Profitability Barriers
- Supplies Management
  - Risk Factors
  - Mitigating Risk
  - Cutting Costs
  - Examples
- Service Management
  - Risk Factors
  - Mitigating Risk
  - Cutting Costs
  - Examples
- Q&A



"Getting your ducks lined up…."

Fact or Fiction?

"The key to a profitable MPS business is securing deals with high equipment and service/supplies gross margins…"

Securing high margins requires:

- Sales training and coaching
- C-level engagements
- Full assessments
- Equipment wrapped into the cost per page

The Reality

Strong sales competency IS important. However…

Profitability is *incumbent* upon an equally skilled and competent operational infrastructure:

- Back office (software, talent) for billing and reconciliation
- Efficient break/fix service/dispatch and preventative maintenance
- High quality, cost effectively managed supplies
- Remote, proactive environment monitoring

The Barriers to Profitability

Is YOUR MPS business profitable today?

- Do you know:
  - Resource costs and skills necessary to complete an assessment?
    - Installing the DCS
    - Environment walkthroughs
    - Cost gathering and analysis
    - Cost consensus with client

The Barriers to Profitability

Is YOUR MPS business profitable today?

- Do you know:
  - Resource costs and skills necessary to complete an assessment?
  - Deal implementation costs?
    - Hardware delivery and storage
    - Hardware installation and training
    - Hardware moves and removal
    - Initial supplies inventory
    - Install coordination

The Barriers to Profitability

Is YOUR MPS business profitable today?

- Do you know:
  - Resource costs and skills necessary to complete an assessment?
  - Deal implementation costs?
  - Total supplies costs?
    - Including delivery
    - Cost of non-quality
    - Yields
    - By customer
    - Per page, by device

The Barriers to Profitability

Is YOUR MPS business profitable today?

- Do you know:
  - Resource costs and skills necessary to complete an assessment?
  - Deal implementation costs?
  - Total supplies costs?
  - Total service costs?
    - Labor
    - Parts
    - Dispatch, phone triage
    - Install costs
    - Ongoing client commitments
    - By customer
    - Per page, by device

BTA Business Technology Association®

SUPPLIESNETWORK
WE SUPPLY TRUST

The Barriers to Profitability

Is YOUR MPS business profitable today?

- Do you know:
  - Resource costs and skills necessary to complete an assessment?
  - Deal implementation costs?
  - Total supplies costs?
  - Total service costs?
  - Total sales costs to acquire AND manage the ongoing relationship?
    - Sales management
    - Sales reps
    - Analysts
    - Client account management

Supplies Management

Supplies Cost in MPS

- 2010 study by Photizo found that overall, 64% of the total cost of an MPS engagement is consumables.
- SN data shows for A4 devices, this number can be closer to 74%

Supplies Cost Risk Categories

- At time of proposal:
  - Page Mapping
- Ongoing management:
  - Supplies variables
  - Operational management costs
  - Fleet optimization

Supplies Cost Risk Categories

- At time of proposal:
  - **Page Mapping**
- Ongoing management:
  - Supplies variables
  - Operational management costs
  - Fleet optimization

BTA Business Technology Association®

SUPPLIESNETWORK
WE SUPPLY TRUST

Page Mapping Example

	Current Environment	"New" Environment
Desktop Devices @ 5¢	20%	5%
Workgroup Devices @ 3¢	50%	30%
Department Devices @ 1¢	30%	65%
Total of 100k pages printed per month	2.8¢ @50% GP	1.8¢ @50% GP

Implications

- Rep builds deal at 2.5¢
- Saves client 11%
- Puts extra GP (delta between 2.5¢ and 1.8¢ =$44.1k over 63 months) into hardware GP
- Rep comp'd 30% of GP ($13,230)
- Dealer nets $30,870 in upfront hardware GP
- Expected S/S GP over life of deal equals $56,700
- Actual cost is 1.4¢/page, not .9¢/page
- S/S GP loss over life of the deal versus expected GP equals $31,500
- Actual S/S GP % = 22%

Supplies Cost Risk Categories

- At time of proposal:
  - Page Mapping
- Ongoing management:
  - **Supplies variables**
  - Operational management costs
  - Fleet optimization

Key Metrics—Supplies Variables

Key to deal profitability is regular analysis of actual versus expected costs (at the page level, by device)

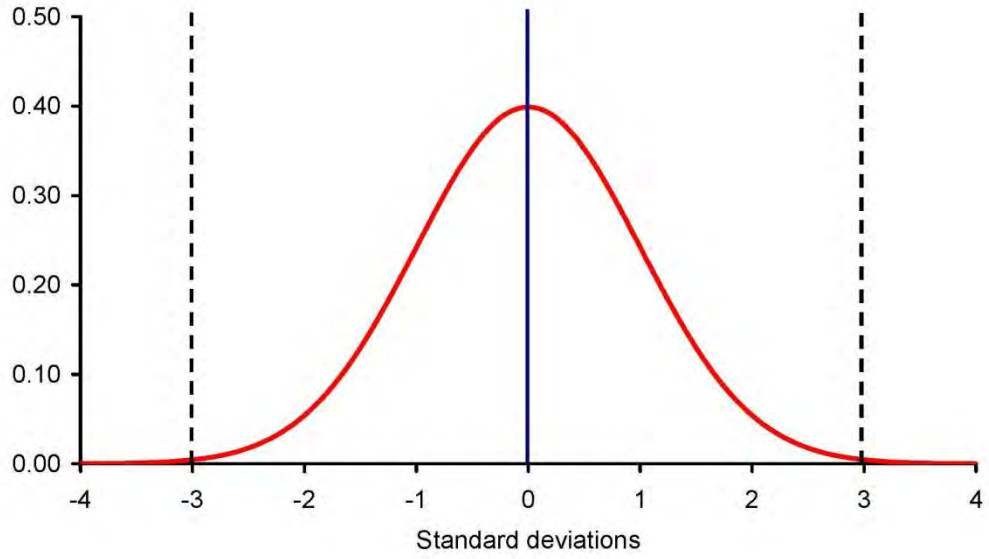
Variables include:

- Shipments vs. consumption
  - Failures
  - Shrinkage/loss
  - Yield
    - OEM vs. Compatible
    - Stated vs. “Effective”
    - Premature replenishment
  - Unidentified assets
    - Using same supplies
    - Not visible on DCS
- Device output mix
- Page coverage

Supplies Variables—"Tolerance Stack"

Definition: Tolerance Stack

"An accumulation of individual tolerance variances (each within the acceptable range for that variable) that cause the overall system to be out of tolerance."



