



# 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

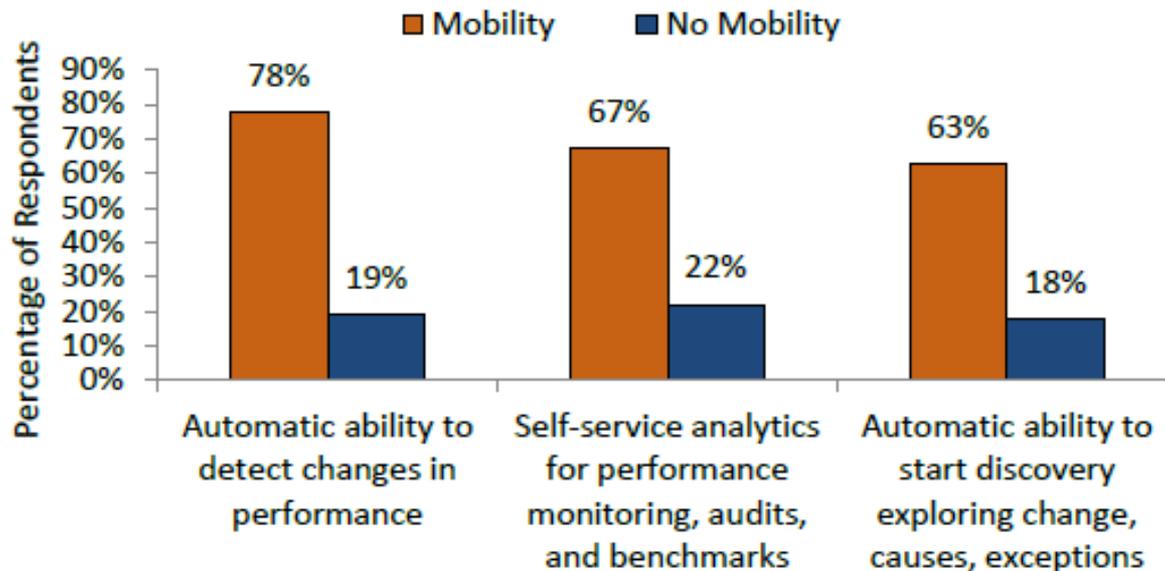
- Do more with less
- Increase efficiencies, productivity, 6 sigma, lean process
- Real-time Data is critical, metrics & KPIs crucial
- Reporting mechanisms
  - Paper
  - Excel
  - Embedded systems
  - Workstations

