Customer-focused Maximo
Shawn Harding

Designing Maximo for the customer from ‘Submit’ to Report.
KU - Current state

• Currently re-implementing Maximo.
  – From 7.5 to 7.6
  – Only critical data from custom 7.5 system to ‘Out of the box’ 7.6 system
  – Many translations
    • Statuses
    • GL structure change
    • Work Type
    • Failure class > WO Class
  – LDAP authentication – Brings in People data
  – Integrating with Space Management data
  – Integration with purchasing system (WO or Inventory)
  – Re-designing integration with fueling system
  – Integrating with energy management system
  – Security restructuring
  – Re-engineering ‘broken’ billing process
Prior system ‘Failures’

- Outside website for submitting requests
- Many ‘manual’ processes / duplicate data entry
- ‘Lost’ work orders due to 60+ statuses and ‘parking lot’ style start centers
- Slow system primarily because of start center configurations
- Very few instances of ‘standardized’ domains/values – largely ‘made up’ values. Often these values ‘trailed off’ from the intent of the field.
- Three completely different work order application clones.
Service Requests

PROS:
• Sign in directly to Maximo to submit service requests
• SR created on submit and details shown
• View all submitted requests with statuses out of the box
• Statuses specific to Service Request only. ‘INPROG’ SR covers all work order statuses < comp.
• Configurable security

CONS:
• SR number is different number than WO number.
## Service Requests

### Search for Service Request

<table>
<thead>
<tr>
<th>Service Request:</th>
<th>Reported Date From:</th>
<th>Reported Date To:</th>
<th>Status</th>
<th>Asset</th>
<th>Location</th>
<th>Configuration Item</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

### View Service Requests

<table>
<thead>
<tr>
<th>Service Request</th>
<th>Summary</th>
<th>Description</th>
<th>Status</th>
<th>Asset</th>
<th>Location</th>
<th>Configuration Item</th>
<th>Reported Date</th>
<th>Affected User</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1612553</td>
<td>TEST w/ rev12</td>
<td>Locksmith services</td>
<td>NEW</td>
<td>12075</td>
<td></td>
<td></td>
<td>3/3/16 4:37 PM</td>
<td>S366H815</td>
</tr>
<tr>
<td>R1612552</td>
<td>rev11 test6</td>
<td>Building and Facility Construction and Maintenance Services</td>
<td>NEW</td>
<td>12075</td>
<td></td>
<td></td>
<td>3/2/16 3:36 PM</td>
<td>S366H815</td>
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<tr>
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<td>NEW</td>
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<td>S366H815</td>
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<tr>
<td>R1612550</td>
<td>rev11 test4</td>
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<td>NEW</td>
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<tr>
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<td></td>
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<td>3/2/16 3:34 PM</td>
<td>S366H815</td>
</tr>
</tbody>
</table>
Service Request – pre-approval (Billable SR)

- Call center staff flags SR as billable when processing (custom YorN flag) and assigns the shop owner.
- If billable, workflow sends a communication email to the customer asking for approval and places the SR in ‘PENDING’ status (SR is not yet routed to the shop).
- Customer replies and email listener picks up the response and writes it to the communication log.
- Call center start center result set looks for ‘PENDING’ SRs with new communication logs:

  \[
  \text{status} = 'PENDING' \text{ and ticketid in (select ticketid from ticket left outer join -maximo.commlog on ticket.ticketuid = commlog.ownerid where commlog.inbound = '1')}\]

- Call center staff then processes the SR to ‘QUEUED’ status which completes the dispatch.
Asset Users – ‘Down’ reporting

• Automation script to send notification when asset is down (Communication Template)
• Communication Template content:

Subject: Asset is down #.assetnum,.DOWNTIMEREPORT.description

The following asset has been reported DOWN:
:assetnum
:downtime report.description

Down Time Code: .DOWNTIMEREPORT.code

Planned downtime info (if planned);
Down Time: .DOWNTIMEREPORT.downtime
Start Date: .downtime report.startdate
End Date: .DOWNTIMEREPORTenddate

• Set up role of ASSET USER:
Asset Users – ‘Asset Down’ reporting

- Set up ROLE of asset user to send to:

  ![Role setup screen](image-url)
Asset Users – ‘Down’ reporting

- Start adding users to assets:
Asset Users – ‘Down’ reporting

- Report downtime on the asset and they’ll be notified:
Asset Users – ‘Down’ reporting

Who gets notified?

