



Improving Efficiency

Mobilize Shop Floor Data Collection



Presented by:

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Poll 1

Agenda

Mobility in your
Manufacturing
Environment

The Business
Case

Customer
Examples

Features &
Demonstration

Operations on The Shop Floor

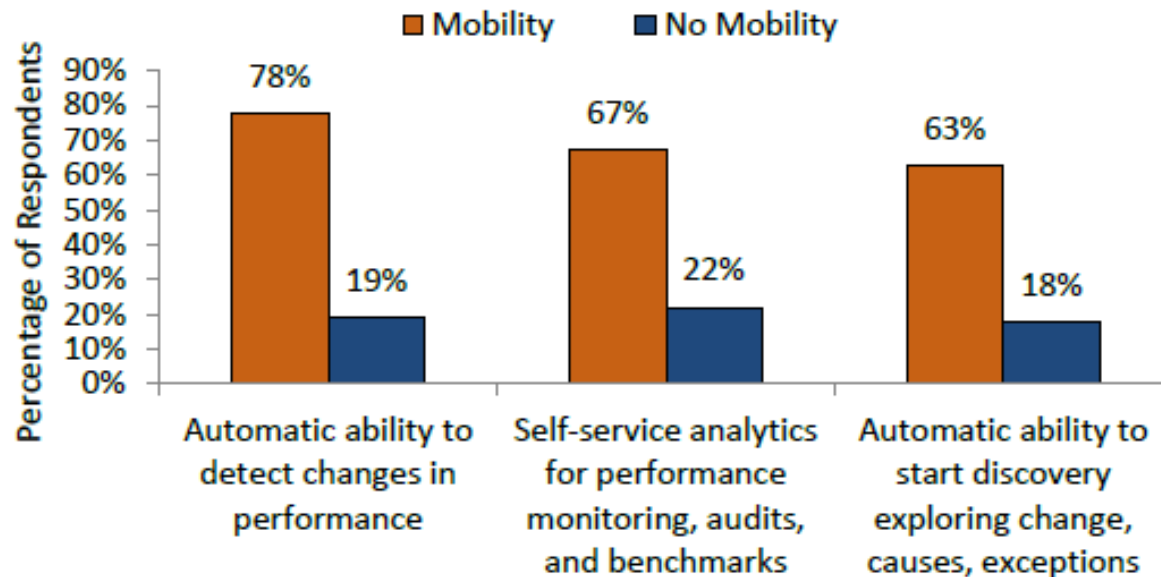
- Do more with less
- Increase efficiencies, productivity, 6 sigma, lean process
- Real-time Data is critical, metrics & KPIs crucial
- Reporting mechanisms
 - Paper
 - Excel
 - Embedded systems
 - Workstations

Mobility on the Shop Floor

- 78% of manufacturers using mobility detect changes in performance automatically
 - 22% that don't are falling behind & dropping profitability
 - Aberdeen Group Research Study
- Mobility enables new business processes
 - Removes paper
 - Accuracy challenges, data entry time, time lags in reporting
 - Increases productivity & efficiencies

Can you afford not to have a mobility strategy?

Figure 5: Difference that Mobility Makes in Decision-Making



Source: Aberdeen Group, January 2014

Mobility to Tackle Data:

Dataset structure is too complex or too fragmented for decision making:

✓ Mobility: 22%

✓ No Mobility: 60%

Data isn't available when needed:

✓ Mobility: 11%

✓ No Mobility: 37%

Data includes hidden information

✓ Mobility: 25%

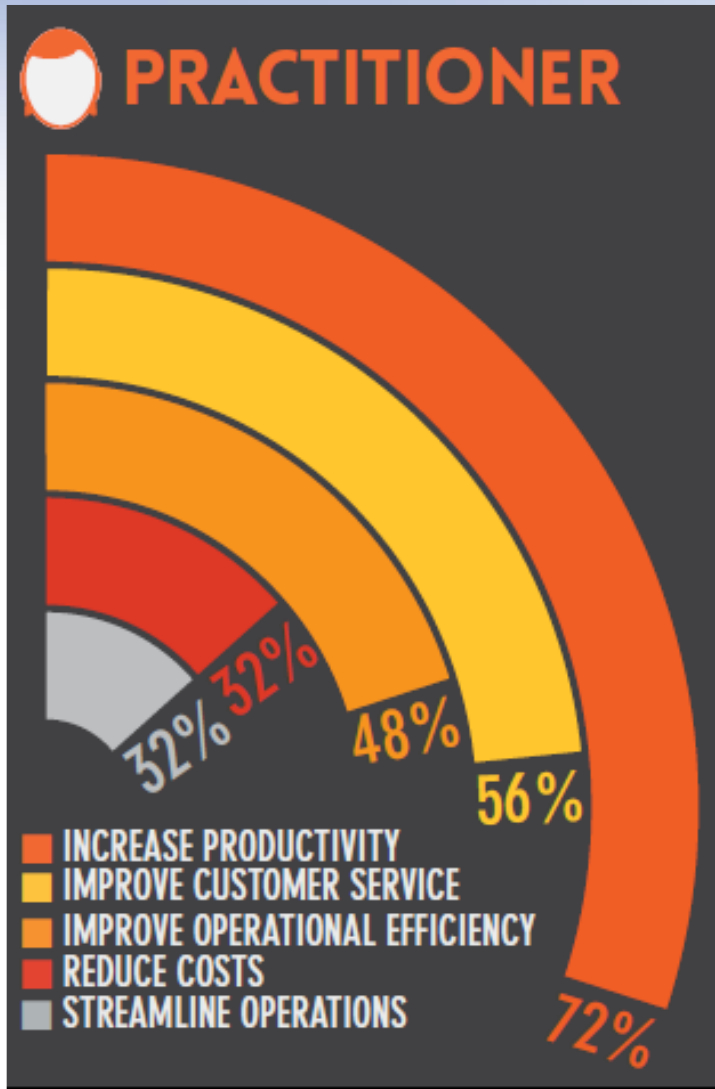
✓ No Mobility: 33%

Operators / Users don't trust data:

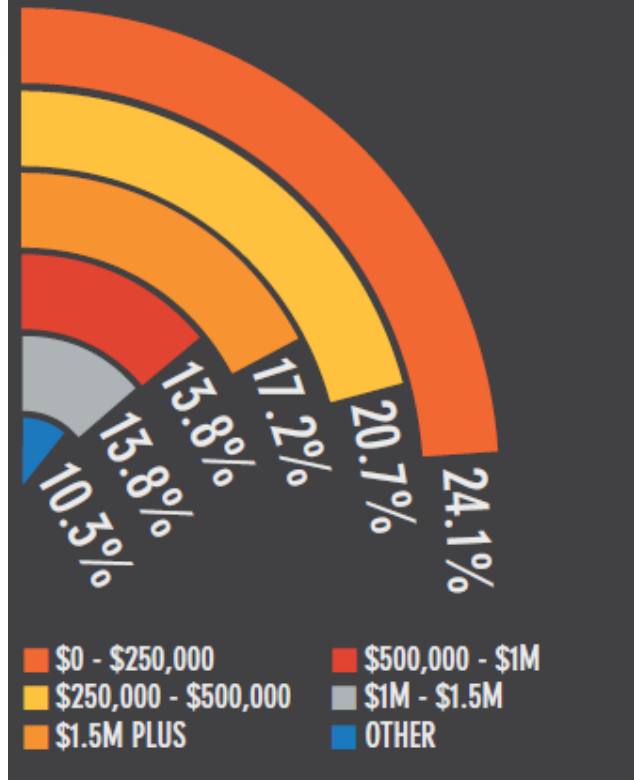
✓ Mobility: 0%

✓ No Mobility: 31%

IN YOUR EXPERIENCE, WHAT ARE THE MAIN REASONS BEHIND PRACTITIONER INVESTMENTS?



WHAT IS YOUR BUDGET FOR MOBILITY SOLUTIONS FOR THE NEXT 12-18 MTHS?



Source: Enterprise Mobility Exchange



Mi-Co

The logo features the text "Mi-Co" in a dark blue, italicized serif font. A stylized grey figure is integrated into the design, positioned behind the "i" and extending over the hyphen and "Co". The figure has a circular head and a curved, arm-like shape that arches over the text.