Tolerance Stack—Example Deal

Company—Dooey, Chetem, and Howe Law Firm

- 50 printers and multi-function devices
- All network attached and mix of:
  - Small, “personal” printers for lawyers
  - Workgroup printers for most paralegals (proximity-based)
  - Department printers for very large case output

Assumptions:

- Supplies cost as percent of total cost = 65%
- Gross margin = 40%
- Net margin target = 15%
- Simplified supplies cost averages:
  - Personal devices = $.01
  - Workgroup devices = $.02
  - Department devices = $.03
- OEM/Compatible mix = 50/50

BTA Business Technology Association®

SUPPLIESNETWORK
WE SUPPLY TRUST

Tolerance Stack—Margin Impact

Supplies Variable	Expected	Actual	Margin Impact	Comments
Failure % (OEM)	0.75%	1.00%	0.033%	
Failure % (Compatible)	1.25%	2.00%	0.098%	
Shrinkage/Loss	0.00%	5.00%	1.300%	
Yield--OEM (Stated vs. Effective)	100%	95.00%	0.650%	
Yield--Compatible (Stated vs. Effective)	100%	90.00%	1.300%	
Yield (Premature Replenishment)	99%	94.00%	1.300%	20% of the time, toner replaced at toner low (30% remaining)
Unidentified Assets	0%	5.00%	1.300%	Lawyers take toner home for work use
Device Output Mix--Personal	10%	15.00%	8.333%	Turns out that actual page production is skewed more to personal and workgroup devices than department level printers
Device Output Mix--Workgroup	60%	65.00%		
Device Output Mix--Department	30%	20.00%		
Page Coverage	5%	6.25%	6.500%	Added company logo to bottom of each page
		Total	20.813%	
		Net Margin	-5.813%	

Supplies Cost Risk Categories

- At time of proposal:
  - Page Mapping
- Ongoing management:
  - Supplies variables
  - **Operational management costs**
  - Fleet optimization

Operational Management of Supplies

In addition to managing the variables associated with consumption, the supplies replenishment/order management process can cause the *most risk* to supplies costs

- Over-ordering/shipment of supplies
- Mis-ordering of supplies
- HR and system costs to manage supplies replenishment

