e-Field Ticketing – Concept to Reality

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2015 - Buyers and suppliers agree that paper field tickets should be eliminated. There must be a better way.

2016 – PIDX Business Process Work Group begin field ticket schema enhancement project by working with buyers and suppliers to understand “best practice” related to procurement through invoice process.


2019 – Final document is presented for review and approval.
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e-Field Ticket – Concept to Reality

Select Energy Services – Our experience...

- Service lines that frequent the well location once the well is producing are quickly identified as a target for e-field ticket process.

- Many buyers choose their own solution to manage logistics related to produced water hauling and oil hauling.

- Select’s approach is to have its own e-field ticket solution to gather the necessary data to be shared with other app solutions and networks.

- Select collaborate with specific buyers and intermediaries to establish POC related to automated service requests, acceptance of the requests, and sharing of e-field ticket data for proof of service.

- Two POC’s - one of which included a blockchain platform.
End to End Procurement Process Via Call Off

**Call-Off**

- **Operator**
  - Plan work/schedule services
  - Confirm Scope
  - Call-off/Request for Service
  - Review FT
  - Confirm FT
  - If received FT copy, store locally or update internal system
  - Receive data to internal system
  - Review & App?
    - Y: Pay Invoice
    - N: Manually done

- **Marketplace**
  - Manually done

- **Supplier**
  - Confirm Scope
  - Perform Service(s)
  - Present FT for job confirmation
  - Receive Signed FT w/ coding
  - Update internal system w/ FT data
  - Submit INV w/ PO coding data elements & signed FT
  - Re-verify INV
  - Receive Response
  - Receive Payment

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PO = Purchase Order
FT = Field Ticket
INV = Invoice

Drilling/INV details or line item details

PIDX XML
INV/FT data & attachment

Receive/Pass approved INV response
e-Field Ticket for Unmanned Locations

Process:
1/ Service request (IoT sensors)
2/ Field ticket (mobile)
3/ Invoice
4/ Payment
Both POC’s prove that there is value in moving forward with more permanent solutions.

With full automation, we agree that the following can be eliminated from the produced water hauling scenario:

- Manual request for service
- Manual acceptance of request
- Manual review of 1,000’s of field tickets
- Requests for summary billing and capture of 1,000’s of lines of field ticket data in spreadsheets
- Eventually, the invoice
e-Field Ticket – Concept to Reality

e-Field Tickets in General..

Generally, buyers anticipate that all suppliers are providing data manually to various apps and networks.

Challenges we encountered early on:

- At the field ticket level, the audience differs greatly from that of the invoice
- Neither party fully understanding what the requirements are at the field ticket level
- Being able to capture new and different required data elements in the FT app and ERP
- Inadequate field ticket test data and scenarios
- Networks not ready to test all scenarios end-to-end
- Understanding use of required data elements – translation and terminology
- Buyer does not have a dedicated resource to support PIDX integration
- Production and test environments not aligned
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e-Field Tickets in General..

Goals and Solutions to work toward:

- Start with a clear and defined integration guide including PIDX mapping detail
- Identify all who should be included in a “Kick-off” meeting (op’s/finance/network rep’s etc)
- During the initial meeting, identify leads who will carry the project forward, establish a timeline and possible go-live date
- Leads meet regularly throughout project to ensure timely delivery
- Establish a way to capture and manage changes buyers make related to required data (best practice = buyer updates integration guide then submits changes to supplier)
- Set reasonable expectations for delivery of change requests
- Post go-live, monitor new process daily and have frequent touch point meetings