Mi-Corporation History

- 15 years of Enterprise Mobility Software Experience
 - *Founded 1999*
- Enterprise Mobile Data Solutions to optimize mission-critical processes
 - *Mobile Forms, Mobile Apps & Analytics products*
 - *Any data, Any Device, Anywhere!*
 - *Flexible, scalable, secure & mature (v10)*
- Partnered with industry leaders
 - *Intel, Microsoft Gold ISV, Panasonic,*
 - *Motion Computing, Samsung, Anoto & more*
- Intellectual leadership
 - *10 issued US Patents, 3 more pending*



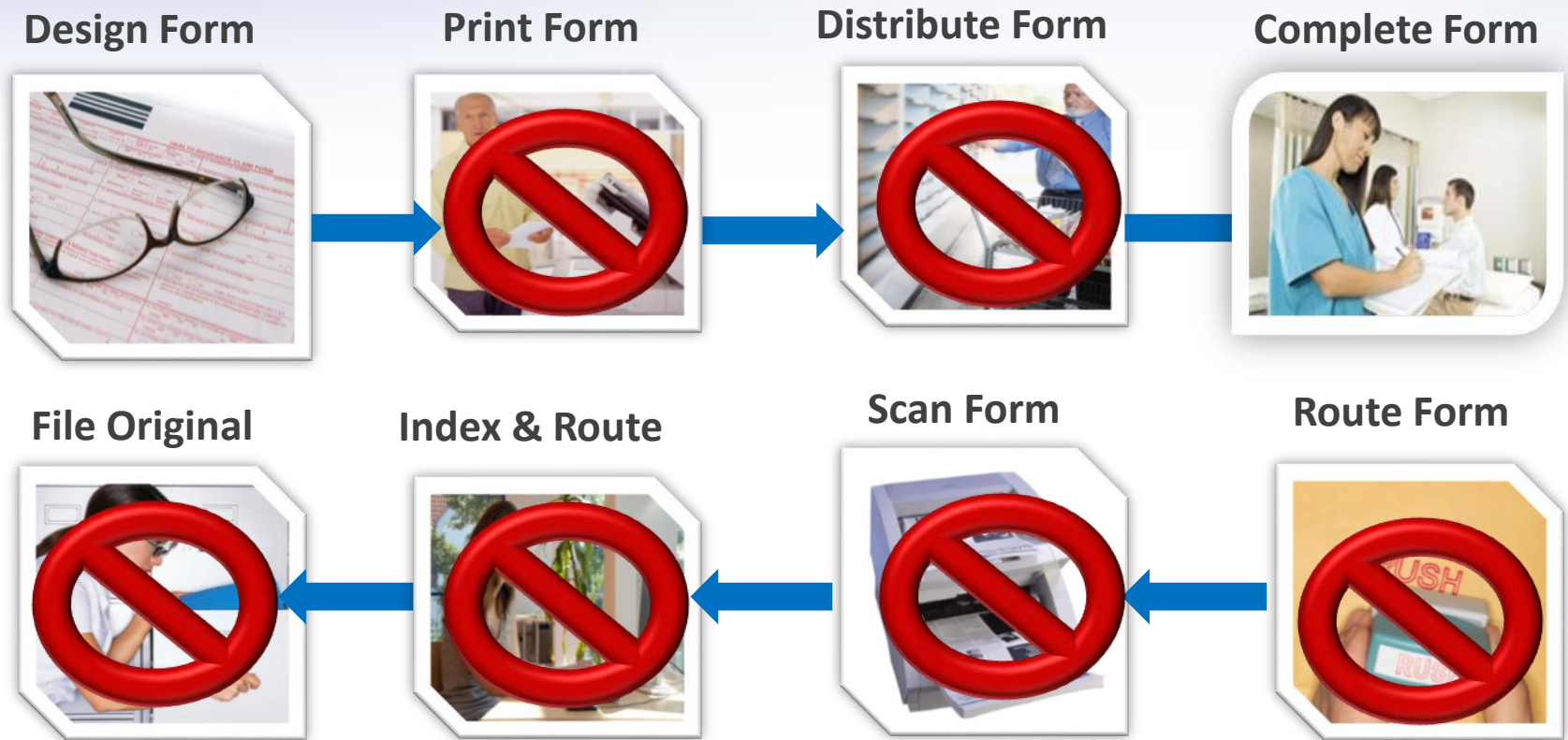
Select Customers



Problems We Solve

- Employee productivity hampered by paper forms, data-entry, no historical context
- Processes are redundant, not streamlined or efficient as could be
- Costs are adding up with manual data-entry, printing, mailing, scanning forms etc.
- Information is not reported quickly enough, slows billing, other processing
- Data accuracy issues with the constant need to fix errors on the back-end
- Competitive pressure to use technology for better customer service & turnaround

The Hidden Costs of your Paper!



