GeoPal

Digital Transformation in Utilities & Utility Support Services

Digital technology advances create the opportunity for significant efficiency and productivity gains for the Utility and Utility Support Services industry. By digitising field processes there is an opportunity to convert local knowledge, held by experienced workforces, into repeatable procedures that newer members of the workforce can follow. It is difficult to draw insights from manual and paper processes, but once these processes are digitised they can be monitored and measured, with jeopardy alerts raised when KPIs are not being met.

A Field Operations Management solution is integral to the utilities industry success and business continuity. One of the main objectives of a field operations management solution is to ensure that the correct information is available to the right people, in the right place, at the right time. Current industry practices are manual based processes -disconnected - and as a result are lacking the ability to cater for customer expectations. Businesses within the utilities sector need to change the way they operate and manage their employees in the field.

Field Operations Management mobile app enablement for field workers is quickly becoming a powerful productivity-boosting capability. With smartphones providing the platform for applications such as GeoPal, utility companies can now digitize the core process of work management to greater effect. This in return leads to better asset management, engineering, planning, scheduling and dispatch, as well as execution and job closeout to name a few.

Digital transformation: is the use of technology to radically improve the performance of enterprises.

Challenges Facing Utility and Utility Support Services companies

- Margins have come under extreme pressure due to intense competition.
- The key challenge for this sector is maintaining profitability, the main cost is labour.
- Management need daily progress reports for each project, showing productivity levels, revenue earned, costs incurred and so on.
- Services are provided to multiple clients, with each client having a different set of reporting requirements. Providing detailed reports to external clients is a key challenge.
- Health and Safety of the field workforce is of paramount importance. Enforcing Health & Safety compliance is a key management objective.
- An ongoing challenge is reducing the time taken from work done to issuing invoices, also called Book-to-Bill reduction and WIP reduction.
- Field data must be presented in KPI reports and actionable executive dashboards. Problem areas must be highlighted so that management can act immediately.

Need for digital-age adaptation: *"according to a new worldwide survey of 228 C-level and senior executives, conducted by The Economist Intelligence Unit (EIU) and sponsored by Everis. Eight out of ten utility company leaders (80%) agree that the future success of their organisation will depend on their ability to harness new digital technologies and techniques to solve their workforce and labour challenges".*

https://eiuperspectives.economist.com/sites/default/files/Preparingdigitisationworkforce.PDF

It is more apparent than ever that the rapid advances of digital technologies such as field operations management bring with it a transformational opportunity for the utilities sector. Some of these innovations are already used in sub sectors throughout the industries, such as decentralized production, real-time analytics pulled from big data, sensor networks, and mobile computing, which will continue to change the contours and competitive balance of utilities over the next few years.

> *"PWC interviewed senior board members and other senior-level executives from 29 leading utilities, including chief digital officers. The research in 12 countries covered many major power and utilities markets in North America, Europe, and Asia. Participants came from Denmark, Finland, France, Germany, India, Italy, Norway, Russia, Spain, the United Arab Emirates, the United Kingdom, and the United States. Of the executives who participated, a huge majority — 70 percent — said their companies want to be digital leaders in the sector; indeed, 20 percent went further, envisioning a day when they will match the capabilities of leading digital players across all industries. However, funding for digital strategic campaigns is lacking, despite the high ambitions. In the digital leader category, nearly 60 percent described their investments in this effort as medium or low.*
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> ***Inaction****: More than half of these companies have devised a strategy to address workforce digitisation, but fewer than one-quarter have deployed it. The impact of the digitisation of work is certainly on the corporate agenda. Only 7% of respondents say their organisation has not discussed it at all. But while a total of 58% of respondents have devised a strategy that covers the digitisation of labour, only 23% have implemented that strategy. Common barriers to taking action on workforce digitisation include an absence of technical knowledge, business processes that are too hard to change, and a lack of desire to innovate".*
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> https://www.strategyand.pwc.com/gx/en/reports/the-digitization-of-utilities.pdf

The problem with paper processes:

The jobs and daily tasks carried out by field workers in the utilities industry are typically completed on paper job sheets. These paper forms might be returned to the office each evening, but often they are not returned until the end of the week or the end of the project, which may take several weeks. That's of course assuming the paper makes it back to the office at all, as a recent report from Gartner suggest that 1 in every 15 paper forms goes missing.

Paper forms must be re-typed into a computer system, collated and a final report prepared for the client – which may also involve trying to match photographs taken on a separate camera with the correct report.
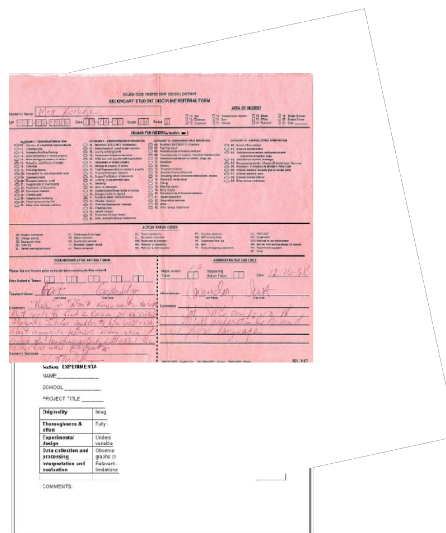
This is clearly very inefficient, the paper forms are slow to fill out in the field, they cause an administration overhead in the office and they often lead to frustrated clients as reports are delivered late.

From a cash flow perspective it is even worse. Invoices cannot be issued to the client until field reports are received. Meaning invoices are often only issued 4 – 6 weeks after the work has completed, delaying cash flow significantly.