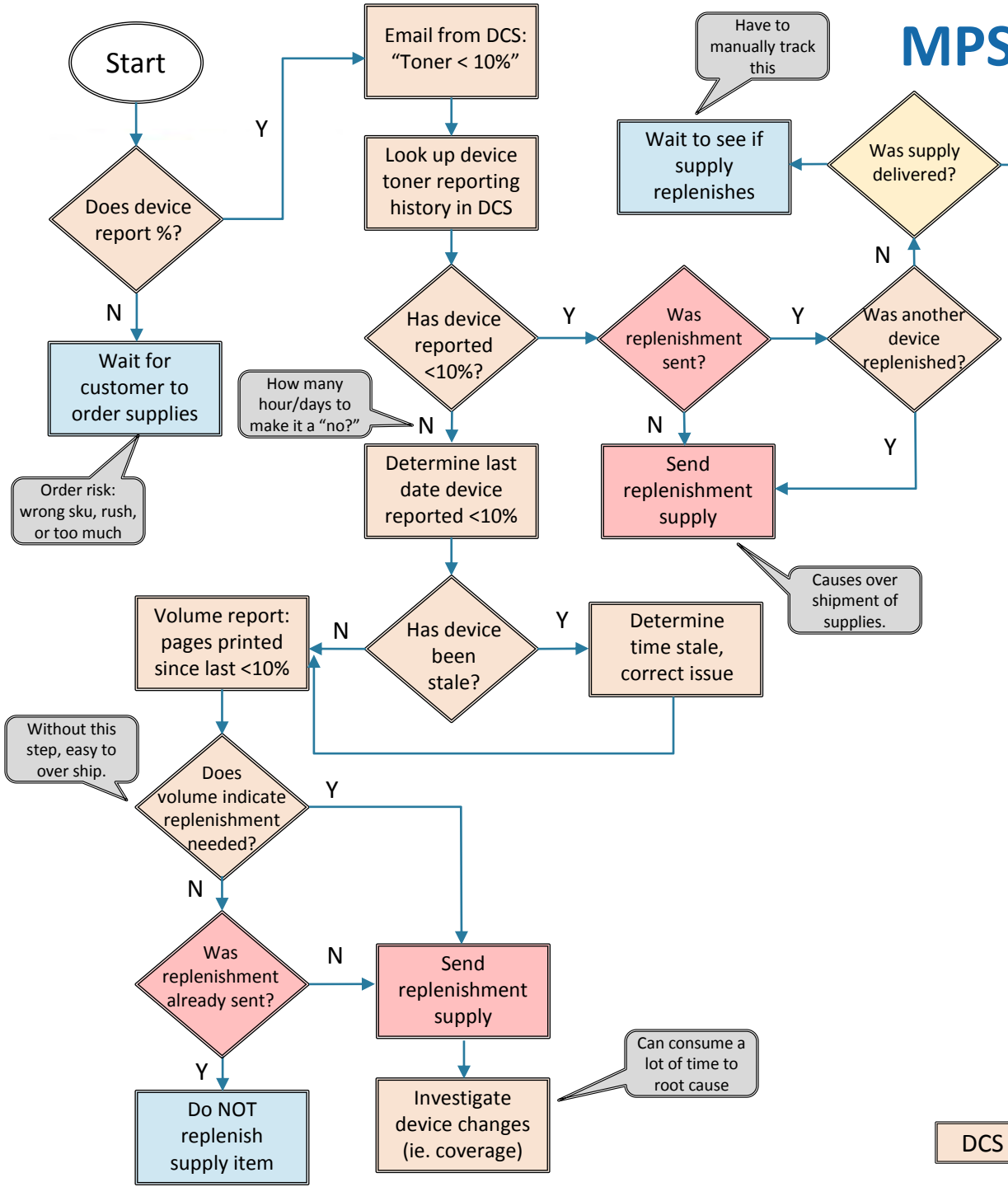
Supply Replenishment Risks

- 30 to 40% of supplies inventory is for devices they no longer have or never had
  - When customers order their own supplies in an MPS engagement, this risk to you does not diminish
- Average "over-ordering" of supplies in an MPS environment can run 10 to 15% PER YEAR of the engagement
  - No controls—pages shipped to a given device not mapped to pages consumed by that device
  - Customer behavior—early replenishment, "lost" supplies, multiple people ordering supplies for the same device, etc.
- Supplies "run out" and require rush replacement
  - Supply put into wrong device
  - Someone forgot to order replacement
- "Failed" supplies not identified and returned for credit

Calculating Supplies Replenishment Costs

- Human resources—time and cost
  - How much time is spent managing the replenishment of supplies?
    - Taking customer orders
    - Reviewing thresholds and ordering supplies
    - Answering customer questions—"Where's my toner?"
    - Searching multiple systems (data collection software, back office ERP, shipping companies, etc.) to find answers
  - What is the loaded cost per hour of these resources?
- How much risk does your system have in:
  - Over-shipments
  - Mis-shipments
  - "Early" replenishments in a given device
  - Rush shipments

MPS—Managing Supplies



Challenges with this system:

- Manual process, resource intensive
- Multiple systems to access (DCS, ERP, transportation logistics)
- Customer behavior and device/system reporting (or lack of) can create "false" spikes or drops in reported supplies levels
- Replenishment based on % remaining can result in:
  - Supplies being delivered too late
  - Supplies arriving too early
    - May "disappear" before needed
    - May be put into device, wasting remaining toner in existing consumable
    - May be put into another device
- Customer-ordered supplies also causes issues:
  - Mis-orders
  - "Rush" orders (and related "emergency stock" at reseller locations)
  - Over ordering

BTA Business Technology Association®

SUPPLIESNETWORK
WE SUPPLY TRUST

MPS—Supplies Cost/Risk Financial Model

# of devices under management	11,800	
Resources--hours per week	56.0	
Resources--loaded cost per hour	$ 22.00	
Risk--overshipment of supplies (annual)	10%	$ 3,350.02
Risk--mis-shipment of supplies (annual)	3%	$ 1,005.01
Risk--rush shipments of supplies (annual)	1%	$ 320.96
Total Monthly Resource Cost	$ 5,297.60	
Total Monthly Risk--Quantified	$ 4,675.99	
Total Monthly Cost/Risk	$ 9,973.59	
Total Cost/Device/Month	$ 0.85	

Assumptions:

Average pages/month/device	3,400
Average supplies cost/page--mono	$ 0.0076
Average supplies cost/page--color	$ 0.0560
Percent of pages--mono	95%
Percent of pages--color	5%
Average "rush" freight charge	$ 10.00

Supplies Cost Risk Categories

- At time of proposal:
  - Page Mapping
- Ongoing management:
  - Supplies variables
  - Operational management costs
  - **Fleet optimization**

Optimizing the Fleet to Cut Supplies Costs

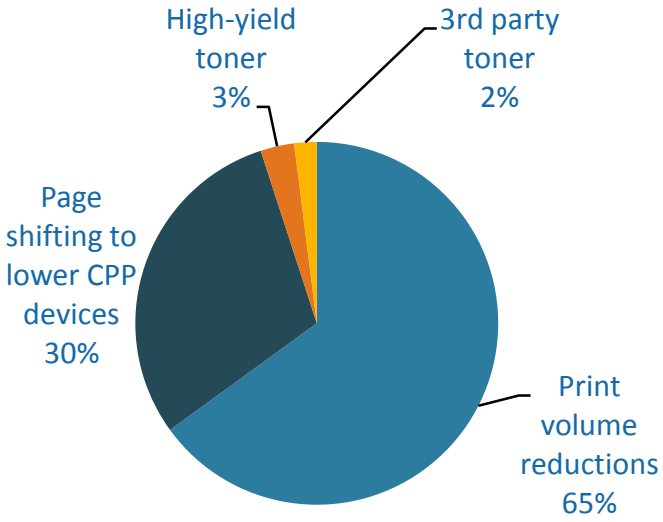
Beyond managing risk of supplies costs, activities can be undertaken to proactively reduce costs and improve margin

First, understand:

- Device-level output costs—per page, per month
- Job parameters (via EU Data SW)—application, coverage, job size
- Monthly device volume

Then:

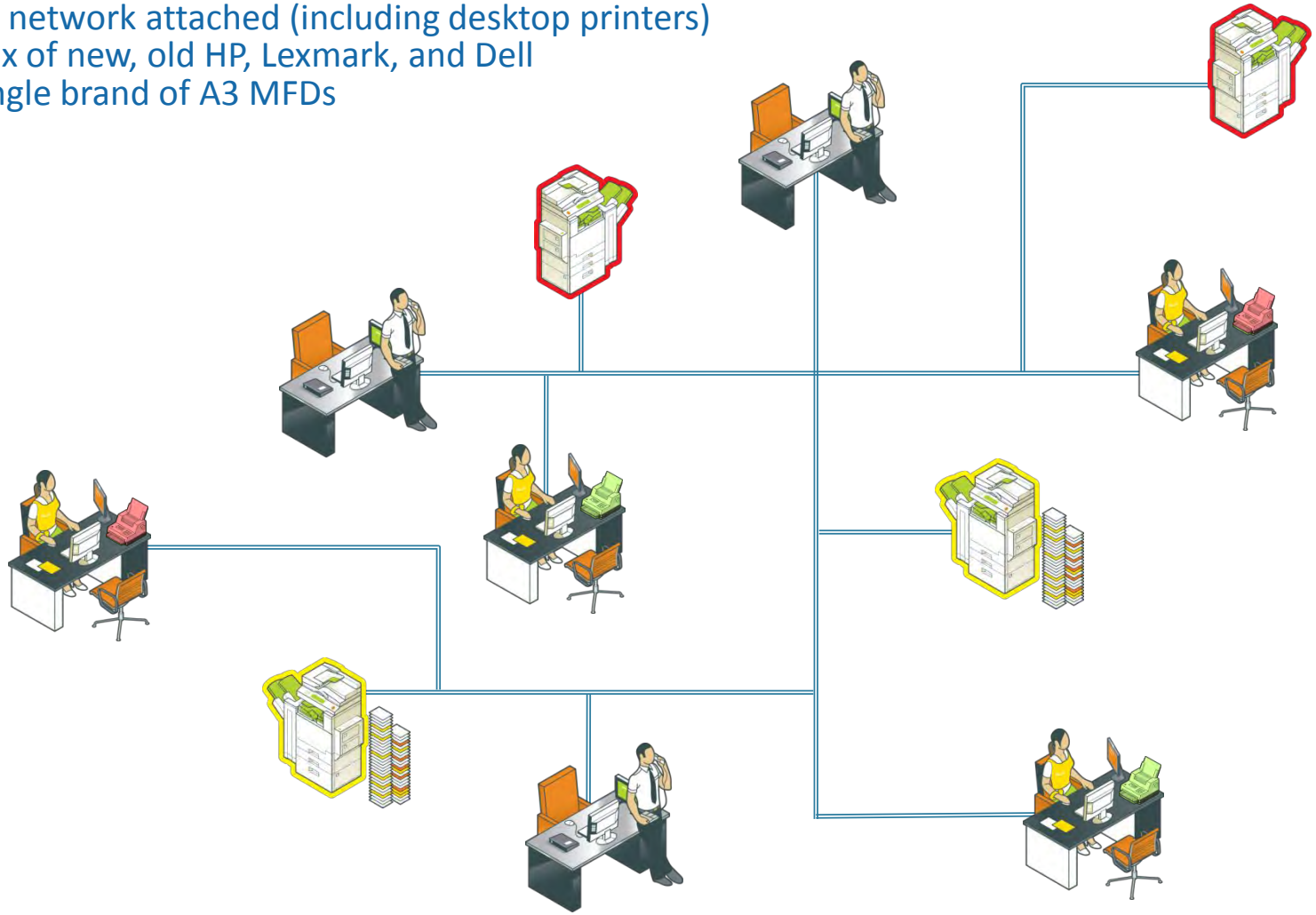
- Evaluate OEM vs. compatible toner costs based on above
- Swap/move/remove devices (balanced by service tech costs)



Infotrends 12/10

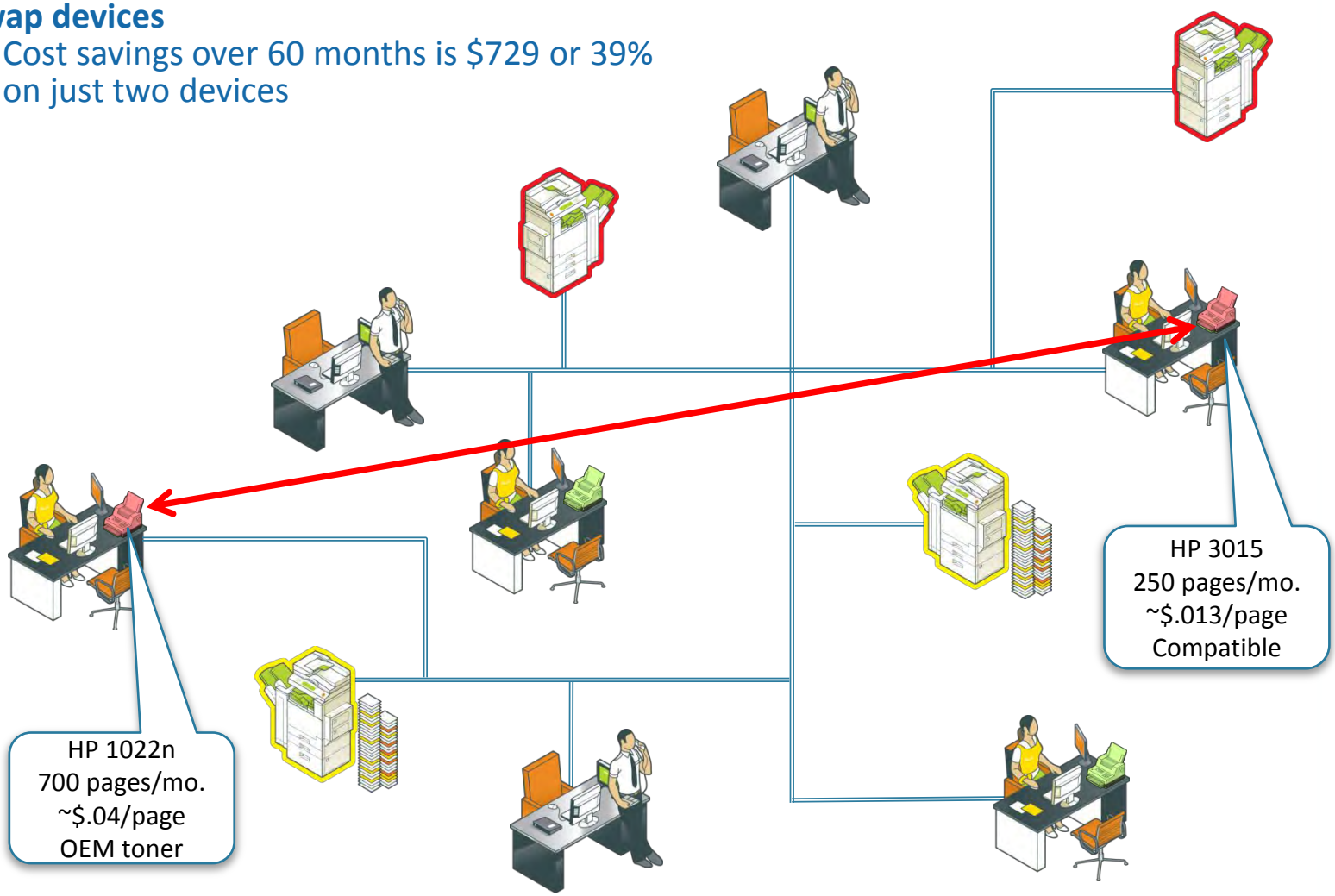
Fleet Optimization Example

- Current environment:
  - All network attached (including desktop printers)
  - Mix of new, old HP, Lexmark, and Dell
  - Single brand of A3 MFDs