Approximate cost of a paper form: \$4.95
- AIIM Whitepaper, 2012

Mobility Boosts Productivity

100X

AVERAGE DATA IS 100X MORE
ACCURATE THAN BEFORE



80%
REDUCTION



**MI-CO'S CUSTOMERS HAVE SEEN AN 80% REDUCTION
IN PROCESS TIMES AFTER CONVERSION**

(AND SAVINGS OF \$8000/MONTH WITH MI-CO PRODUCTS)

Mi-Corporation Products: Mi-Forms

Mi-Forms Software System

Software that allows enterprises to build electronic forms applications for mobile data collection

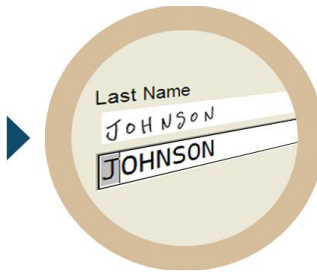
- Build Any Form App (however simple or complex) & deploy to any device
- Implement Any Business Rule for Verification, Validation or data lookup (online or offline)
- Communicate with any Backend Enterprise System (via 90 APIs & web services)



**Design
Forms**



**Capture
Data**



**Verify
Data**

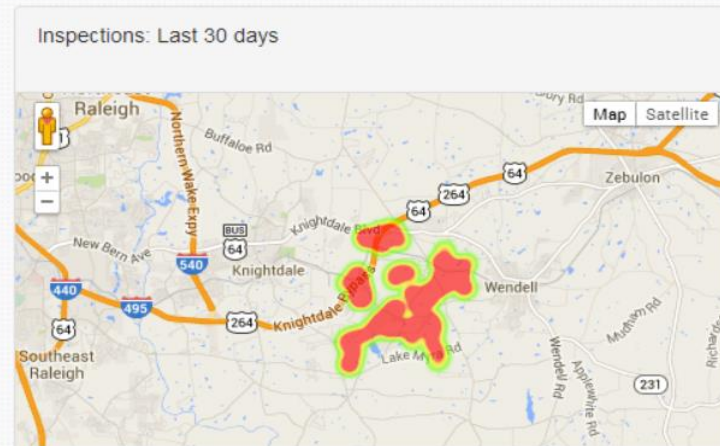
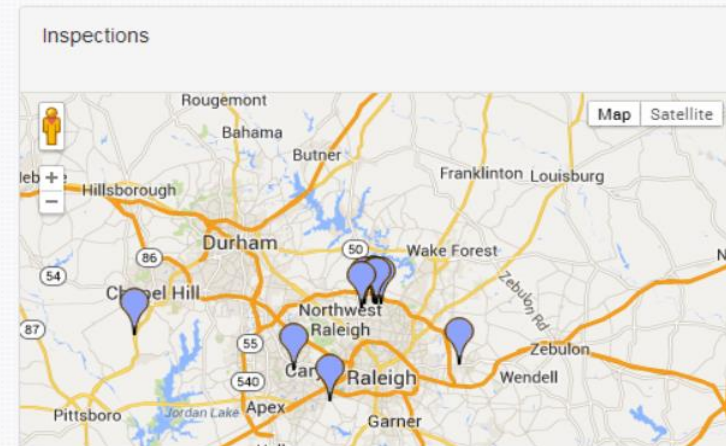
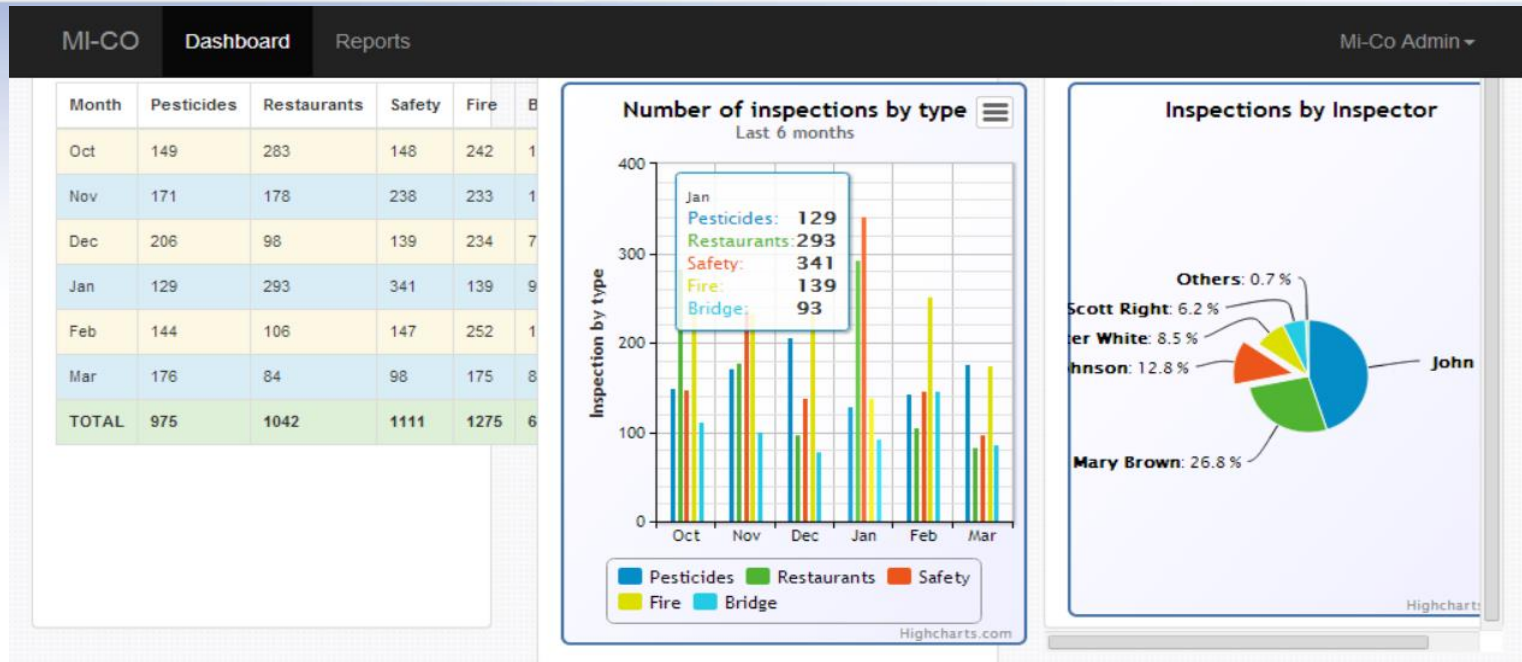