# 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%

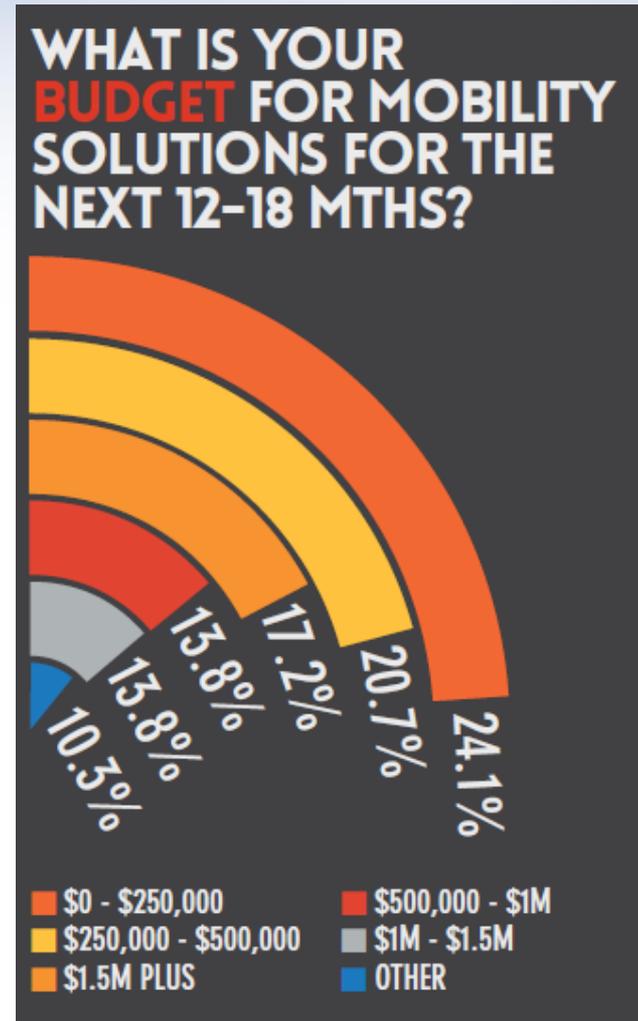
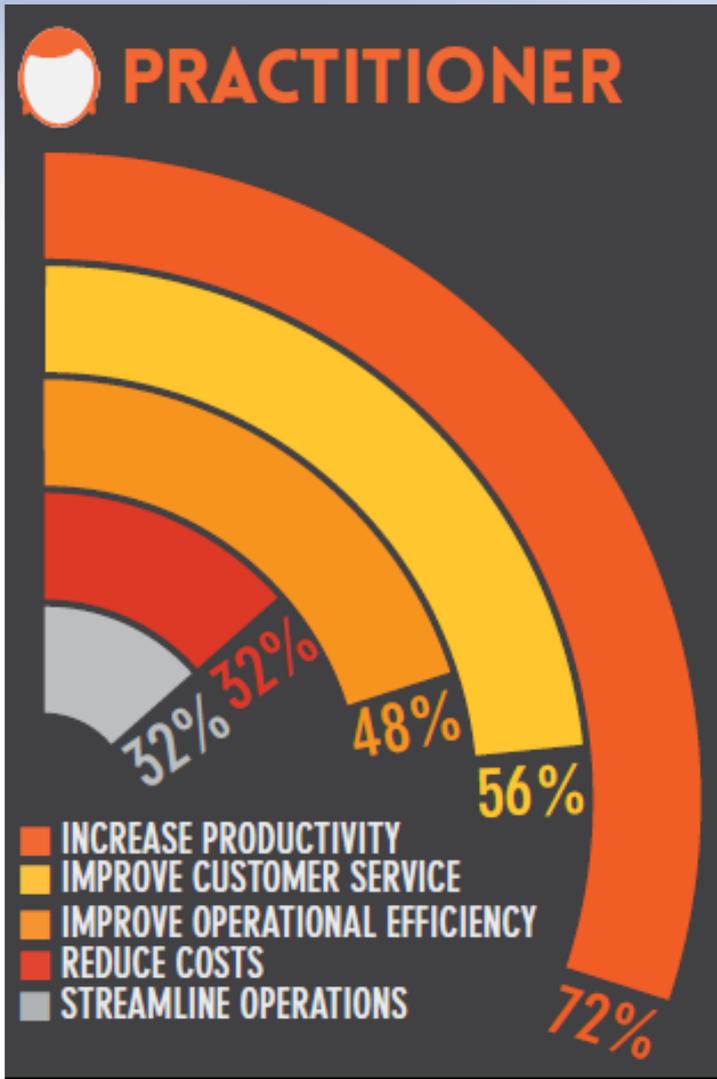
✓ No Mobility: 33%

Operators / Users don't trust data:

✓ Mobility: 0%

✓ No Mobility: 31%

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



Source: Enterprise Mobility Exchange

The logo features the text "Mi-Co" in a dark blue, serif font. The letter "i" is stylized with a grey dot and a grey curved line above it that forms a partial circle, resembling a person's head and shoulders. The text is centered on a white background with a blue gradient bar at the top.