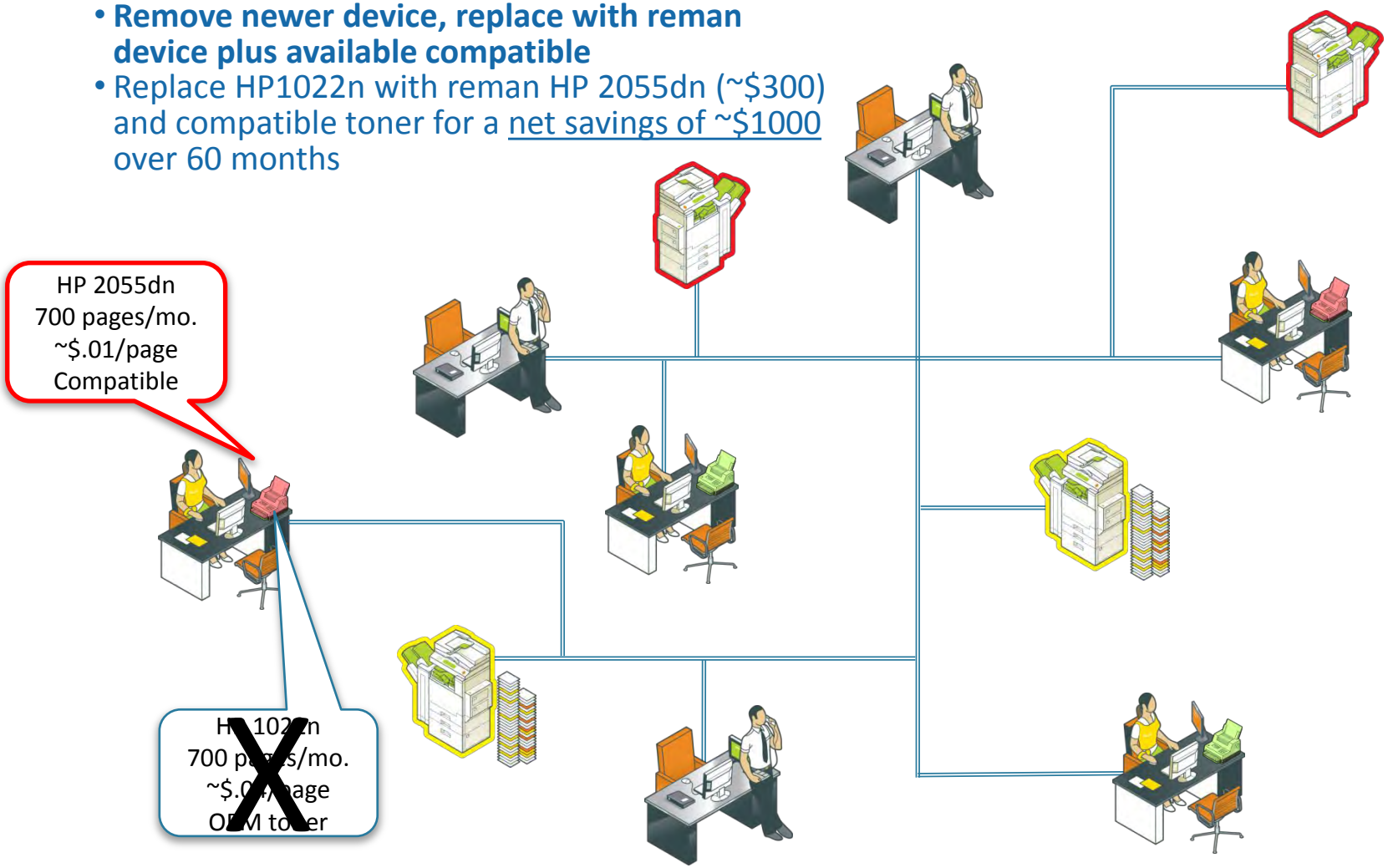
Fleet Optimization Example

- Opportunity: Lower cost of desktop device printing
  - **Swap devices**
    - Cost savings over 60 months is $729 or 39% on just two devices