**Communicate
Information**

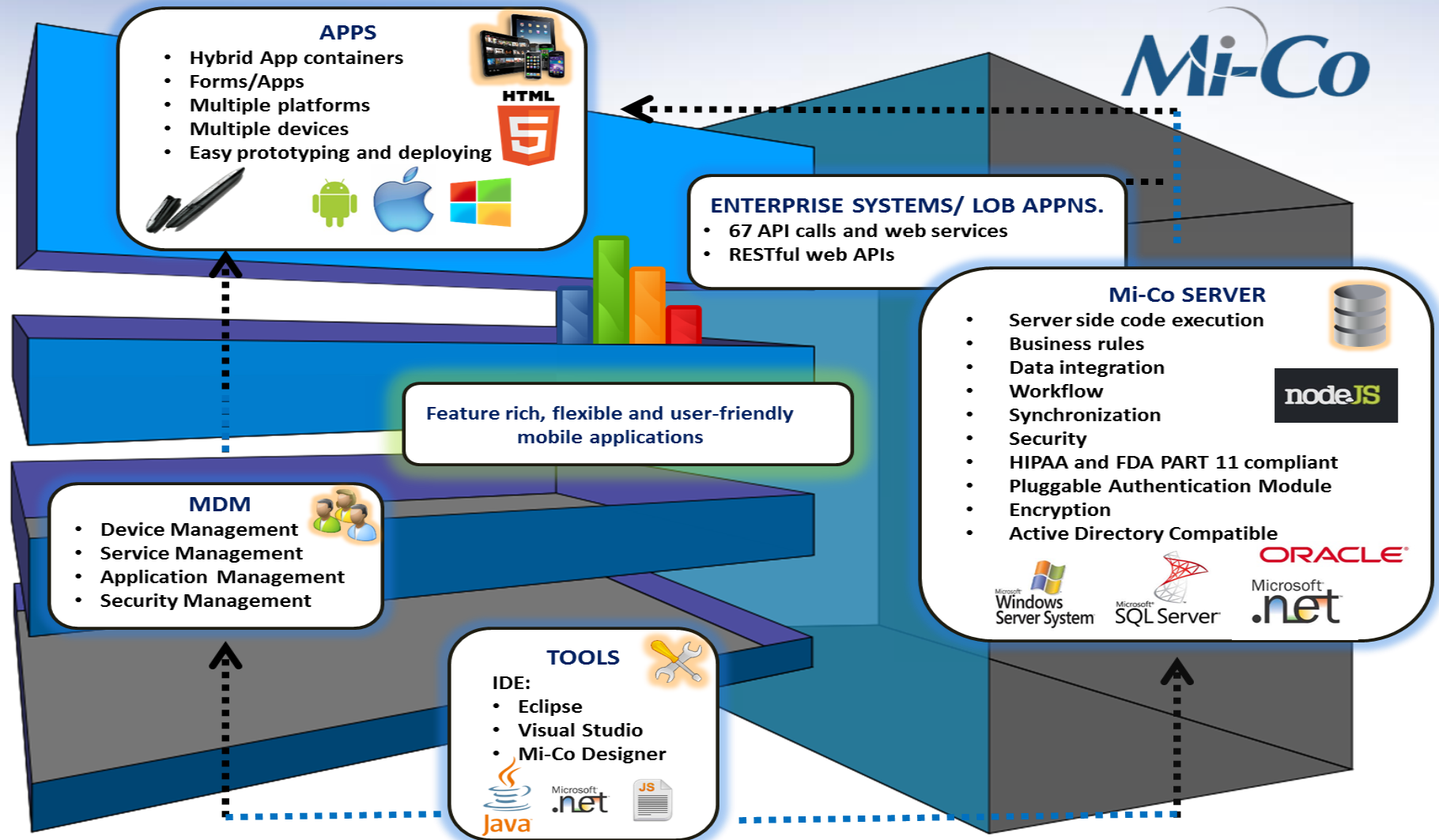
Mi-Corporation Products: Analytics & Mobile Apps

- Mobile Field Inspection System
 - Field Inspection Dashboard/Database/Reporting system
 - Database tables automatically created when forms created
 - Pre-configured reports, dashboards, charts/graphs; on-premises or hosted
- Mi-Enterprise Apps
 - Server-based middleware platform for app developers to use
 - Manages users, integration, workflow, business logic, syncing, security etc.
 - Allows for faster, cheaper app deployment with proven technology

MISM Dashboaring/Analytics



Mi-Enterprise Apps

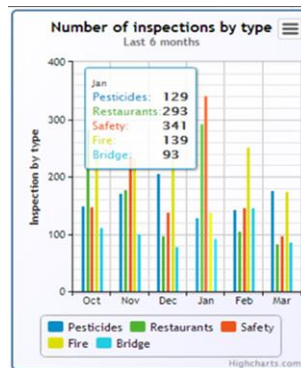


Business Case: KPIs, Dashboards & Analytics

What?

So
what?

Now
what?



<http://www.actioncoach.com/Good-Decision-Making-in-Business?pressid=1282>

Case Study: Veriform Sheet Metal

- Manufacturing company in Canada
- Process flow for Shipping lists and pickups:
 - 19 steps – 5 steps (with Mi-Forms)
- Data entry time: Reduced 74%!
- Saving \$8,000/month with Mi-Forms on Tablets!
- Chose Mi-Co for flexible technology, superior service



Case Study: Cataler North America



“Before Mi-Forms and electronic data at the point of inspection, errors were much more likely to occur in the process. Our manual process was inhibiting our production capability, greatly reducing our efficiency and effectiveness.”

