



## *Mi-Forms Future Directions*

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# Mi-Forms Software Platform

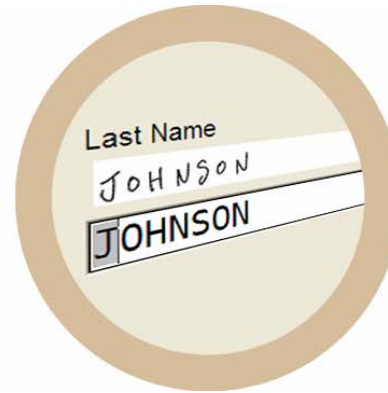
Mi-Forms empowers the mobile data capture process from form design to information communication



Design Forms



Capture Data



Validate/Verify  
Data



Communicate

# Mi-Forms Software Platform



Design Forms

*Paper Delivery*

## Cardinal/Mi-Co Alliance

- Reduce total cost of printing prefilled Anoto forms
- Provide Index/Key for initially blank forms in most convenient and reliable way
- Reduce amount of pattern required for user friendly Anoto solutions – prefilled and blank
- SDK for solution developers, Anoto partners



# Mi-Forms Software Platform



Design Forms

*Paper Delivery*

## HP Digital Pen and Paper

- Mi-Forms makes form design easier
- Standard exports require no programming
- Custom exports and integrations can be tested within Mi-Forms Designer
- Mi-Forms object model makes integrations easier

# Mi-Forms Software Platform



Design Forms

*Field  
Configuration*

*Data Paths*

## “Palettes” – Data-Driven Design

- Ability to load arbitrary XML Schema, Relational Database, or Web Service representations
- Click on data element to add Mi-Forms field with element name and properties to the form