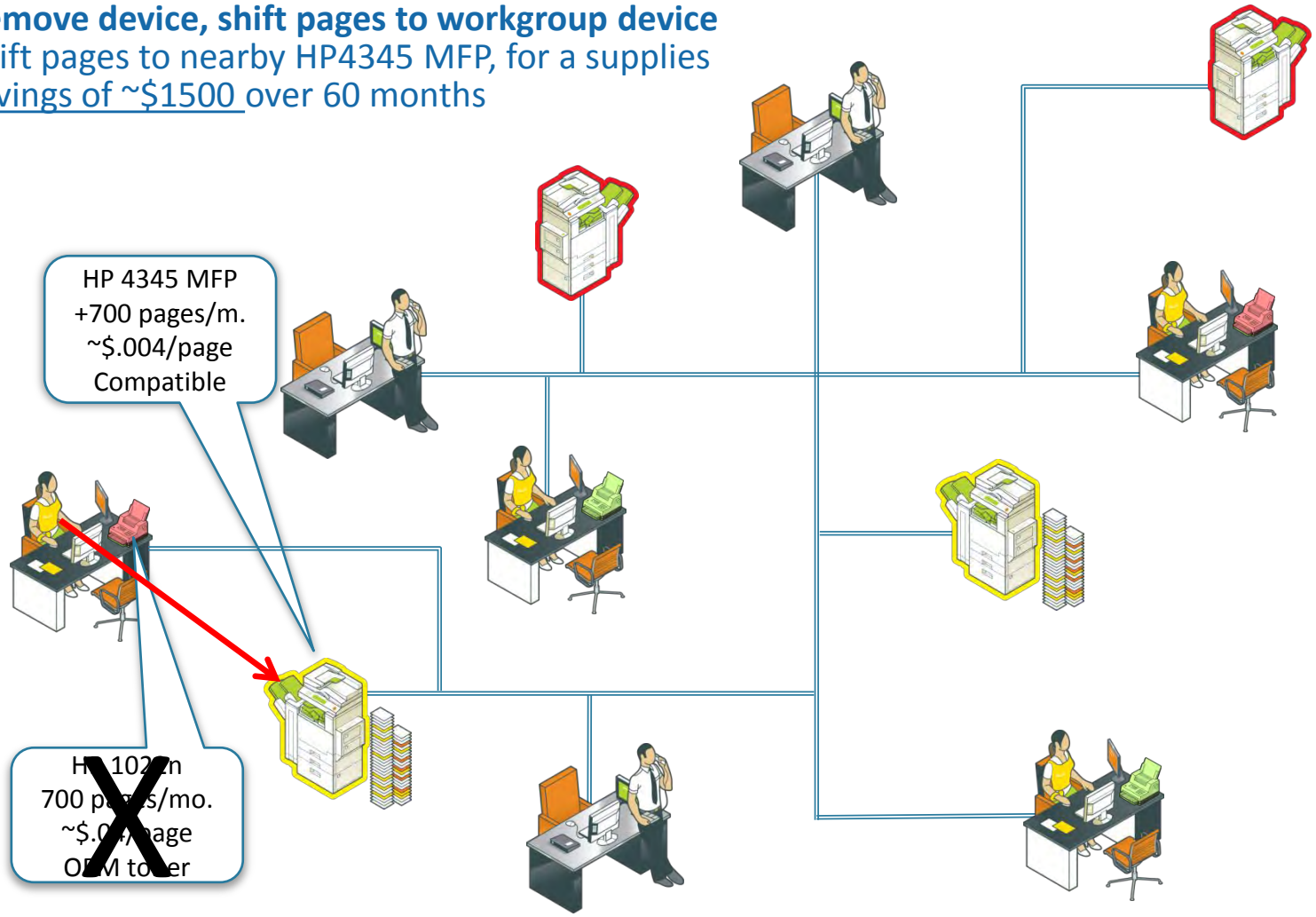
Fleet Optimization Example

- Opportunity: Lower cost of desktop device printing
  - **Remove newer device, replace with reman device plus available compatible**
  - Replace HP1022n with reman HP 2055dn (~$300) and compatible toner for a net savings of ~$1000 over 60 months



Fleet Optimization Example

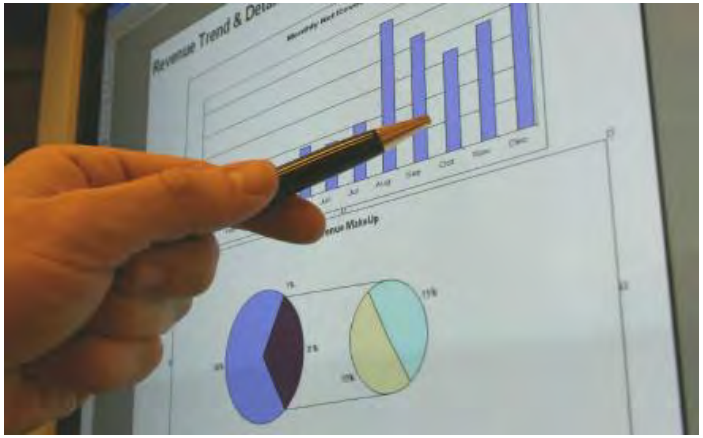
- Opportunity: Lower cost of desktop device printing
  - **Remove device, shift pages to workgroup device**
  - Shift pages to nearby HP4345 MFP, for a supplies savings of ~$1500 over 60 months



Service Management

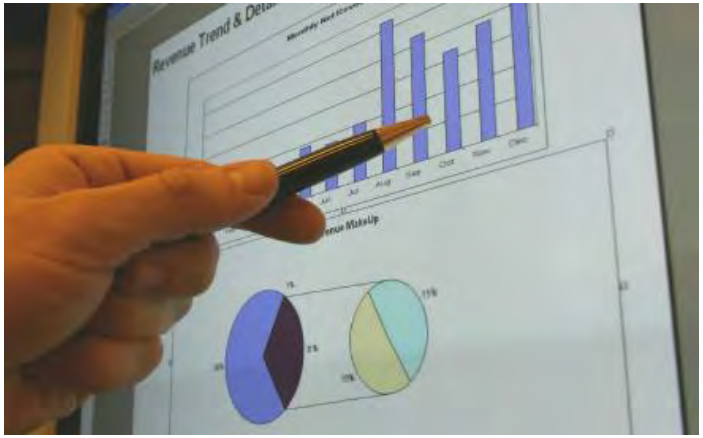
Service Cost Risk Categories

- At time of proposal:
  - Page Mapping (covered under supplies discussion)
- Ongoing management:
  - Service variables
  - Operational management costs
  - Fleet optimization



Service Cost Risk Categories

- At time of proposal:
  - Page Mapping (covered under supplies discussion)
- Ongoing management:
  - **Service variables**
  - Operational management costs
  - Fleet optimization



Key Metrics—Service

Variables include:

- Pages per month per technician
  - Labor hours per repair
  - Calls per tech per day
  - First time fix rate
  - Geographic account dispersion
  - Non-repair activity
    - Installations
    - Moves
    - Training
- Device failure rate
- Device repair costs
  - Class issues
  - Misuse
  - Aging technology

Tolerance Stack—Example Deal

Company—Dooey, Chetem, and Howe Law Firm

- 50 printers and multi-function devices
- 12 locations in the Boston area (one location downtown, the others scattered in adjacent cities.