Chuck Watkins,
System Administrator
Cataler NA

Chris Painter, Chuck Watkins

Cataler North America,
a division of Toyota North America

Poll 2

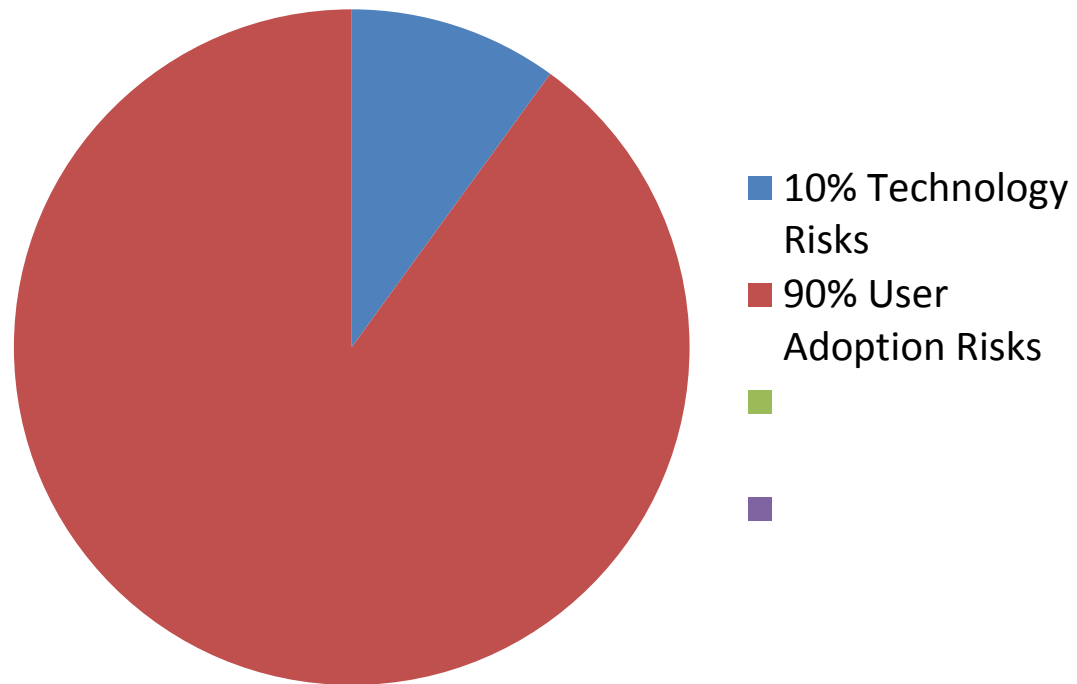
Best Practices

- Manage the Risks: “User Adoption is Everything” for Mobile Solutions

- Enthusiastic Users

- Right solution
 - Right involvement
 - Right training
 - Right incentives
 - Repeat...

- Measure ROI, report



Best Practices

- **Factors to Consider**

- Moving from a paper-based workflow to a “paper-less” workflow requires significant planning and serious consideration of the following;
 - **Lifecycle Management** of corporate Forms *e.g., versioning and impact on record management*
 - **Audit Reporting** of (who & when) changes made to any data elements from submission to final approval and publication
 - **Ease of Integration** of data once captured with existing corporate business systems - highly specialized off the shelf field service software may not play nicely with legacy systems
 - **Reimagine processes & UI/UX** since you can now enable features & aspects of mobile data capture that were not possible on paper; reimagine what is most optimal rather than recreate what was done before on paper

The Business Case

- Know your current process cost
 - Use tools like Mi-Corporation's ROI calculator
 - Account for hardware, services, support, TCO 3-5 years
- Quantify the potential benefits
 - Additional revenue
 - Cost savings, time savings
 - Better staff productivity
 - Improved customer service
 - Competitive edge in market
- Communicate, communicate!



Microsoft Excel - Mr-Ga ROI Calculator - Perpetual License 2011

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YOUR CURRENT PROCESS...