**Mi-Co**

# 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



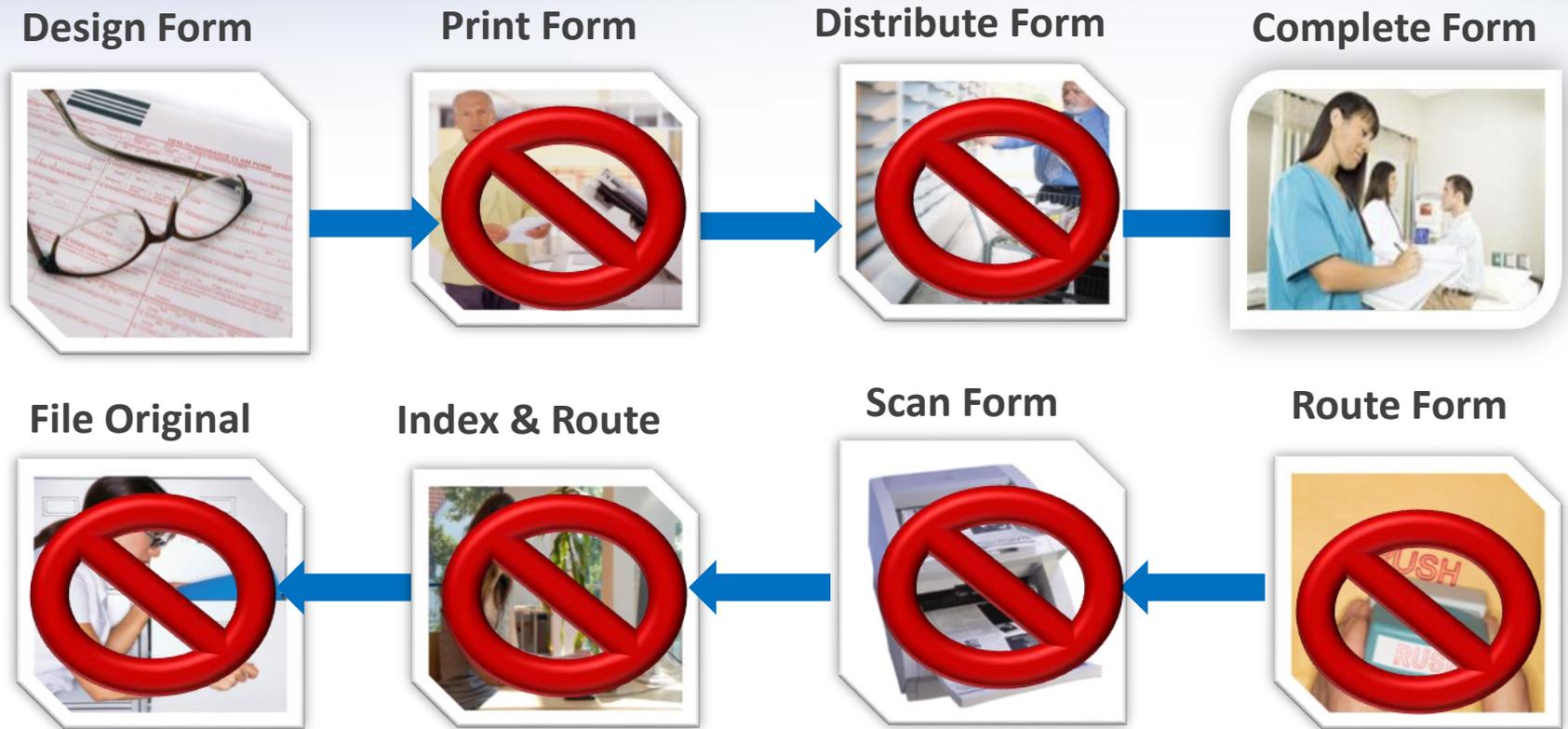
New York University  
College of Dentistry