# Mi-Forms Software Platform



Design Forms

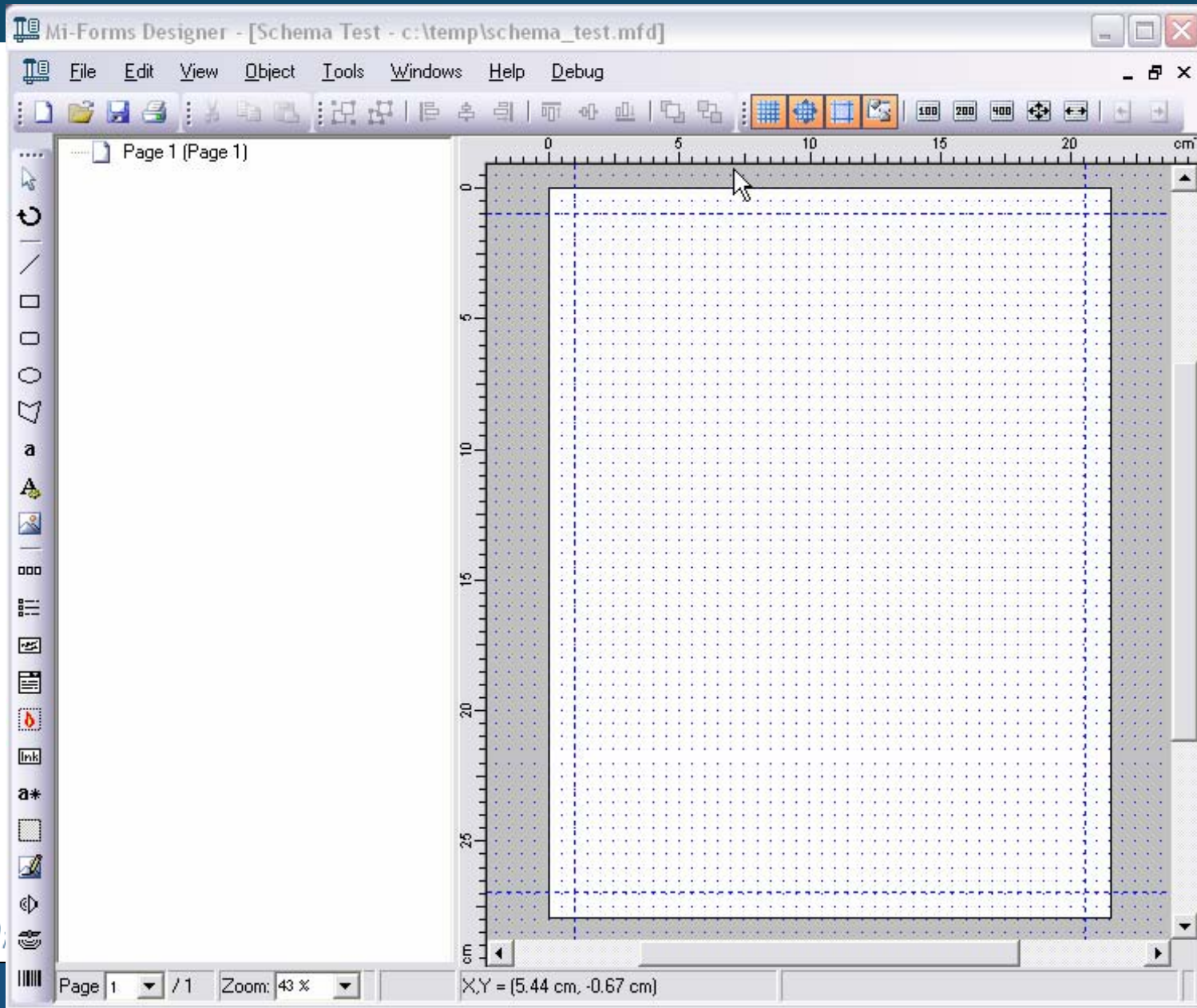
*Field  
Configuration*

*Data Paths*

## Benefits of "Palettes"

- Mi-Forms field names are automatically generated according to existing data
- More automated data path configuration (e.g., destination, data path type)
- Automated rule configuration

# Palette Example: Design from XML Schema



# Palette Improvements

- Manage library of common form elements
- Form design templates with common properties and script code predefined
- Investigate tools to build schemas from various data management systems (RDBMS schemas to XML schemas)

# Embed .NET controls directly into form



Design Forms

Customize  
user  
experience

- Treat a .NET control as if it were a Mi-Forms native control type
- Add via the Designer's GUI
  - Select referenced assembly, drag region onto form

# Validation Rule Authoring GUI

- Point and click mechanism to build rules
  - Compare field values to literals and other field values
  - Assemble subexpressions with boolean operators

