**UNBOUND**

Enhancing Field-to-Office Workflows with FormsConnected

Cost Management Integrated Workflow

Tom Coons – Sales Director
Lisa Stine – Construction Engagement Engineer

Lisa Stine

Construction Engagement Engineer

Lisa Stine is an engineering professional with a strong foundation in structural engineering and deep expertise in construction technology. With a Civil Engineering degree from Missouri University and over 13 years in the AEC industry, including 7+ years at Autodesk in technical and marketing roles, Lisa has a unique blend of engineering expertise and software insight which allows her to bridge the gap between technology and industry needs.

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Tom Coons

Enterprise Sales Director

Tom Coons has over 20 years in various high-tech roles and has a masters in Computer Science / Information Technology. Throughout his career he has led global IT and Software Engineering organizations prior to moving to technology sales. Tom is a business and technology leader with a proven track record of delivering results for his customers. He is passionate about digitally transforming companies leveraging disruptive technologies to exceed their business objectives.

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Agenda

- Data Utilization
- Business Results
- Why IMAGINiT
- FormsConnected
- IMAGINiT Pulse
- Cost Management Integrated Workflow
  - Material Tracking
  - Time + Equipment Tracking
  - Cost Management
- Workflow Demo
- Q + A

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Cost Management Integrated Workflow

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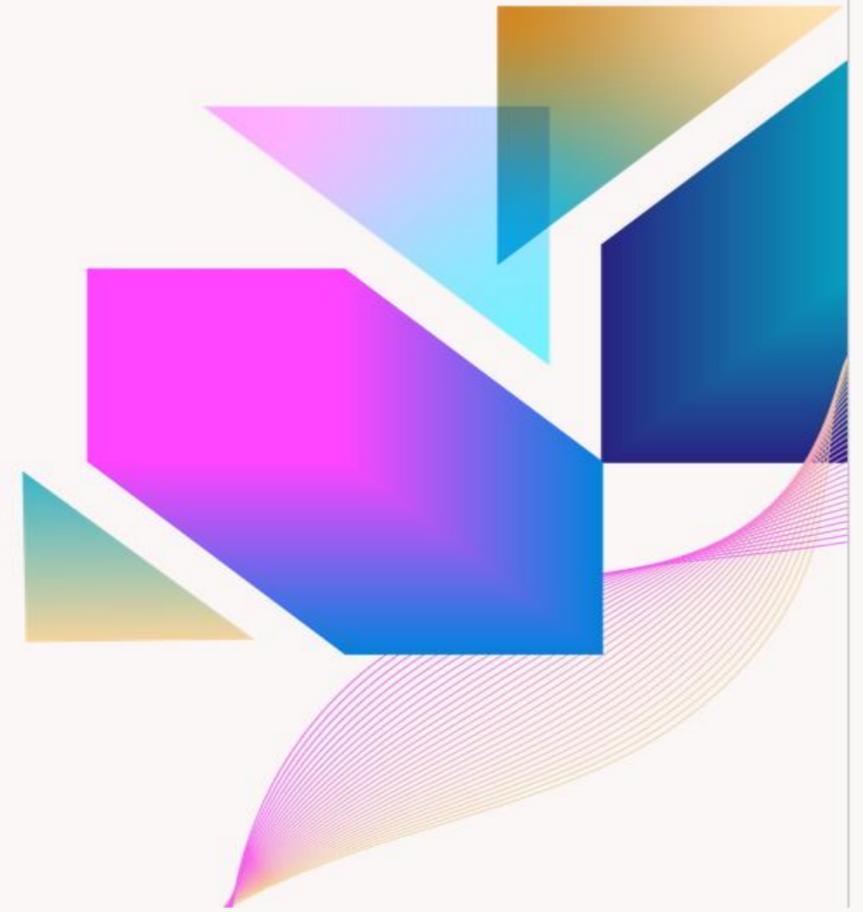
TOPICS:
- Data Utilization
- Business Results
- Why IMAGINiT
- FormsConnected
- IMAGINiT Pulse

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The Data Utilization Gap (All Industries)

68%
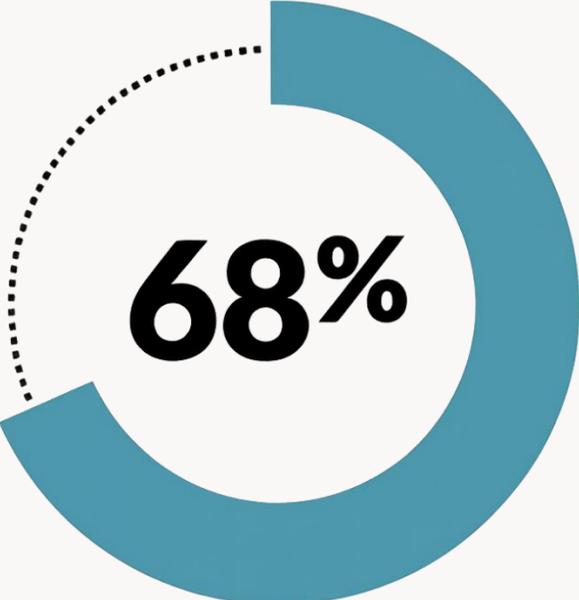
of data available to enterprises is **NOT** put to work**