# 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

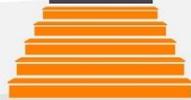
**100X**

AVERAGE DATA IS 100X MORE ACCURATE THAN BEFORE



AVERAGE PROCESS CUT FROM  
**20 STEPS**  
DOWN TO  
**5 STEPS**

**END**



**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**



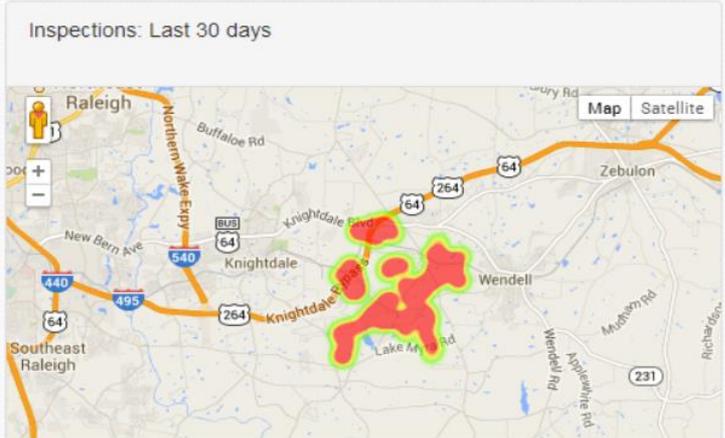
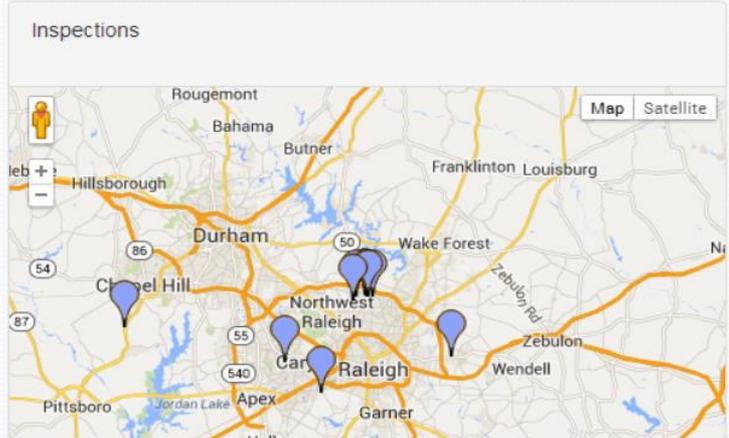
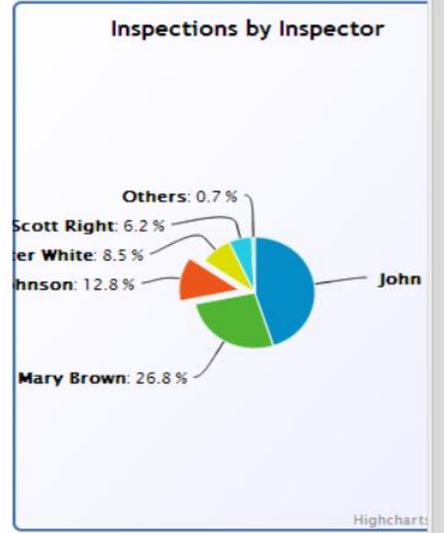
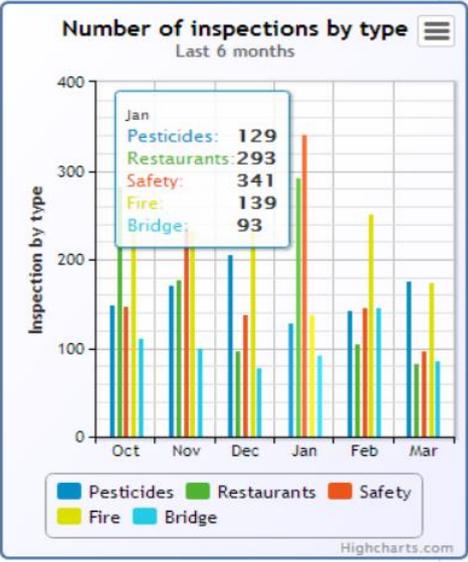
**Communicate  
Information**