DATA CAPTURE

How many field staff are collecting data? Forms 16

How many forms does each staff member complete each day? Forms 5

How many pages, on average, in each form? Pages 2

Based on info above your forms length is: Medium

How long does it take to complete an average form? Minutes 20

DATA ENTRY

How long does it take to enter an average form into computer? Minutes 20

What is level of forms complexity? Definition Medium

ERROR

What % of time does the data captured has errors? % 15%

Penalize for each error in data capture? (zero if N/A) Minutes per Form 1

GENERAL

What is the hourly wage rate for staff? \$ per hour \$ 20

How many working days per year? Days 240

FORMS INFORMATION SUMMARY

Forms filled per year Forms 12,000

Pages filled per year Pages 48,000

Total time spent in filling forms per year Minutes 360,000

Hours 6,000

Working Days 750

Total time spent in entering data into computer per year Minutes 240,000

Hours 4,000

Working Days 500

Cell Color Key

Pictorial

Fill-in

Related

RETURN ON INVESTMENT GRAPHS...

Return on Investment

Legend: Tablet PC (Blue line), Digital Pen (Yellow line)

Graph showing Return on Investment (Y-axis, 0 to 3000%) vs. Investment (X-axis, 0 to 10000). The Digital Pen line starts at 0 and rises to 3000% at an investment of 10000. The Tablet PC line starts at 0 and rises to 2500% at an investment of 10000.

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YOUR Streamlined Process with Mi-Forms...

DATA CAPTURE WILL BE MORE EFFICIENT & FEATURE AUTOMATED DATA ENTRY

Efficiency Gain in Data Capture % 8%

Efficiency Gain in Data Entry % 233%

CURRENT PEN & PAPER PROCESS

Time spent in Data Capture per staff per day Minutes 150

Time spent in Data Entry per staff per day Minutes 100

IMPROVEMENT with Mi-FORMS

Time saving in Data Capture per staff per day Minutes 11.30

Time saving in Data Entry per staff per day Minutes 70

EFFICIENCY GAIN OF 100% REDUCES TIME SPENT BY HALF

Total time saving in Data Capture per year Hours 452

Total time saving in Data Entry per year Hours 2,799

Total money saving in Data Capture per year \$ 9,043

Total money saving in Data Entry per year \$ 55,975

WITH MI-FORMS BUSINESS RULES AND VALIDATION, ERROR WILL BE REDUCED BY

Number of Forms that are error Forms 1,800

Cost due to error forms \$ -

Error Reduction in Data Capture (max 100%) % 44%

Number of Error forms per year reduced by Forms 792

Possible reduction in error cost per year (0 hours per year) \$ -

YOUR MI-FORMS BENEFITS: MONEY & TIME

Total money saving per day \$ 271

Total money saving per month \$ 5,418

TOTAL MONEY SAVING PER YEAR \$ 65,818

Mi-Forms Implementation

Your chosen platform Tablet PC

Hardware cost \$ 15,000

First year

Mi-Forms clients license fee \$ 12,000

Mi-Forms designer license fee (single license) \$ 2,500

Mi-Forms Server license fee \$ 25,000

Digital Pen configuration fee (not applicable for Tablet PC) \$ -

Paper for Digital Pen for 48000 Pages (not applicable for Tablet PC) \$ -

Installation service and integration \$ 2,000

Application Training \$ 1,600

TOTAL FIRST YEAR COST \$ 56,100

Microsoft Excel - Mr-Ga ROI Calculator - Perpetual License 2011

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TOTAL FIRST YEAR COST \$ 56,100

Risk vs. Reward

- MDC projects are risky, complex
 - Starts simple
 - Users request increasing complexity
 - Integration with enterprise systems
 - Online/Offline sync issues
 - User adoption challenges
 - Cloud vs on-premise
 - Data types
- Lots of products that superficially appear to meet your needs
- Dive deeper
 - 10+ years experience in MDC?
 - Highly responsive support/advice/guidance/best practices
 - Continuous innovator
 - Support for widest variety of devices/data types/integrations?
 - Evaluations/trials/reference checks



Experience You Can Trust

- Flexible Technology



Apple iOS



Android



Microsoft® Windows

- Client Experience



MISSISSIPPI
STATE DEPARTMENT
OF HEALTH

Poll 3

Suggested Next Steps & Questions

- Visit www.mi-corporation.com for more information about Mi-Corporation software & services: Data Sheets, Case Studies, White Papers
- Downloadable Demo software is available at www.mi-corporation.com

Look for Mi-Forms sample apps ON THE APP STORES (Apple, Android)!

Watch our Youtube videos: www.youtube.com/micortp & www.youtube.com/mobileforms

- Contact DTI to get STARTED TODAY! – www.dtiibs.com

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