**Seagate and IDC Report

PROCUREMENT

DESIGN

MANUFACTURING

QUALITY

SERVICE

ENGINEERING

SUPPLIER

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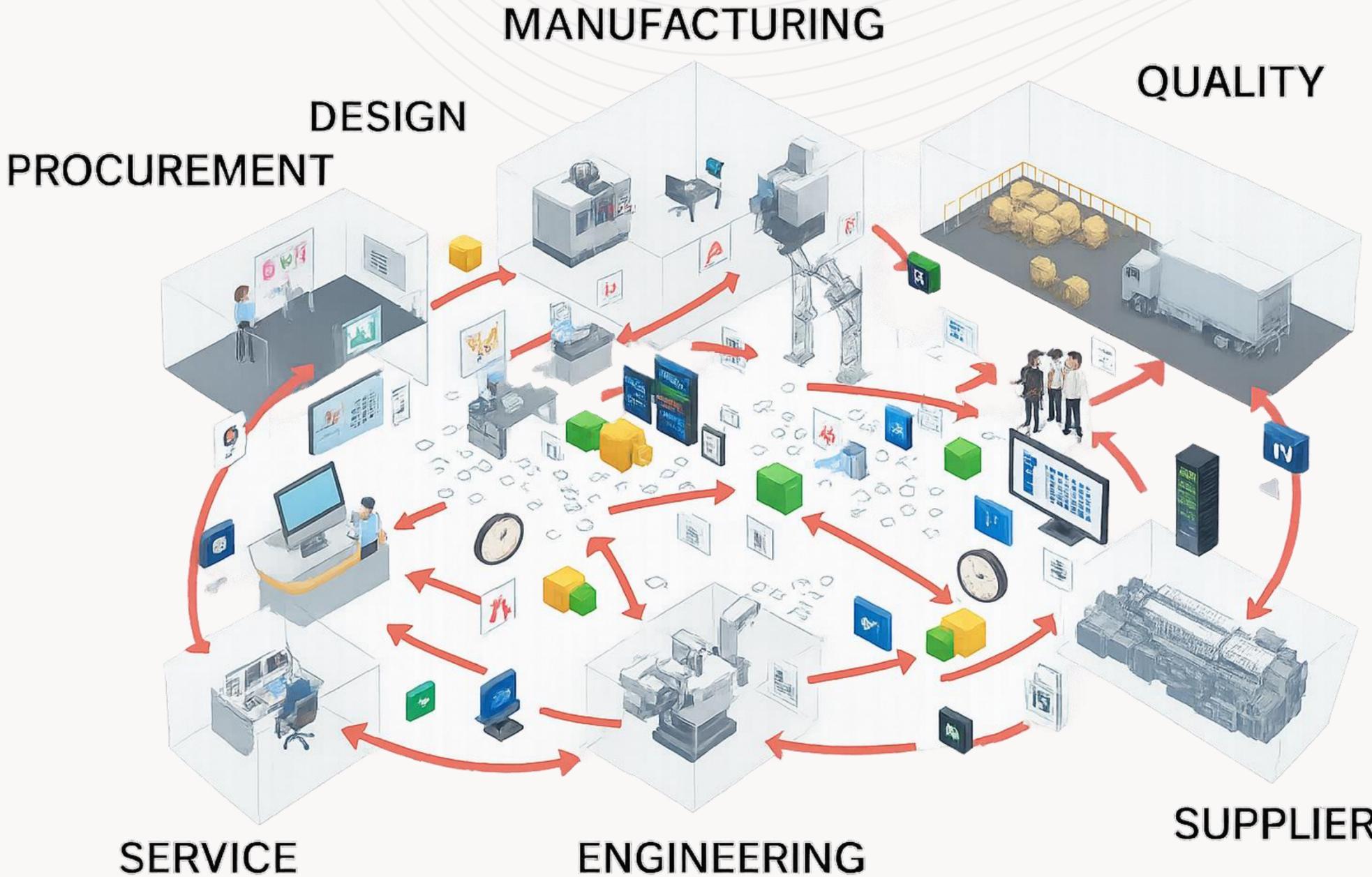
Data Accuracy is Key For AI Insights

47% of leaders believe the top use cases for AI include increasing productivity.

39% cited the automation of mundane repetitive tasks.

32% believe AI is ubiquitous and will be adopted in all areas.

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Process Revolution

Development
- Building Information Modeling (BIM)
- Preconstruction Planning

Analysis
- Cost Estimation + Forecasting
- Risk Analysis + Mitigation
- Schedule Optimization

Engineering
- Structural + MEP Coordination
- Constructability Reviews
- Design-to-Field Handover

Quality
- Field Inspections + Punch Lists
- Safety + Compliance Tracking

Documentation
- Submittals + RFIs
- Drawings + Spec Management
- As-Builts + Closeout Docs

Compliance
- Safety Standards
- Permitting + Regulatory Approvals
- Contractual Obligations

Supply Chain
- Materials Procurement
- Vendor + Trade Coordination
- Lead Time Tracking

Execution
- Field Productivity Tracking
- Cost Management + Change Orders
- Logistics + Site Coordination

