



can stand the stringent requirements  
of Pharmaceutical Manufacturing

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# OFBiz & Pharma Manufacturing

- OFBiz
  - Great general purpose ERP platform
  - Backed by solid framework
  - Robust tools for extension
  - Universal data-model
- Pharma Manufacturing
  - Highly regulated
  - Constantly changing regulations
  - Highly values Intellectual property

# Challenges in Pharma Manufacturing

- Approval workflows
- Inventory Management for limited shelf life items
- Traceability
- Auditing
- Multi-Level Formulation
- UoM conversion
- Regulatory compliance

# Approval Workflows

- Dashboard approval
- Email notification
- Modularized & Integrated
- SSO across different modules

# Inventory Management for limited shelf life items

- Expiry date for Inventory Items
  - Procured & Manufactured
- Track by status
- Lot number
  - Auto-generated for Procured & Manufactured
- Inventory Location
- Inventory Transfer

# Traceability

- Expiry date for Inventory Items
  - Procured & Manufactured
- Track by status
- Lot number / Batch number
  - Procured & Manufactured
- Inventory Location
  - Manage own locations
- Inventory Transfer
- Track Variances
  - e.g. Analytical & QA Sample
- Inventory Item Label

# Auditing

- Event driven Audit Trails using Event Condition Action (ECA)
- Auditing of Inventory receipt thru production
- Auditing of Batch Manufacturing records
- Auditing of formula changes & workflow approval
- Tracks workflow approval & effective dates in history logs

# UoM Conversion

- UoM conversion to support batch process
- Automatic UoM conversion during formulation



# Multi-level Formulation

- Formula specification of intermediates & products
- Multi-level formula specification
- Embedded special manufacturing instructions
- Mix & Match Formula & Products
- Formula approval workflow
- Formula version control
- Support for user defined physical characteristics
- Supports products with different strengths & physical characters
  - Using Virtual & Variants

# Regulatory Compliance

- Version control in history log
- Bi-directional lot traceability
  - Tracks inventory items of ingredients used in batch
- Tracks Intermediate or WIP items
- Support for discarding un-used items
- Managing formula revisions
- Document management e.g. Certificate of Analysis
- Recall Management using bi-directional traceability

Q & A