# Mi-Corporation Products: Analytics & Mobile Apps

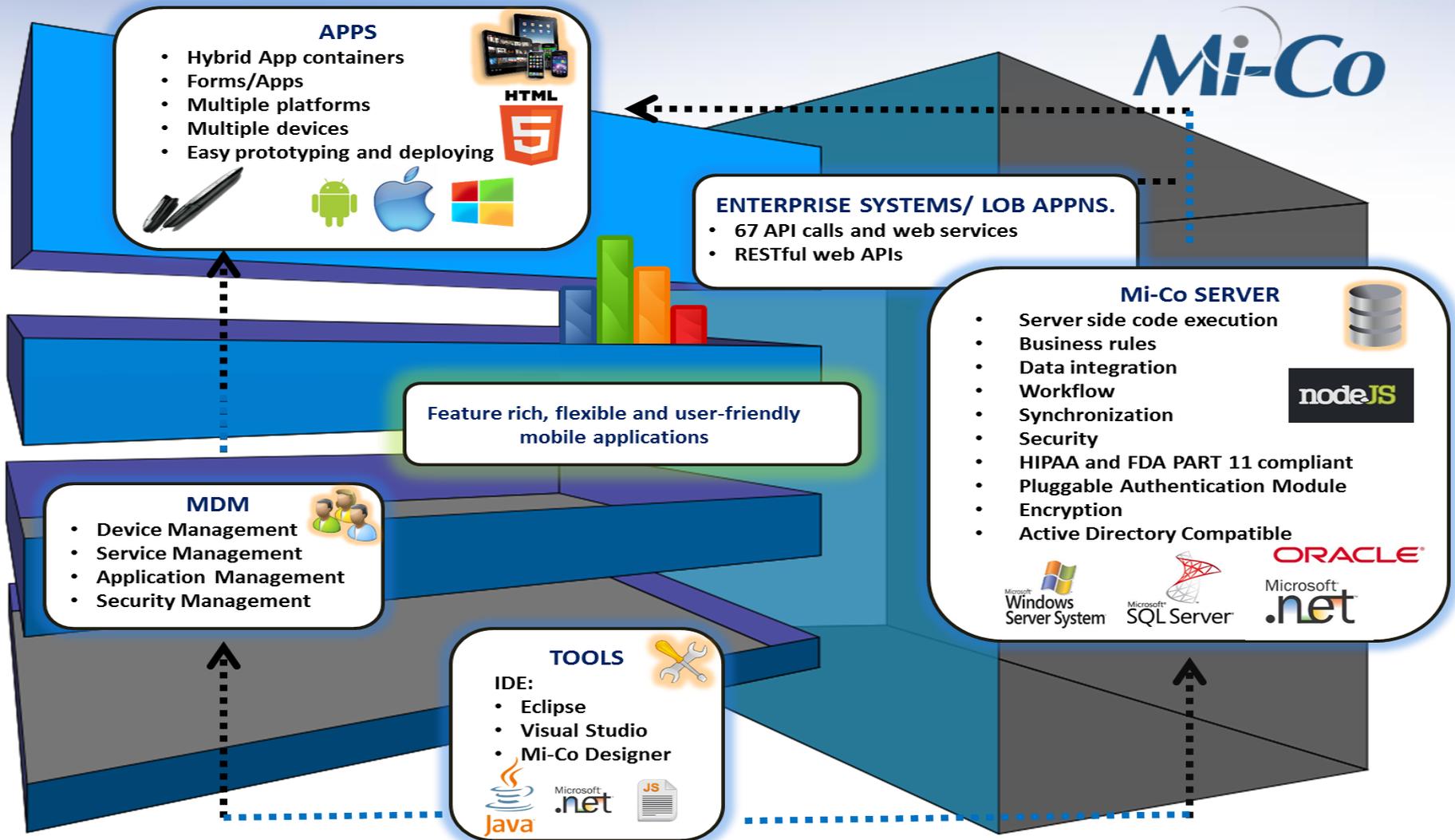
- **Mobile Field Inspection System**
  - Field Inspection Dashboard/Database/Reporting system
  - Database tables automatically created when forms created
  - Pre-configured reports, dashboards, charts/graphs; on-premises or hosted
  