Sustainability
- Waste Reduction + Recycling
- Lifecycle Cost Analysis

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Design to Construction Excellence
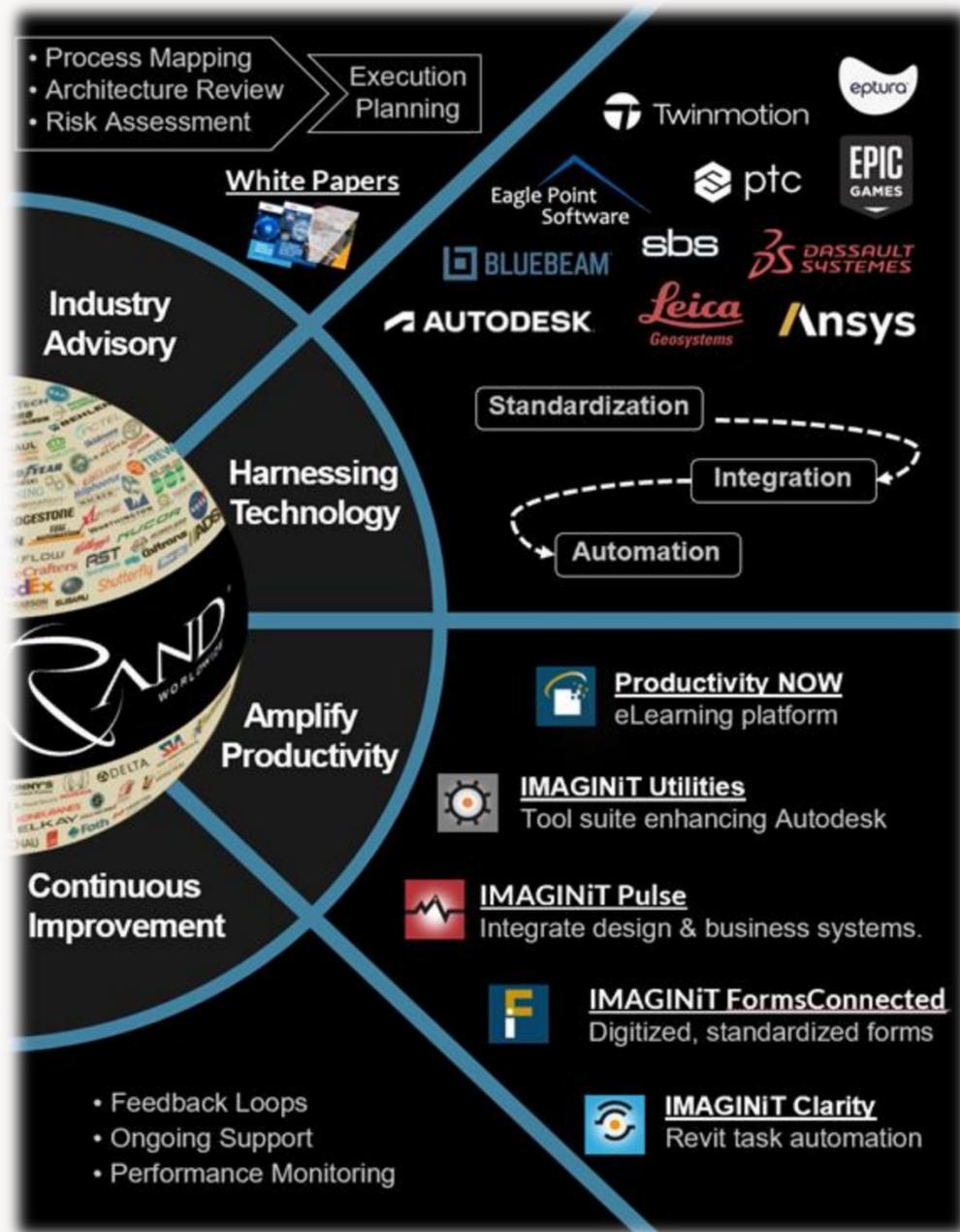
- **Preconstruction**
  - BIM
  - VDC
  - Early project planning

- **Estimation + Planning**
  - Cost estimation + forecasting
  - Risk analysis + mitigation
  - Schedule optimization

- **Coordination**
  - Structural, MEP, and trade coordination
  - Constructability reviews
  - Design-to-field handover

- **Quality + Safety**
  - Field inspections
  - Safety tracking
  - Proactive issue resolution

- **Project Documentation**
  - Submittals
  - RFIs
  - As-Builts + Closeout Docs

- **Compliance + Standards**
  - Building codes
  - Permitting + regulations
  - Contractual obligations

- **Procurement + Logistics**
  - Material procurement
 - Vendor + trade management
  - Lead time tracking

- **Field Execution**
  - Productivity tracking
  - Cost management + change orders
  - Site logistics

- **Sustainability + Resilience**
  - Waste reduction + recycling
  - Lifecycle cost analysis

