Integrity Mobile

Surpass energy transition challenges with a next-generation mobile application to collect, analyze and review inspection data in the field
Meet Energy Transition Demands with Agility and Efficiency

Asset-intensive firms are confronting the energy transition by seeking smarter, more innovative solutions to achieve digital transformation. While they invest in renewable generation assets for the long term, they also must maintain aging fossil fuel-running assets to be as safe and efficient as possible. As a new generation of employees onboards, this additional process complexity for inspections creates a pressing need for software tools that can speed up the efficiency and productivity of inspectors onsite.

Addressing your modern business challenges

Operators have assets within their facility that function under extreme operating conditions resulting in the pressing need to conduct regular physical inspections to capture real-time data. To do so, users inspecting these assets must go into field to inspect and record observations, often in hazardous environments, bringing with them relevant equipment documentation. Field inspections must be made easier, more efficient and contextualized to Operations and Maintenance activities.

CHALLENGES

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Ease of data collection in the field

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Requirement for inspector to carry documents such as manuals or engineering drawings

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Timely access to important/relevant information of the asset & greater contextualization of data

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Limited internet connectivity

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Safety in hazardous environments
Integrity Mobile improves your inspection efficiency and outcomes

Integrity Mobile is a mobile application within GE Digital’s Mechanical Integrity Application that helps optimize inspectors’ efficiency by digitizing and streamlining the process of data collection in the field. With Integrity Mobile, inspectors and field employees can log inspections, manage inspection tasks, complete inspection reports, capture and annotate images and create recommendations on a mobile device both in online and off-line modes.

NOTE: Integrity Mobile is an add-on for the Inspection Management (IM) Module in GE Digital’s APM Mechanical Integrity Application.

FEATURES:

- Rich and intuitive mobile user experience
- Built using Microsoft’s Xamarin platform (.NET & XMAL) and supported across major platforms like iOS & Android
- Unified View: All relevant information like inspection details, scope, history and images will be available at one single location
- Schematic visualization of scope of work*: View the scope of inspection in an image or equipment drawing that will provide a better clarity on inspection requirements
- Image tagging and annotation: Enables users to annotate the critical sections of an asset and capture real-time observations
- Offline data collection: Users will be able to execute above capabilities in a mobile or tablet while in offline mode
- Supports smaller-form factors (mobile phone)

* Currently in roadmap
# Integrity Mobile Functionality

## Mobile Application

<table>
<thead>
<tr>
<th>Feature</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Log in screen</td>
<td>✓</td>
</tr>
<tr>
<td>User preferences</td>
<td>✓</td>
</tr>
</tbody>
</table>

## View Inspection Task

<table>
<thead>
<tr>
<th>Feature</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Ability to view planned work</td>
<td>✓</td>
</tr>
<tr>
<td>Shows a list of inspection tasks within time frame of 1 year</td>
<td>✓</td>
</tr>
<tr>
<td>Configurable query</td>
<td>✓</td>
</tr>
<tr>
<td>Ability to create inspection</td>
<td>✓</td>
</tr>
</tbody>
</table>

## View Inspection

<table>
<thead>
<tr>
<th>Feature</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to list inspections by Inspection owner or Team Member</td>
<td>✓</td>
</tr>
<tr>
<td>Configurable query</td>
<td>✓</td>
</tr>
<tr>
<td>Standard result grid controls</td>
<td>✓</td>
</tr>
<tr>
<td>Navigate to the individual inspection event</td>
<td>✓</td>
</tr>
<tr>
<td>Column chooser</td>
<td>✓</td>
</tr>
</tbody>
</table>

## Mobile UX for Single Inspection Event

<table>
<thead>
<tr>
<th>Feature</th>
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</thead>
<tbody>
<tr>
<td>Contain 4 tabs (Inspection details, Inspection sheet, Recommendations, Inspection History)</td>
<td>✓</td>
</tr>
<tr>
<td>Inspection sheet will contain findings and any related sub inspections</td>
<td>✓</td>
</tr>
<tr>
<td>accordion design for easy navigation</td>
<td>✓</td>
</tr>
<tr>
<td>Ability to search</td>
<td>✓</td>
</tr>
<tr>
<td>Ability to click and view images as thumbnails</td>
<td>✓</td>
</tr>
</tbody>
</table>