- **Mi-Enterprise Apps**
  - Server-based middleware platform for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

# MISM Dashboarding/Analytics

Month	Pesticides	Restaurants	Safety	Fire	Bridge
Oct	149	283	148	242	1
Nov	171	178	238	233	1
Dec	206	98	139	234	7
Jan	129	293	341	139	9
Feb	144	106	147	252	1
Mar	176	84	98	175	8
<b>TOTAL</b>	<b>975</b>	<b>1042</b>	<b>1111</b>	<b>1275</b>	<b>6</b>



# Mi-Enterprise Apps

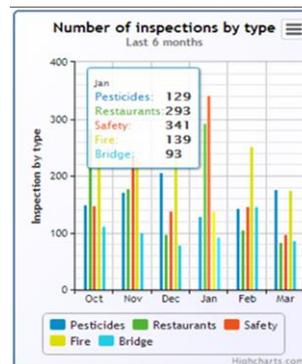


# Business Case: KPIs, Dashboards & Analytics

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

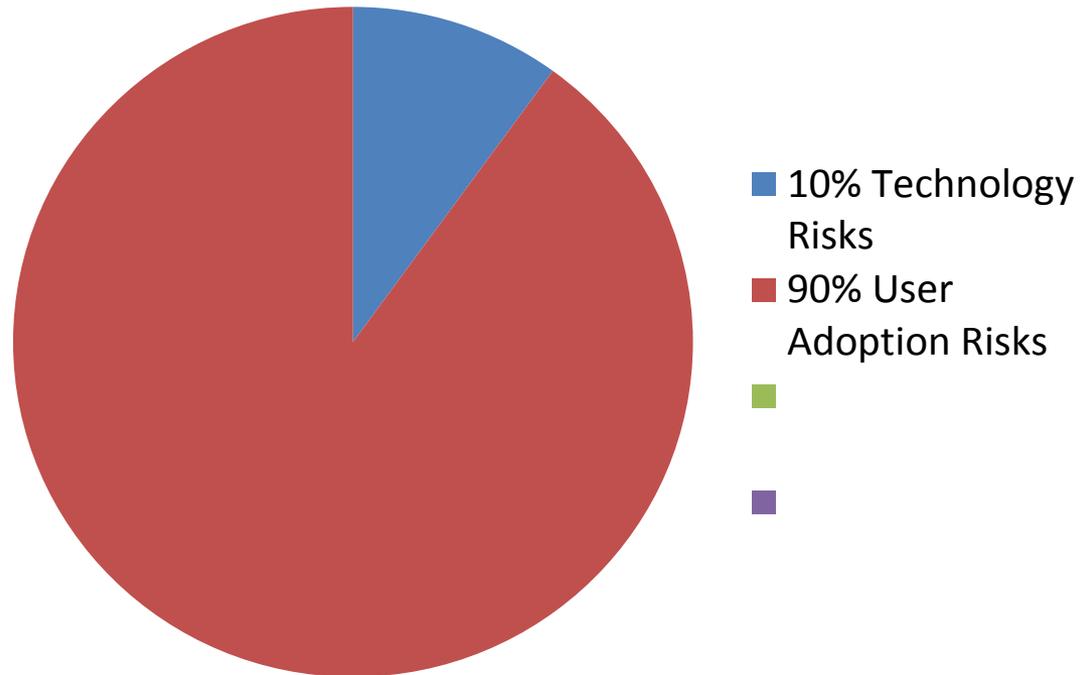
# Best Practices

- 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!