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Digitized Process For The Office + The Field
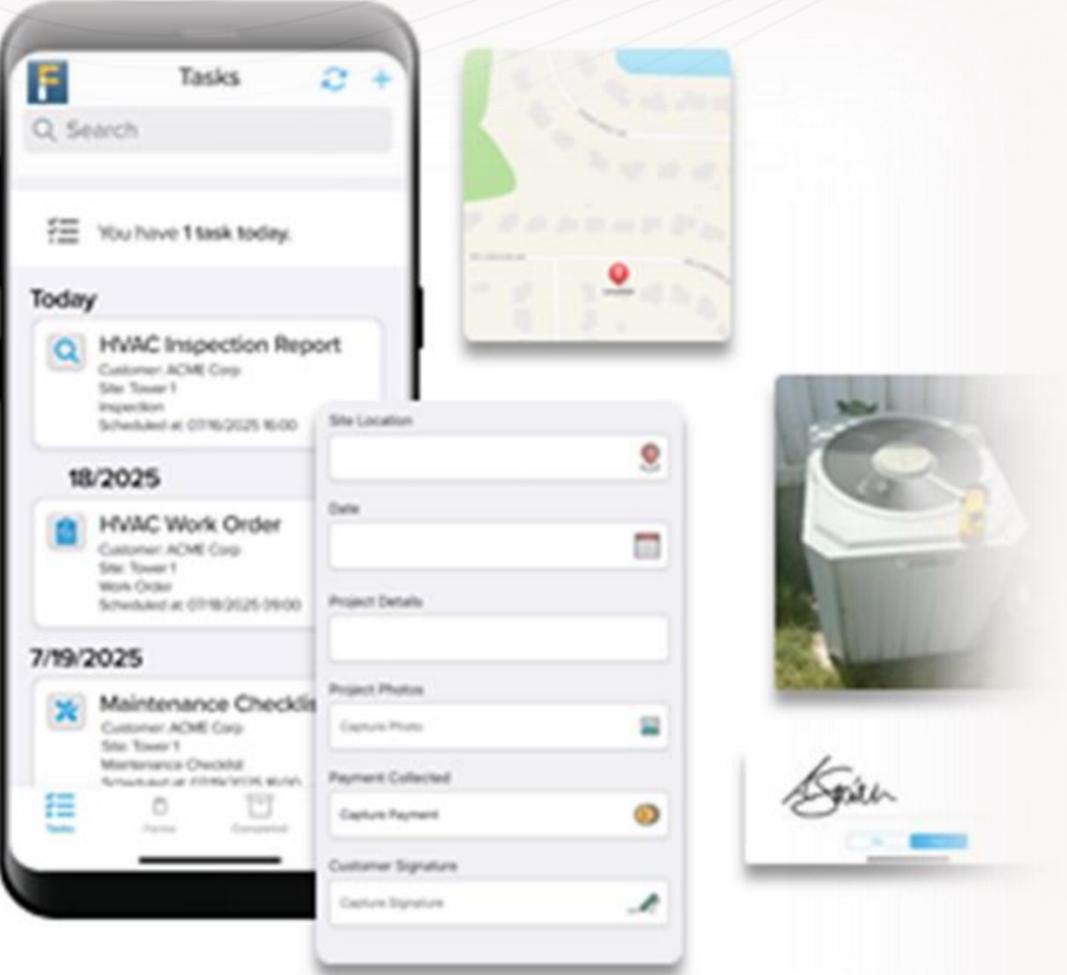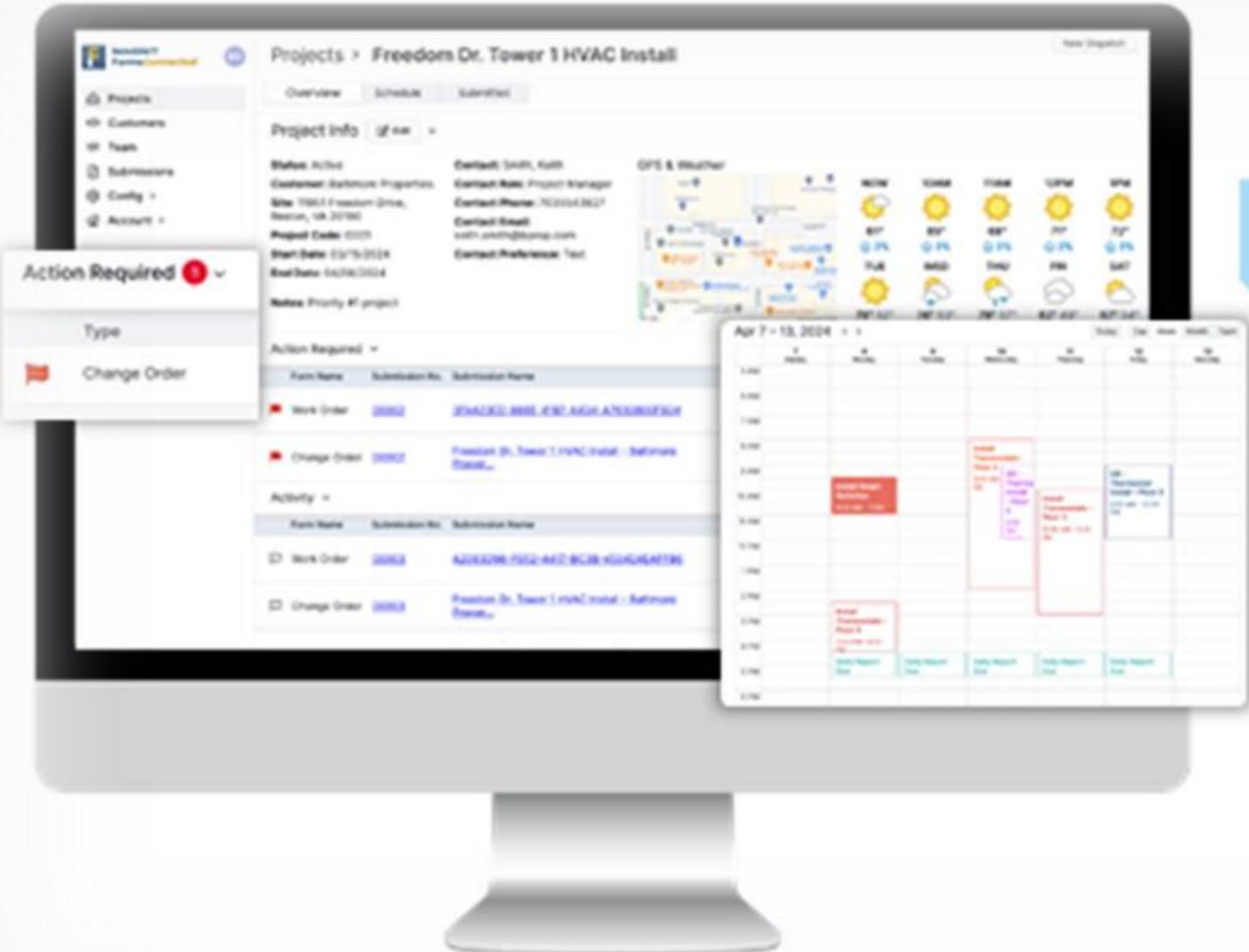
Easy to Manage *For Office*

