

White Paper 07

**Inspection Business:
Unleashing Significant Savings and Efficiency through Mobile Data
Capture On-the-Go**

New significant opportunities for efficiency and savings for inspection businesses are now available thanks to mobile technology and the fact that most professionals at all levels of the organization have their own smartphone. 2016 is the year where business processes turn mobile. In this paper we examine in detail the savings potentials focusing in particular on simple applications that could make life of inspection companies significantly easier. Thanks to dramatic improvements in productivity and data availability, the Return on Investment can reach easily 10 to 20 times the cost, and more – and there is an opportunity to significantly improve competitiveness and propose value-added services to your clients. Why wait?

The Opportunity is NOW

In inspection businesses (Marine Warranty Surveys, Quality inspections, Bunkering inspections etc.), work is still very paper-based. This involves significant delays in reporting and hassles, in particular because most of the work is performed remotely at Client premises and often by third party inspectors. The implementation of paper-based systems is associated with delays in data collection and validation, high administrative costs, poor productivity and unavailability of data for analysis. In addition, because such manual systems are cumbersome and slow, significant opportunity costs are also lost, and the risk for disputes is much higher.

Operational people on the ground need to be focused on getting things done, not on filling up paperwork. What operational people need to fill-in needs to be extremely simple and convenient to carry on site.

All these pain points are instantly solved by mobile solutions that provide simple intuitive mobile phone interfaces, allow seamless synchronization with the office, and simply work on the contributor's own phone or tablet.

Mobile solutions can deliver ROIs of 10 to 20 compared to traditional processes for remote contributors. In the current business context it can allow also to drastically improve productivity and competitiveness. Why wait?

Additional features are also instantly available by using smartphones. Data can be enriched by adding pictures, GPS locations, bar codes or tag readings and other data readily available from the phone itself, with minimal actions for the users. Signatures can be obtained directly on the device for instant official validation of records.

Assumptions

In this paper we assume the deployment of a mobile system based on the contributor's own phone (no hardware investment, tracking and deployment issue). The system is intuitive to use like modern mobile applications and usable within minutes without further training. Data is instantly synchronized with the master database (or at least when connectivity is re-established at least once a day when contributors come back within wifi or mobile networks' reach), which allows dashboards at the office to be continuously updated. Approval workflows are easily implemented. Certificates signed by the contributor on his own phone, cross-signed by the Client on the spot can be produced and sent instantly in pdf format to third parties.

We assume that this mobile system replaces a paper-based process with documents scanned, sent by emails or other ways between site and office.

Benefits evaluation framework

The practical benefits of systems aimed at recording data from remote locations can be measured on the following dimensions:

- Accuracy of data, enrichment of data and allowing data accuracy checks (e.g. GPS location, pictures) and on-the-spot signatures,
- Consistency of data across locations, contractors, organizations allowing data mining and consistent dashboards,
- Time lapse reduction (workflows, approvals) enabling reactivity and limiting drastically possible claims/disputes with suppliers and clients,
- Minimization of inspectors' man-hours for paperwork and substantial increase in productivity, in particular for 3rd party inspectors,
- Time savings for the coordination organization (reporting, administrative support and reviewers/approvers).

Benefits can be either:

- Direct (direct cost savings through improvement of resource efficiency, correct and instantaneous decision)
- Indirect (reactivity and avoidance of mistakes, non-authorized approval or commitment, standby, overbilling, additional time & resource spent, higher satisfaction of Client, etc.)
- or through the avoidance of significant commercial risks or dispute.

In this paper we have assumed that we only replace the existing process with a mobile application, without further process reengineering, which could bring significant additional benefits in the future.

ROI estimates for 4 applications show demonstrable savings:

1. **Equipment or quantity survey**
2. **Quality Control checks and records**
3. **Timesheet for inspectors**
4. **Travel requests and expenses for inspectors**

Application 1: Equipment or Quantity Survey

Equipment or Quantity Survey will be applicable to the following specific applications:

- On-hire and off-hire of equipment (including complicated equipment such as marine vessels) or periodic equipment surveys
- Marine Warranty surveys
- Quantity surveys (such as bunker surveys, calibration, meter readings etc.)