Assumptions:

- Service cost as percent of total cost = 20%
- Gross margin = 40%
- Net margin target = 15%
- Labor as % of total S/S cost envelope = 30%
- Parts as % of total S/S cost envelope = 70%

BTA Business Technology Association®

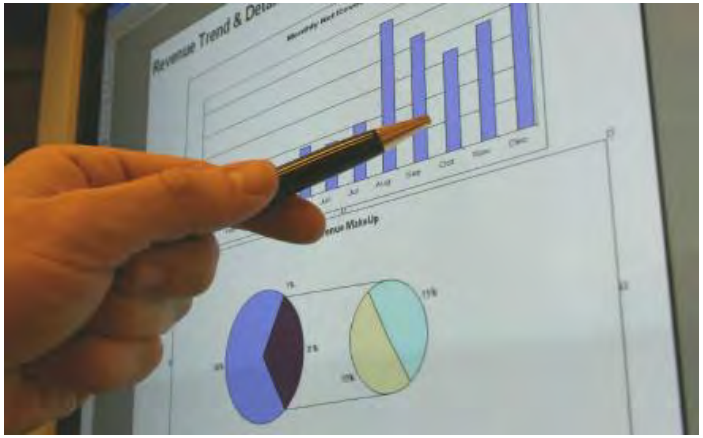
SUPPLIESNETWORK
WE SUPPLY TRUST

Supplies Variables—"Tolerance Stack"

Service Variable	Expected	Actual	Margin Impact	Comments
Labor Hours per Repair	1.00	1.50	2.255%	Older devices taking longer to root cause repair and have more complex repairs (front panels, formatter boards); performing regular moves of equipment for client; travel time to scattered offices is longer; paperwork/reporting for client need takes up more tech time.
Non-Repair Onsite Activity	0.00	0.25		
Geographic Account Dispersion	0.25	0.50		
Service Technician Efficiency	75%	65%		
Calls per Tech per Day	4.80	2.48		
First Time Fix Rate	90%	80%	1.000%	New technicains lowering average overall
Device Failure Rate	20%	30%	4.000%	Older devices failing more frequently.
Device Repair Costs	$100	$125	1.400%	Higher cost parts (formatters, front panels).
		Total	8.655%	
		Net Margin	6.345%	

Service Cost Risk Categories

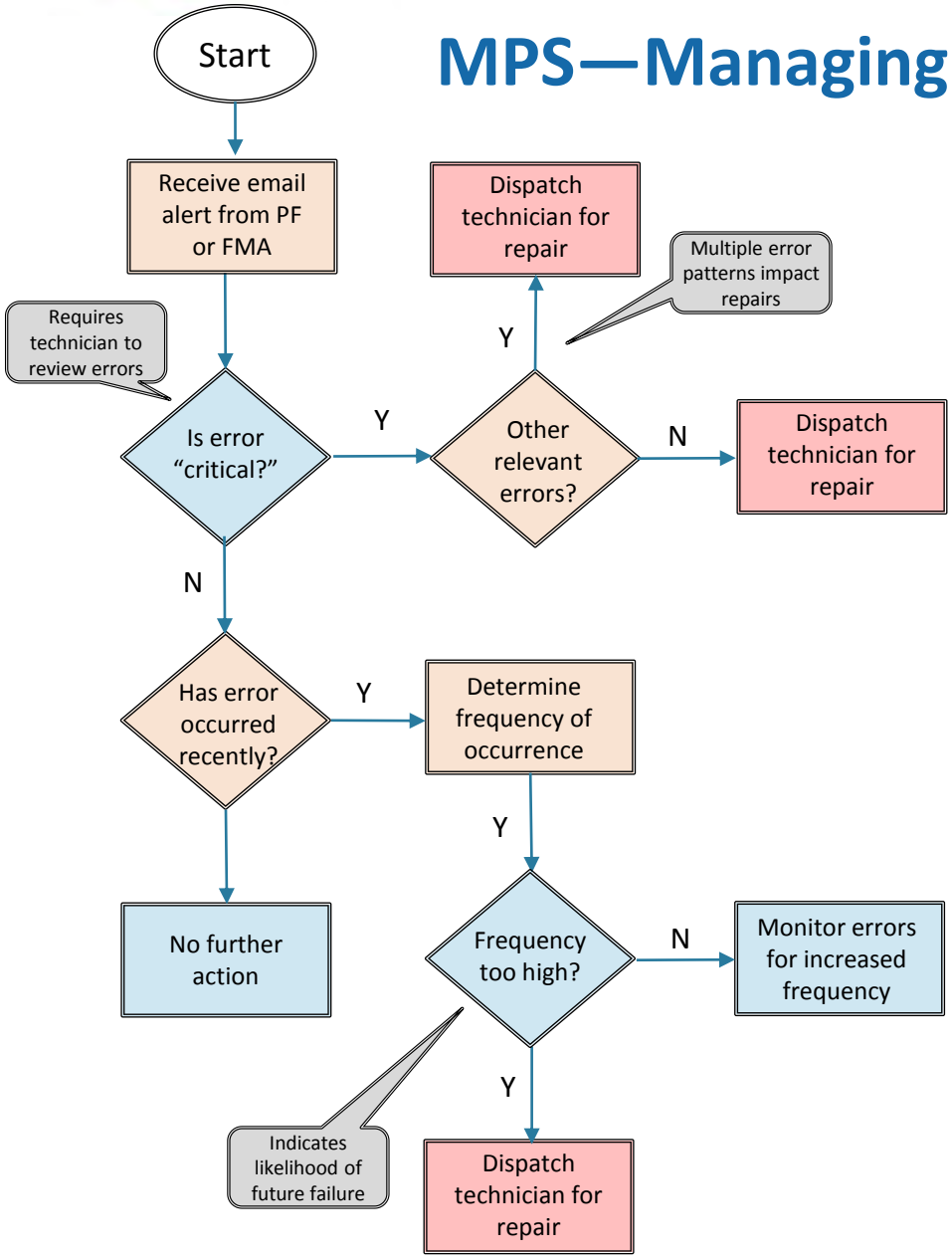
- At time of proposal:
  - Page Mapping (covered under supplies discussion)
- Ongoing management:
  - Service variables
  - **Operational management costs**
  - Fleet optimization