# Mi-Forms Software Platform

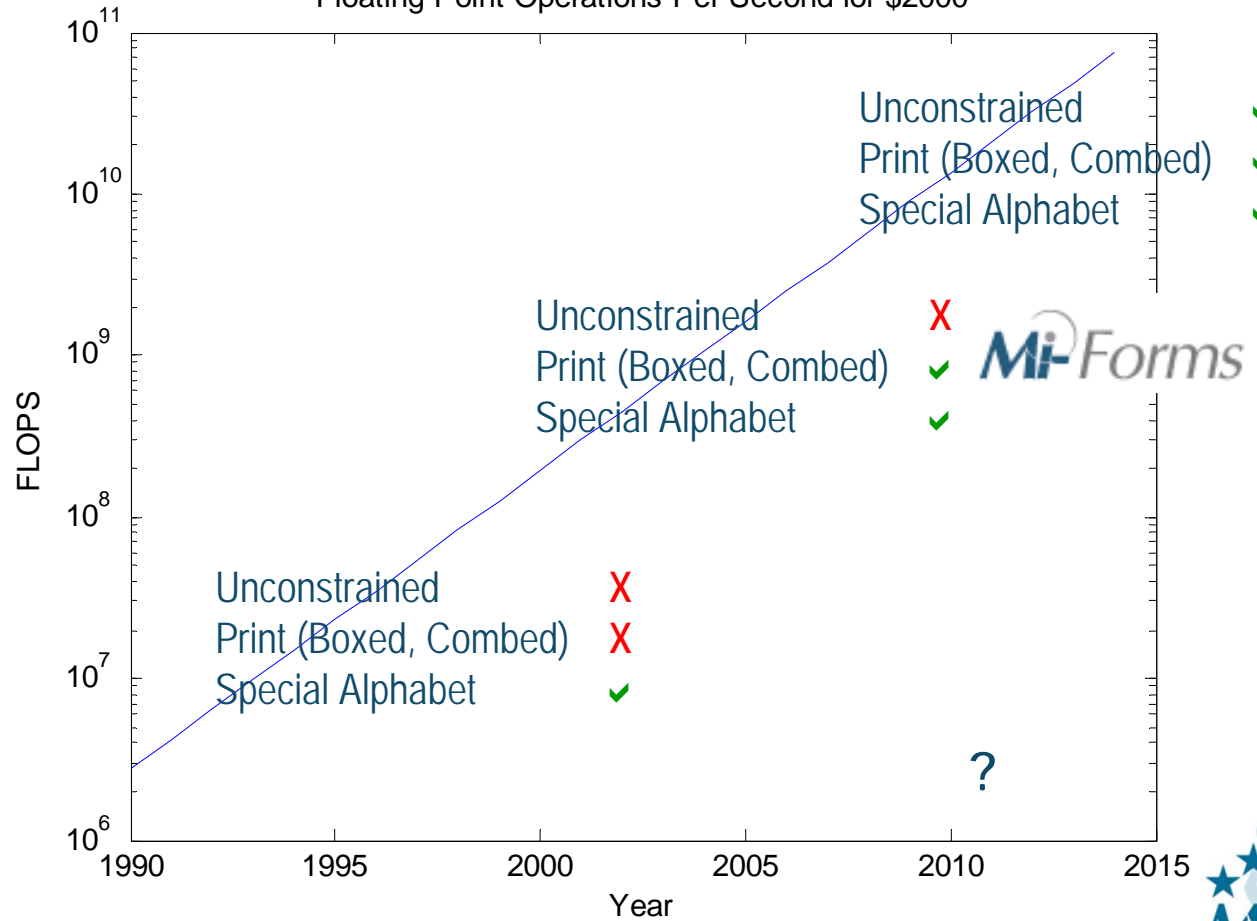


Capture Data

*Handwriting  
Recognition*

## Handwriting Recognition History and Future

Floating Point Operations Per Second for \$2000



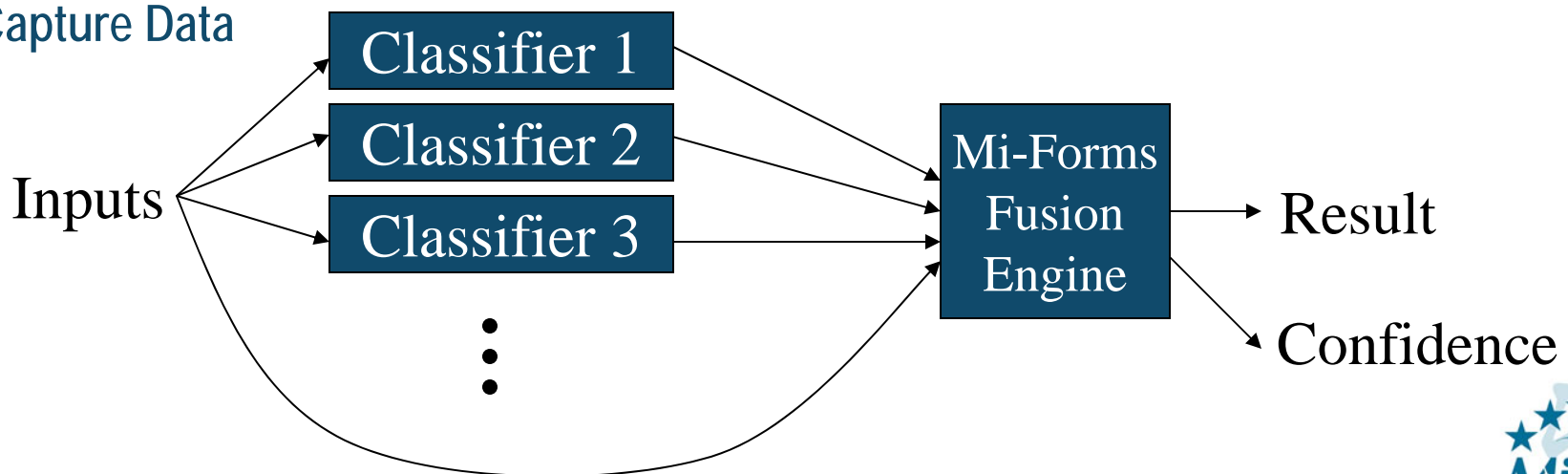
# Mi-Forms – Handwriting Recognition



## Mi-FormsFusion: Mixture of Experts

Fusion of results from multiple classifiers to attain accuracy beyond the reach of any one classification strategy.

Capture Data



# Mi-Forms Software Platform



Verify Data

*Continue  
Experimental  
Validation for  
ROI Analyses*

## National Cancer Institute – Experimental Validation of Mi-Forms Verification

- Mi-Forms Verification of Logitech io data *More Accurate* than manual data entry
- Same trained data entry person for both experiments
- Data from some pages keyed into wrong electronic page
- Unique dot patterns prevent these errors!
- FAS convenient way to provide unique dot patterns

# Rich Web-based Verification



Verify Data

*Enhanced user-  
friendliness*

- Embed the Mi-Forms Component in the Mi-Forms Server's Web interface
- Uses the same rich verification found in the Mi-Forms Client
- Takes advantage of the component's small install footprint
- Run script during verification

# Mi-Forms Software System



Communicate

*Data Paths*

## Component-Based Server

- Unified form engine will reduce system complexity
- Eliminates any discrepancies in form rendering and data handling between client and server
- Will be able to run script on server side

# Mi-Forms Server

## Case Management Support

- For simple deployments where organization is making the transition directly from paper
- Organize form session data in a hierarchy by “case”, which could be a patient, customer, or inspection site, depending on the vertical

# Mi-Forms – Driving Forward



## Design Forms

- Library of common elements
- Validation rule authoring GUI
- “Palette” based forms design



## Capture Data

- Handwriting Recognition – Mi-FormsFusion Technology
- Increase ways of providing an interactive user experience



## Verify Data

- Rich verification experience in the browser
- VB.NET rule definitions
- Unconstrained Recognition Verification



## Communicate

- Committed to Supporting XML and .NET Standards
- Case Management integration program

# Enhanced Online Support

## For Customers and Partners!

- Managed library of script examples
- Collaborative forums where Mi-Co partners can post questions
- Mi-Co technical support staff and developers participate in the forums

# Mi-Forms – Future Directions



Design Forms



Capture Data



Verify Data



Communicate

- Directions based on customer and partner feedback, specific requirements
- Tracking Technology Changes:
  - Operating Systems: Longhorn
  - .NET framework 2.0
  - Recognition technology – shape matching improvements
  - Digital pen APIs
- Directions based on our primary research