Easy to Use *in the Field*

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Mobile-first field data capture

Digitize site inspections, daily reports, safety audits, and RFI's

Prefill project or equipment details from asset databases or barcode scanning

Voice-to-text for efficient note-taking in the field

Ensure Compliance & Accuracy

Required fields ensure data completeness for OSHA, client standards, and quality control

Conditional logic to guide checklists based on project type, stage, or role

Capture photos, GPS, and signatures for real-time documentation and accountability

Real-Time Updates & Workflow

Submit site visit resorts, change orders, or safety issues from jobsite to office- even offline

Automatically route reports for supervisor review and approval

Trigger workflows for issue resolution

Track Mileage, Time, and Movement with GPS

GPS powered time clock tracks job start/stop for labor logs

Mileage tracking supports reimbursement for fleet oversight

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Digitized Platform + Process For The Field
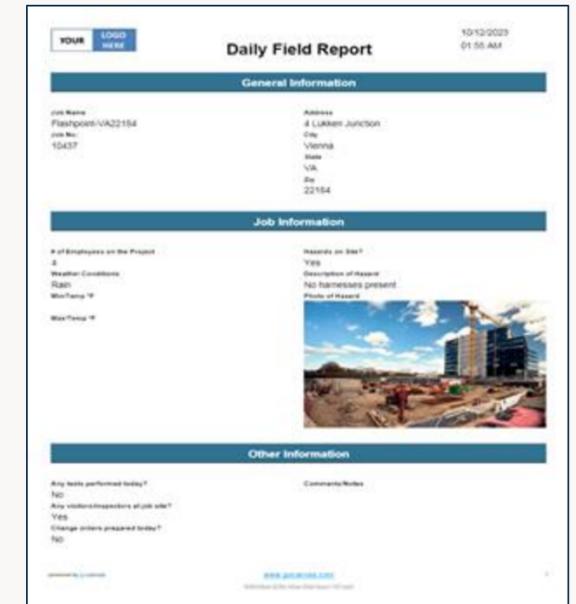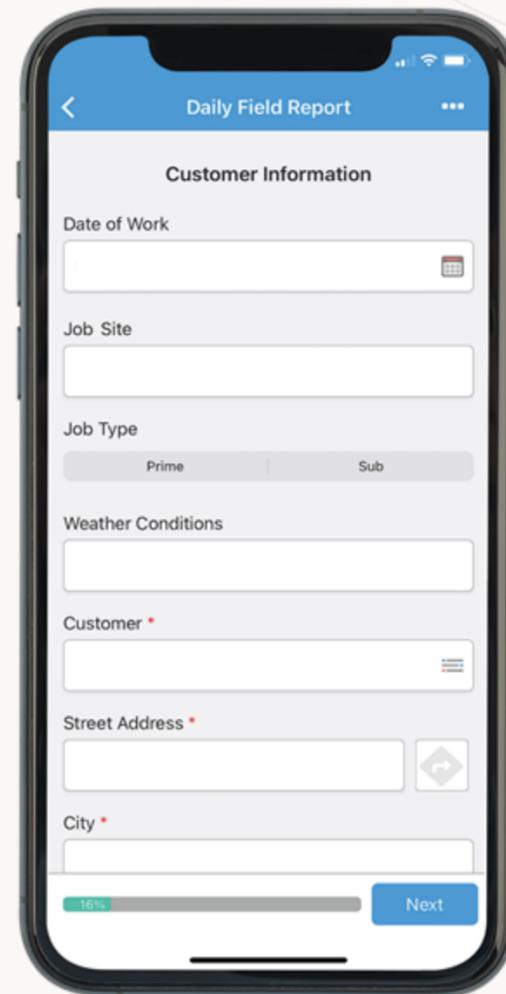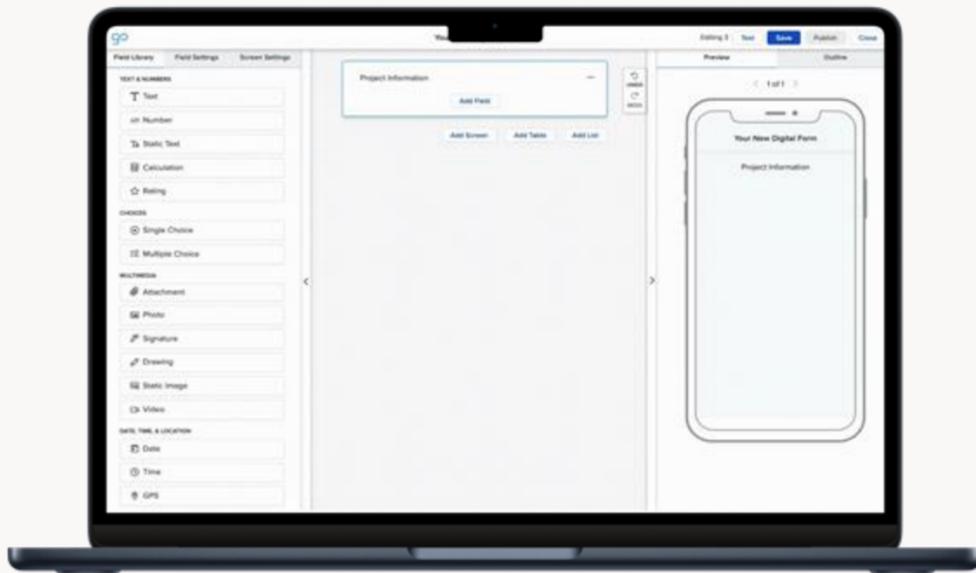
FormsConnected Integrations
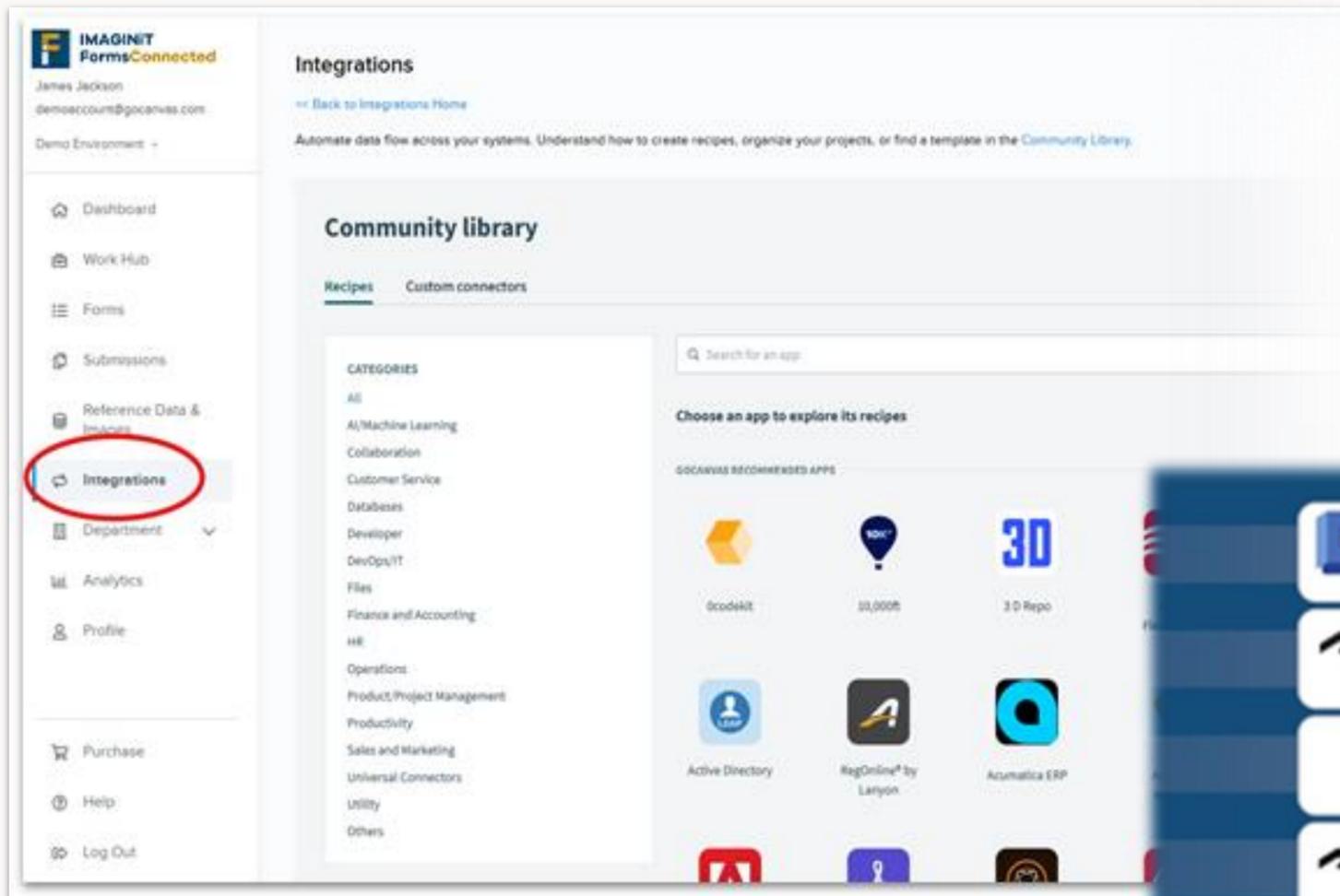
Cost Management Integrated Workflow