BTA Business Technology Association®

SUPPLIESNETWORK
WE SUPPLY TRUST

MPS—Managing Service Monitoring



Challenges with this system:

- Manual process, resource intensive
- Requires technicians to review and interpret email alert information:
  - Have to read through each email to pull out error codes and relevant text strings
  - Meaning of error codes, text strings
  - Codes and text strings vary widely by brand and model
  - Interpretation efficiency determined by skill level of technician
  - Many errors are not critical, but have to be sorted through
- Frequency of review determines responsiveness to downed machines
- Multiple systems to access (DCS, ERP, transportation logistics)

DCS | ERP | Logistics | Other

Calculating Service Monitoring Costs

- Human resources—time and cost
  - How much time is spent managing review of service alert emails?
    - Who is involved in the reviews?
      - Initial email alert reader/sorter
      - Technician to interpret potentially critical alerts
      - Investigating error history on the device
  - What is the loaded cost per hour of these resources?

- How much risk does your system have in:
  - Responding to customer calls with on-site technicians to resolve issues that could have been resolved by the customer?
  - Arriving “blind” to the customer site, not knowing the errors and history on the device?

Calculating Service Dispatch Costs

- Human resources—time and cost
  - How much time is spent responding to end user customer phone calls?
    - Are these calls that used to go to the customer's internal help desk?
    - Are these calls "triaged" to determine if the problem can be resolved over the phone, or automatically dispatched?
    - If triaged, are service technicians dispatched to the call provided with information on failure mode, level of triage, etc.?
  - What is the loaded cost per hour of these resources?

- How much risk does your system have in:
  - Responding to customer calls with on-site technicians to resolve issues that could have been resolved over the phone with the customer?
  - Arriving "blind" to the customer site, not knowing the failure parameters and history on the device?

BTA Business Technology Association®

SUPPLIESNETWORK
WE SUPPLY TRUST

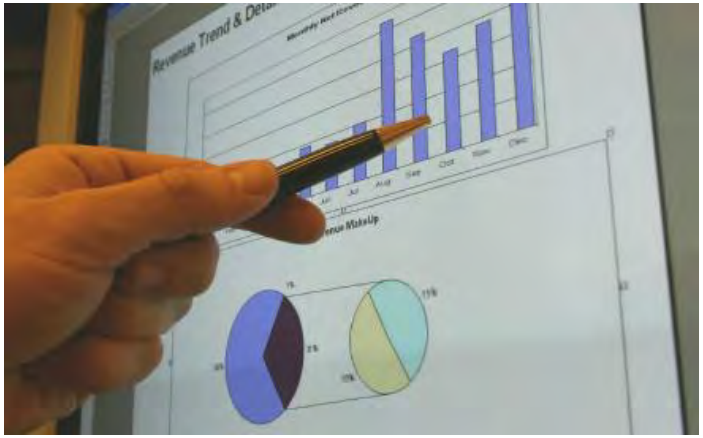
MPS—Service Cost/Risk Financial Model

# of devices under management	6,350	
Dispatch resources--hours per week	5	
Dispatch resources--loaded cost per hour	$ 25.00	
General resources--hours per week	5	
General resources--loaded cost per hour	$ 20.00	
Technical resources--hours per week	5	
Technical resources--loaded cost per hour	$ 35.00	
Risk--non-necessary service calls	15%	$ 3,095.63
Total Monthly Resource Cost	$ 1,720.00	
Total Monthly Risk--Quantified	$ 3,095.63	
Total Monthly Cost/Risk	$ 4,815.63	
Total Cost/Device/Month	$ 0.76	

Assumptions:	
Average frequency of service call (in months)	30
Average labor time per service call (in hours)	1.50
Average loaded cost per service call (labor, travel)	$ 65.00

Service Cost Risk Categories

- At time of proposal:
  - Page Mapping (covered under supplies discussion)
- Ongoing management:
  - Service variables
  - Operational management costs
  - **Fleet optimization**



Optimizing the Fleet to Cut Service Costs

Beyond managing risk of service costs, activities can be undertaken to proactively reduce costs and improve margin

First, understand:

- Device-level service costs—per page, per month
- Monthly device volume, mean time/pages between failures
- Engine-level quality history

Then:

- Evaluate OEM vs. compatible parts costs based on above
- Swap/move/remove devices to lower service costs

Device Level Service Costs

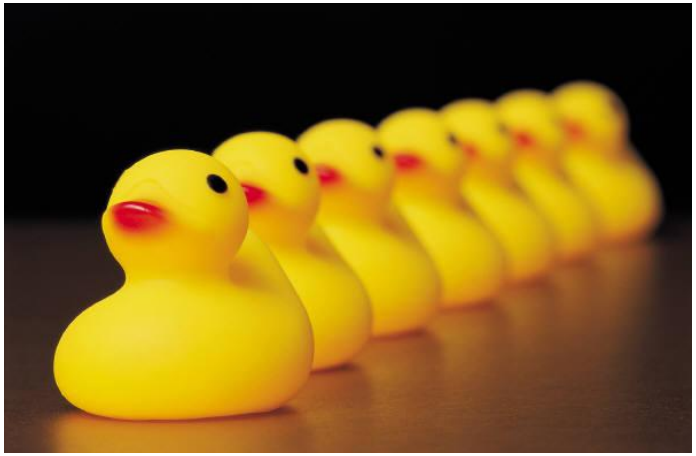
Using your service team's experience as well as industry/distributor partner knowledge, remove (or move to much lower volume areas of the client's environment) high repair cost printers

For example:

- HP P3005—3X industry average
- HP 4000 Series—2X+ industry average
- HP M3035—2X industry average

Summary

- Operational excellence is THE key to profitability in MPS
- Beware of the TOLERANCE STACK problem—each individual variable can be within variance, but the “system” is still out of tolerance
- There are MANY factors that have to be managed—knowing them at the client and device level gives you the data to make intelligent changes without negatively affecting the client’s workflow



“Getting your ducks lined up….
Makes it easier to knock them down”

Q&A