• Building occupants (customers)
• Human Resources - in the event the asset/system warrants administrative leave
• Public Affairs – critical system outages may make the news
• Disabled persons / mobility – Especially in the case of elevator outages.
• Event coordinators – does the system/asset outage affect scheduled events?
• Campus Security
• Dorm RA’s
• Anyone who wants to know…

• Future plans –
  – Integrate with HR data on Faculty/Staff building locations so occupants are added to the lists automatically (person groups per building).
Asset Users – ‘Down’ reporting

What Assets?
• Elevators!
• Air handlers
• Fume Hoods – in Labs
• Electrical System
• Hot/Cold water systems
• Vehicles
• Emergency power generators
Asset Users – PM due reporting (vehicles)

- Notification sent to asset primary/custodian when PM work order generated against the asset.
- Escalation set to look for work orders generated by PM and can be further configured by asset classification etc.
- Communication template stating that :assetnum, :asset.description has been generated on :wonum etc. and that the asset is due for service.
- Email goes out to asset primary and custodian and they bring the asset in for service.
Data Standardizations

- All Classifications built on UNSPSC
- UNITED NATIONS STANDARD PRODUCTS AND SERVICES CODE

- Items
- Assets
- Services

- 77,000+ codes
- 2-digit hierarchy makes it easy to drill up or down and/or use wild cards for queries and reporting.
Data Standardizations – UNSPSC Service example (SR/WO)

- [720000] - Building and Facility Construction and Maintenance Services
  - [721000] - Building and facility maintenance and repair services
  - [721100] - Residential building construction services
  - [721200] - Nonresidential building construction services
  - [721400] - Heavy construction services
  - [721500] - Specialized trade construction and maintenance services
    - [721510] - Boiler and furnace construction and maintenance services
      - [72151001] - Boiler maintenance service
      - [72151002] - Boiler installation and setup service
      - [72151003] - Heating system maintenance and repair service
      - [72151004] - Hydronics heating system maintenance and repair service
      - [72151005] - Boiler pressure controller installation
      - [72151006] - Boiler pressure controller maintenance or repair or operation

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Data Standardizations – UNSPSC Asset Example

- [220000] - Building and Construction Machinery and Accessories
  - [221000] - Heavy construction machinery and equipment
    - [221015] - Earth moving machinery
    - [221016] - Paving equipment
    - [221017] - Heavy equipment components
  - [221018] - Aerial lifts
    - [22101801] - Manlift or personnel lift
    - [22101802] - Platform lift
    - [22101803] - Articulating boom lift
    - [22101804] - Telescoping boom lift
  - [221019] - Building construction machinery and accessories
  - [221020] - Building demolition machinery and equipment

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Data Standardizations – UNSPSC Item Example

- [270000] - Tools and General Machinery
  - [271100] - Hand tools
    - [271115] - Cutting and crimping and punching tools
    - [271116] - Forming tools
    - [271117] - Wrenches and drivers
      - [2711701] - Screwdrivers
      - [2711702] - Nut drivers
      - [2711703] - Socket sets
      - [2711704] - Sockets
      - [2711705] - Box end wrenches

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Data Standardizations

- Work Type from APPA standard
- RM – Reactive Maintenance
- PM – Preventive Maintenance
- CM – Corrective Maintenance
- CAP – Capital maintenance
- SUP – Support
- NP – Non-Productive (meetings etc.)
Data Standardizations – APPA Work Type
Data Standardizations

• How do data standardizations effect the customer?

• ‘Universal’ query methods allow end users to find and report quickly and accurately for the customer.
• Maintenance and custodial staff can focus PM responses.
  – Which issues are reported the most?
  – Which issues cost the most?
• Staff balancing
Data Standardizations – Failure Classes (SH standard…)

Failure classes:
- Physical Environment
- Mechanical
- Plumbing
- Electrical
- Life Safety
- Custodial
- Grounds
- Access
- Vehicular
- Pest control
Summary

• Submit – SR process designed around customer experience and communication. Approval steps help communicate and document in one system.

• Asset downtime – targeted communication to affected users

• Data standards – reporting what happened from different data angles.

• COMMUNICATION - These methods are designed to give the customer the information they need when they want it.
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