Lisa Stine
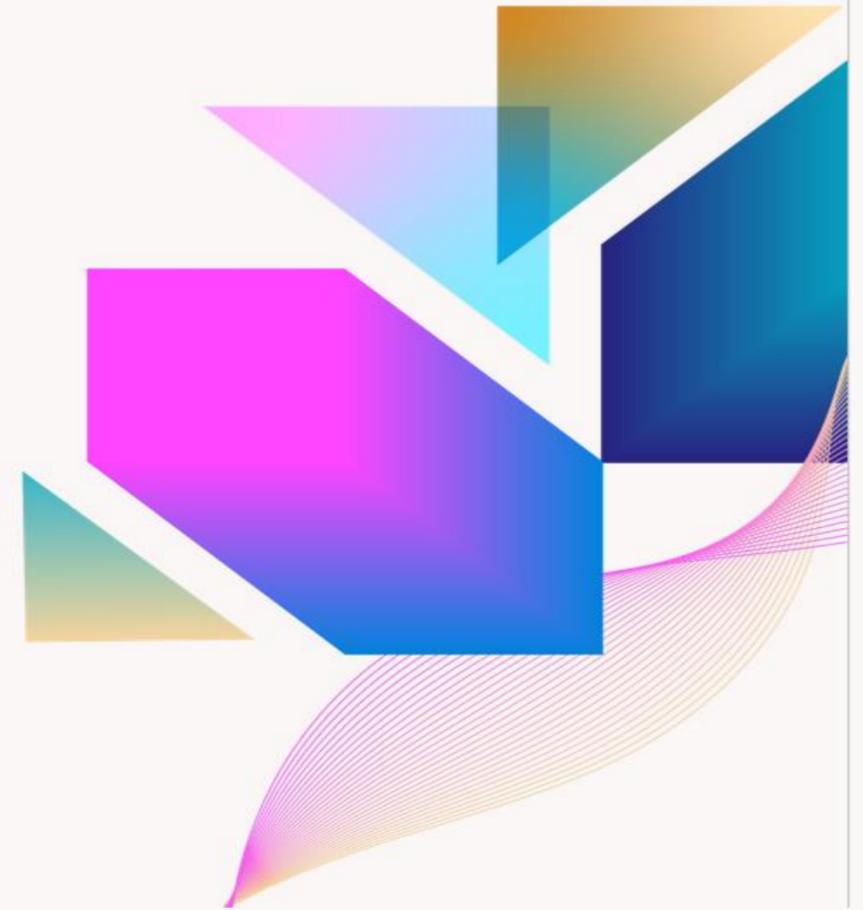
TOPICS:
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  - Material Tracking
  - Time + Equipment Tracking
  - Cost Management
- Workflow Demo

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The Challenge → Field + Office

Field Issues

- Time + Materials typically tracked on paper

- Field teams struggle with incomplete data capture

- Inconsistent formats across crews + projects

- Field information often doesn't make it to office/is illegible

Office Issues

- Delays getting Time + Material details from field

- Manual data entry creates rework and potential errors

- Lack of standardization across projects and teams

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Disconnection Leads to Negative Business Impacts

- Limited visibility into real-time costs and approvals

- Missed or unbilled items lead to revenue leakage

- Manual process result in wasted resources

- Difficulty forecasting and controlling costs

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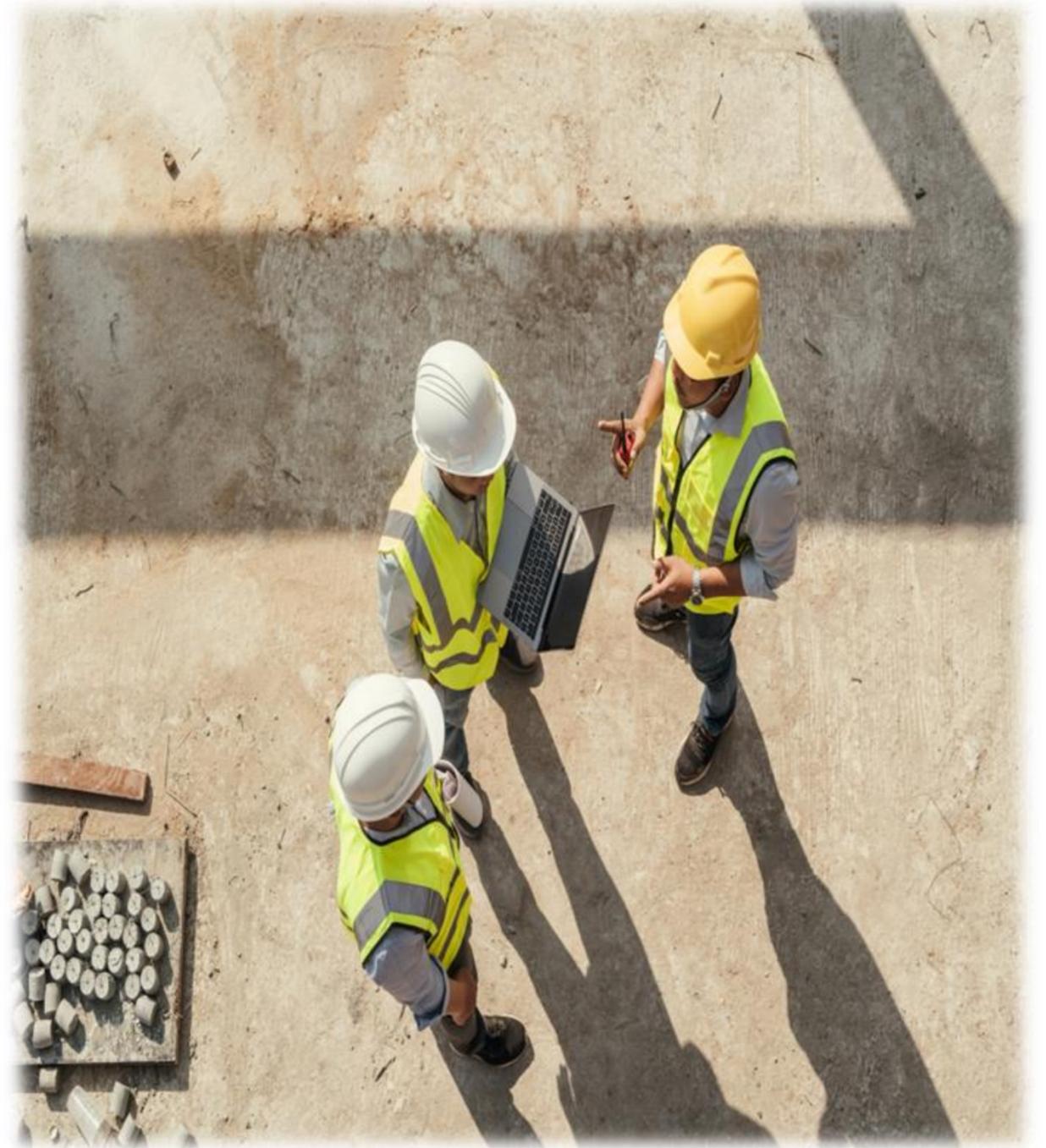
Client Case Study – Material Tracking