## Annotation of Images from Mobile

<table>
<thead>
<tr>
<th>Feature</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to annotate images</td>
<td>✓</td>
</tr>
<tr>
<td>Free hand drawing</td>
<td>✓</td>
</tr>
<tr>
<td>Text mark up</td>
<td>✓</td>
</tr>
<tr>
<td>Add shapes (arrows, square, etc.)</td>
<td>✓</td>
</tr>
</tbody>
</table>
GE Digital’s APM Suite

GE Digital APM increases asset reliability and availability while optimizing maintenance costs, mitigating operational risks, and reducing total cost of ownership (TCO). The software connects disparate data sources and uses advanced analytics to turn data into actionable insights while fostering collaboration and knowledge-management across the organization. Available on premises or in the cloud, APM works across all equipment, all OEMs, and all industries, across the plant, and across the fleet.

### Industrial Data Diagnostics

**Pinpoint opportunities to improve data quality and asset performance**

<table>
<thead>
<tr>
<th>Data quality recommendations</th>
<th>Failure mode analysis</th>
<th>Manufacturer comparisons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benchmark analytics</td>
<td>PM diagnostics</td>
<td>Improvement tracker</td>
</tr>
</tbody>
</table>

### APM Health

**Unified view of assets’ current state & health**
- Rounds / Rounds Pro
- eLogs
- Health manager
- Calibration management

### APM Reliability

**Predicting equipment issues**
- Reliability analytics
- Root cause analysis

**Performance Intelligence**
- Thermal Performance and Economic Advisory

**SmartSignal**
- Predictive diagnostics
- Digital twin blueprints

### APM Strategy

**Reduce risk & optimize life cycle cost**
- RCM/FMEA
- Strategy management
- Strategy optimization
- Strategy implementation

**Lifecycle cost analysis**

### APM Integrity

**Helping to keep facilities contained & compliant**
- Compliance management
- Inspection management
- Integrity Mobile
- Thickness monitoring
- Risk based inspection

### APM Safety

**Reduce hazards risk within industrial processes**
- Hazard analysis
- SIS management
- Management of change

### APM Foundation / Essentials

**IT/OT Connectivity & Integration**
- EAM systems
- HMI/SCADA, Historian, MES systems
- Edge OT connectivity and analytics
- GIS systems

**Data Management & Processing**
- Common asset model (or) hierarchy
- Analytics management and execution*
- Infrastructure Data Fabric*
- Policy designer
- End-to-end security

**Monitoring, Analysis & Event Management**
- Advanced Visualization*
- Dashboards, interactive data analysis
- Criticality, alerts, cases, recommendations
- HMI visualizations and alarms*

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*Cloud only
GE Digital APM is recognized as an Integrity Management leader in the Verdantix Green Quadrant: APM Solutions 2022.

It's time to optimize your asset integrity program to reduce risk, lower inspections costs, and improve employee productivity.

About GE
GE Digital, an integral part of GE Vernova’s portfolio of energy businesses, is a $1 billion software business putting data to work to accelerate a new era of energy. GE Digital has pioneered technologies like Industrial AI and Digital Twins to serve industries that matter for decarbonization like energy, manufacturing, aviation. Our software drives insights customers need to transform how they create, orchestrate, and consume energy. Over 20,000 customers world-wide use our software to fuel productivity and reliable operations while reducing costs and carbon for a more sustainable world. For more information, visit [www.ge.com/digital](http://www.ge.com/digital). GE Vernova, a dynamic accelerator comprised of our Power, Renewable Energy, Digital and Energy Financial Services businesses, focused on supporting customers’ transformations during the global energy transition.

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Explore the benefits of APM
- Improves reliability, availability, and productivity
- Optimizes maintenance costs
- Mitigates risk
- Maintains technical expertise (industry and organizational knowledge)
- Delivers continuous improvement

Learn more about our complete APM offering