YOUR CURENT PROCESS...				YOUR Streamlined PROCESS WITH MI-Forms...			
<b>DATA CAPTURE</b>				<b>DATA CAPTURE WILL BE MORE EFFICIENT &amp; FEATURE AUTOMATED DATA ENTRY</b>			
1	How many field staff are collecting data?	People	10	Efficiency Gain in Data Capture	%	0%	
2	How many forms does each staff member complete each day	Forms	6	Efficiency Gain in Data Entry	%	233%	
3	How many pages, on average, in each form?	Pages	4	<b>CURRENT PEN &amp; PAPER PROCESS</b>			
4	Based on info above your forms length is:		Medium	Time spent in Data Capture per staff per day	Minutes	150	
5	How long does it take to complete an average form?	Minutes	30	Time spent in Data Entry per staff per day	Minutes	100	
6	How long does it take to enter an average form into computer?	Minutes	20	<b>IMPROVEMENT WITH MI-FORMS</b>			
7	What is level of forms complexity?	Definition	Medium	Time saving in Data Capture per staff per day	Minutes	11.30	
8	What % of time does the data captured has errors?	%	15%	Time saving in Data Entry per staff per day	Minutes	70	
9	Penalty for each error in data capture? (zero if N/A)	Minutes per Form	6	<b>EFFICIENCY GAIN OF 100% REDUCES TIME SPENT BY HALF</b>			
10	What is the hourly wage rate for staff?	\$ per hour	20	Total Time saving in Data Capture per year	Hours	2.99	
11	How many working days per year?	Days	240	Total Time saving in Data Entry per year	Hours	9.043	
12	<b>GENERAL</b>			Total money saving in Data Capture per year	\$	5,943	
13	<b>FORMS INFORMATION SUMMARY</b>			Total money saving in Data Entry per year	\$	56,978	
14	Forms filled per year	Forms	12,000	<b>WITH MI-FORMS BUSINESS RULES AND VALIDATION, ERROR WILL BE REDUCED BY</b>			
15	Pages filled per year	Pages	48,000	Number of Forms that are error	Forms	1,500	
16	Total Time spent in filling forms per year	Minutes	360,000	Cost due to error forms	\$	-	
17	Working Days	Days	6,000	Error Reduction in Data Capture (max 100%)	%	44%	
18	Working Hours	Hours	750	Number of Error forms per year reduced by	Forms	792	
19	Total Time spent in entering data into computer per year	Minutes	240,000	Possible reduction in error cost per year (0 hours per year)	\$	-	
20	Working Days	Days	500	<b>YOUR MI-FORMS BENEFITS: MONEY &amp; TIME</b>			
21	Working Hours	Hours	4,000	Total money saving per day	\$	271	
22	<b>Cell Color Key</b>			Total money saving per month	\$	5,418	
23	Return on Investment Graphs...			<b>TOTAL MONEY SAVING PER YEAR</b>			
24	Return on Investment			\$ 63,019			
25	3000%			MI-Forms implementation			
26	2500%			Your chosen platform			
27	2000%			Hardware cost			
28	1500%			First year			
29	1000%			MI-Forms clients license fee			
30	500%			MI-Forms designer license fee (single license)			
31				MI-Forms Server license fee			
32				Digital Pen configuration fee (not applicable for Tablet PC)			
33				Paper for Digital Pen for 48000 Pages (not applicable for Tablet PC)			
34				Installation service and integration			
35				Application Training			
36				<b>TOTAL FIRST YEAR COST</b>			
37				\$ 15,000			

# 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](http://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](http://www.mi-corporation.com)

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

Watch our Youtube videos: [www.youtube.com/micortp](http://www.youtube.com/micortp) & [www.youtube.com/mobileforms](http://www.youtube.com/mobileforms)

- Contact DTI to get STARTED TODAY! – [www.dtiibs.com](http://www.dtiibs.com)

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