Surveying is an activity that can have significant consequences in case of dispute. The quality and integrity of records, as well as its timeliness are critical.

Survey certificates can be produced and issued on the phone, with both parties' signature and pictures to complement.

In this case, the dashboards can also serve to have an accurate view at all times of all the equipment on-hire, avoiding cases where equipment remain on-hire beyond their absolute need.

Benefit dimension	Direct savings	Indirect savings	Risk reduction
Data accuracy and quality	+	++	++
Data consistency across locations/contractors	++	+	
Time lapse reduction	+	+	+++
Inspectors productivity	+++	+	
Coordination office savings	++	+	

Application 2: Quality Control Checks and Records

This application allows to run all Quality Control checks (e.g. from an Inspection and Expediting visit, on vendor premises etc). It also covers QC checklists (e.g. Test Plan, punch list, welding, etc) or any periodic inspection of equipment.

The application allows to capture data on mobile phones instead of registering the results on paper, making it instantly available for analysis. The data can be enriched by pictures and dashboards are instantly updated regarding defect rates, etc.

Benefit dimension	Direct savings	Indirect savings	Risk reduction
Data accuracy and quality	+	++	++
Data consistency across locations/contractors	++	++	
Time lapse reduction	++	++	++
Inspectors productivity	+++	+	
Coordination office savings	+++	+	

Application 3: Timesheet for inspectors

This mobile application allows inspectors to input their timesheet in the mobile phone, sign off and get the signature of the client. A pdf is generated from the mobile for the client to keep.

Benefit dimension	Direct savings	Indirect savings	Risk reduction
Data accuracy and quality			++
Data consistency across locations/contractors	++	+	
Time lapse reduction	++	+	++
Inspectors productivity	+		
Coordination office savings	++		

Application 4: Travel requests and Expense management for inspectors

This application is to speed-up approval and reduce the administrative burden of managing travel expenses and travel requests using mobile data and the convenience of photography for the necessary receipts and records.

Benefit dimension	Direct savings	Indirect savings	Risk reduction
Data accuracy and quality			+
Data consistency across locations/contractors		++	
Time lapse reduction	++	+	
Inspectors productivity	+		
Coordination office savings	++	+	

Moving beyond: re-engineering processes around new capabilities

Further benefits can be released from the implementation of shared mobile applications. The optimized paper-based processes can certainly be reengineered to release significant additional value once mobile applications usage is embedded in the organization.

Implementing modern mobile applications with back-office databases will enable more productivity and significant process optimization with substantial additional efficiency gains.

Conclusion

Mobile applications can now easily be implemented to replace non efficient paper-based processes, especially for remote contributors to projects, adding significant value in terms of data consistency, analysis, accuracy, reliability, and timeliness.

Looking forward, Mobile applications have the potential to reduce significantly the re-work and cost of non-quality for Inspection businesses.

As technology is ready through use of smartphones, cloud based platform and connectivity available on many locations, 2016 is the time to move to mobile!

Our Solution

Our MobiProjects solution responds to the requirements to enhance efficiency in Projects:

- **Bring Your Own Device (BYOD)** concept (works on any device),
- **Implement Your Processes** – including workflows and approvals - thanks to the platform's flexibility,
- **Off-Line work and seamless synchronization** for remote sites with poor connectivity,
- **Support by experienced Professionals in your field,**
- **Quick and easy:** implementation and deployment in days, new users operational in minutes.

The solution is cost-effective and flexible to adapt to your needs, billed yearly with an unlimited number of users for your project.

Based on the benefits exposed in this paper, this solution can deliver ROI of 10 to 20 times the cost, and more for each application implemented. In addition you can make your services much more competitive in the marketplace while proposing value-added services to your clients. Why wait and be overtaken by your competitors?

Request a demo! And more information on MobiProjects.com



The logo for MobiProjects, featuring a stylized blue 'M' followed by the text 'obiProjects' in a blue sans-serif font.