Field Workflow

- 8 Inspectors, full-time in the field

- 8 material delivery logs per day per Inspector
  - Hand-written, paper reports/logs

- End of week, scan reports and upload to Dropbox

- 10% reports go missing, don't make it to Dropbox

Office Workflow

- Project Engineer/Project Manager downloads all forms at EOM from Dropbox

- Fills out any information missing from forms

- If questions arise around content in form, reaches out to correct Inspector
  - Often not possible, if signatures aren't on form

- Manually enters materials/quantities/costs into financial tracking platform

- 12-15% of data estimated to be skipped/entered erroneously

- Upload/financial tracking/invoicing process takes about a week (224 hours) for PE/PM to complete

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What is the FIELD Cost of Disconnection?

Manual Report Completion

- Time per form: 5 minutes
- 8 forms/day/Inspector = 40 minutes/day = .67 hours/day/Inspector
- 8 Inspectors = 5.36 hours/day total
- At $25/hour, that's:
  - $134/day
  - x 21 working days/month = $2,814/month
  - x 12 months = **$33,768/year**

End-of-Month Scanning + Uploading

- 168 reports/month/Inspector
- 5 min to scan + upload each form = 840 minutes/month/Inspector = 14 hours/month/Inspector
- $25/hour = $350/month/Inspector
- 8 Inspectors = $2,800/month
- x 12 months = $33,600/year

Total Annual Cost of Manual Process

- Field completion cost: $33,768/year
- Scanning + uploading cost: $33,600/year
- **Total: $67,368/year**

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What is the OFFICE Cost of Disconnection?

Volume of Reports

▪8 Inspectors x 8 forms/day x 21 days = 1,344 forms/month

▪16,128 forms/year

Project Engineer Time Estimate/Form

▪Download/organize: 1 minutes

▪Fill in missing information: 3 – 5 minutes

▪Manual entry into finance system: 3 – 5 minutes

▪Clarifying/guessing when data is missing: 1 – 2 minutes

▪**8 – 12 minutes/form**

Monthly/Annual Time Burden

▪1,344 forms/month X 10 minutes average = 13,440 minutes = 224 hours/month

▪160 hours = 1 FTE month → 1.4 FTE months/calendar month

▪Annual time = 224 hours x 12 months = 2,688 hours/year

Cost (at Project Engineer Hourly Rate)

▪Assuming $45/hour

▪224 hours/month x $45/hour = $10,080/month

▪$10,080 x 12 months = $120,960/year

▪**Total: $120,960/year**

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Combined Field + Office Burden

Field Inspectors

- Manual logs + scanning
- $67,368/year at 5 minutes/form

Office

- Project Engineer revising/completing/re-entering data
- $120,960/year

Total Cost

- **$188,328/year in inefficiency + risk of errors**

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Technology Gaps vs. Connected Workflow

<u>Current Gaps</u>

- Field forms live in standalone silos
- Cost data must be manually re-entered into finance systems
- Forms often have missing project numbers, codes, or costs
- PEs/PMs spend hours scanning, uploading, and revising form errors
- Financial visibility lags, leading to delayed decisions
- Lack of accountability when forms are incomplete or unclear

<u>Connected Workflow</u>

- Forms feed structured data directly into workflows
- Automated flow into cost tracking + financial tools
- Required fields + drop-downs ensure complete, accurate data
- No scanning or re-entry – real-time digital entry
- Immediate cost visibility for faster, data-driven decisions
- Traceable + auditable records across field and office

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Connecting the Field to Cost Management

FormsConnected Demonstration

Autodesk Construction Cloud
Cost Management

Questions?

Thank You!

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