When the client does receive the invoice (typically the Quality Surveyor), it may be disputed, for example, a variation request has not been approved in advance.

Eliminates human error: More often than not, manual processes are prone to human error, decreasing productivity, and ultimately leading to frustration from customers when the contractor lacks necessary information. Furthermore, manual information processes create bottlenecks. Modern-day mobility solutions fit in the palm of a user's hand, so chasing paper trails and calling dispatch are legacy practices that need to end.

Turning Paper into Technology

Most of the Utility Support Services companies we have dealt with are extremely well managed companies. They are highly process orientated and in many cases have achieved ISO certification. However, in the vast majority of cases their processes are paper based. These companies are plagued by mountains of paperwork, leading to reduced operational efficiencies in the field, slow decision making, increased administration costs and unpredictable health and safety compliance.

There is now a great opportunity to digitally transform these paper processes through the use of mobile applications that are easy to use, fast to deploy and cost effective to implement.

GeoPal saw there was an opportunity to use technology to move businesses away from ineffective and cumbersome paper processes. There are numerous industries in dire need of technological advancement, not simply for modernisation's sake, but as a vehicle of business transformation and future viability. The challenge inherent in this opportunity was, and still is, to bridge the gap between manual, paper-based processes that businesses and employees have been using for decades, and the new possibilities brought on by mobile technology. That challenge is made more compelling by the fact that technological obsolescence in industries and sectors plagued by low margins and even lower productivity, can become the unique selling point that allows a company to thrive.

GeoPal's ultimate goal is to help companies undergo a 3-step Digital Transformation Process, whereby businesses, burdened by manual and paper-based processes, are able to transition to a model where people, processes and technology work together to produce the best possible results in terms of their business productivity, profitability and compliance. We aim to make mobile technology available to businesses of all sizes, to prove that it is possible for companies to break with outdated operational models in just 8 weeks.

Mobile Workflow forms are the solution

All of the above challenges are solved through the use of flexible mobile workflow forms. With GeoPal, the Contracts Manager quickly creates different workflow forms for different clients. There is no software coding required – GeoPal provides an easy to use online tool for creating mobile forms using a simple drag and drop interface.

Each field on a paper job sheet is replicated as a step on the mobile workflow form. But because the form is now on a mobile device, the form can include steps for capturing and annotating photos, recording video, capturing GPS coordinates, scanning barcodes, selecting answers from pick lists, capturing signatures and so on.
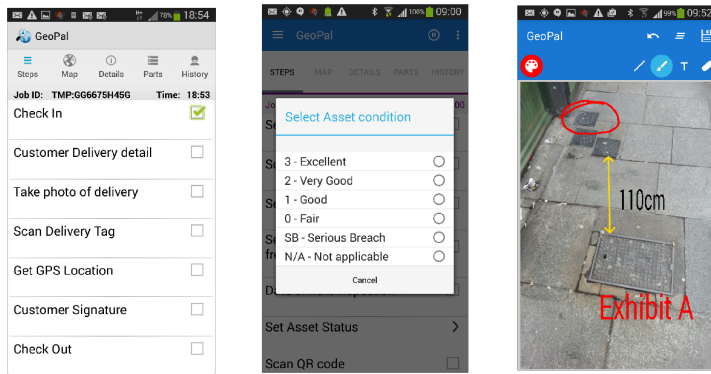
Job Workflow Steps   Pick from List   Take Photo & Annotate

The mobile app is used during the full life-cycle of utility contracts for :

- Quotation scoping and estimating.

- Capturing details of each job or task completed.

- Approval for Variation Requests (CVI) and compensation events.

- Health & Safety enforcement.

Each job step is date and time stamped on the mobile device, providing management with valuable performance metrics.

Completed forms are immediately delivered to the office -there is no retyping the forms into computer systems. Reports are automatically created for clients, pulling the required data from the mobile forms. Client satisfaction is much increased with timely field reports.

The sending of invoices can be triggered immediately upon receipt of the mobile forms, reducing the time taken to issue invoices from weeks to days. The data in the mobile forms is multiplied by a Schedule of Rates to create the line items for the invoice. At the beginning of a project, mobile forms are also used for Quotation Scoping and Estimating.

Variation requests filled out on the mobile form are automatically sent to the client Quantity Surveyor for immediate approval or rejection (pending further information), allowing variation work to proceed immediately, subsequently minimising the opportunity for invoice disputes.

Unlike traditional paper-based reporting, GeoPal provides management with real-time visibility of their field operations through executive dashboards and KPI reports, enabling them to take immediate action on at-risk projects.

Some Benefits of GeoPal include:

- Increase Field Worker utilisation rates by 20% with real-time productivity reports.
- Reduce office administration costs by 50% by eliminating all paper processes and re-entry of field data.
- Increase Project Profitability by 25% by delivering reports to supervisors in the field showing daily Cost Performance.
- Reduce the time taken to issue Work-In-Progress invoices from 30 days to 3 days with real time progress reports for each project or contract
- Increase client satisfaction by 60% with same-day reports for every project.
- Reduce insurance claims by 75% with enforced health & safety compliance.

Utility and Utility Support Services companies already benefiting using GeoPal are operating in a diverse range of markets including power, water, telecommunications, road, rail, marine, petrochemical, nuclear, civil engineering and other infrastructure services. Projects are manpower heavy and work includes civils, maintenance, fibre installation, scaffolding, industrial painting, cleaning and refurbishment.

Learn how GeoPal can help your business, request a free demo.