Business Requirements Specifications (SRS)

ERP Solution for Lakhsma

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Document Release History

SI. No	Version Number	Release Date	Prepared By	Reviewed By	Approved By	Reasons for New Release
1	1.0	14th Sep, 2015	Nazifa Chowdhury		N/A	



1.0 Introduction

1.1 Purpose of BRS

The purposes of this BRS are to clearly identify the customer's business requirements and provide a detailed document. The customer will review the document and approve/make change if required. It will also help the review team to be able to validate whether the business requirements have been fulfilled or not.

The BRS will also help the Analyst and Designer to understand and track the requirements for the proposed system. It will also identify a set of requirements for the development of the project. The BRS helps to describe the behavior of the system to be developed.

Proposed Modules:

In this document we are considering three modules of three major departments of Lakhsma Sweater. The modules are:

- 1. Merchandising
- 2. Procurement
- 3. Inventory



2.0 Merchandising

2.1 Overview

Merchandising is the heart of the Garments industries. Though the overall process of merchandising involves any sort of direct and indirect activities which is associated with any certain order given by buyer from inquiry to shipment but core activities are Quotation management, Sampling management, Consumption and Bill of Materials generation.

2.2 Merchandising Process Flow

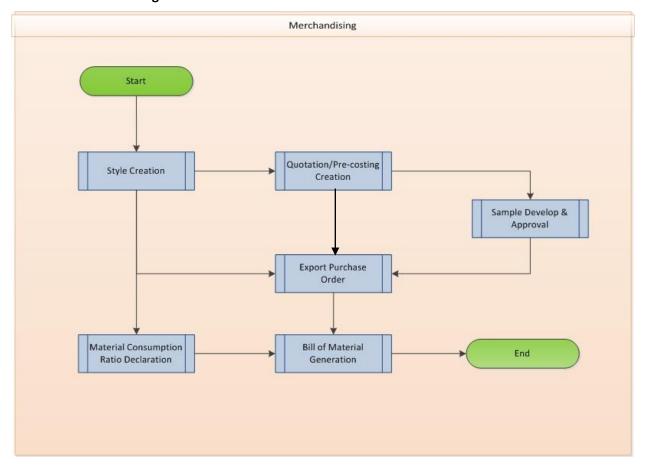


Fig: Merchandising Process Flow



2.3 Merchandising use case diagrams and description

2.3.1 Quotation Process:

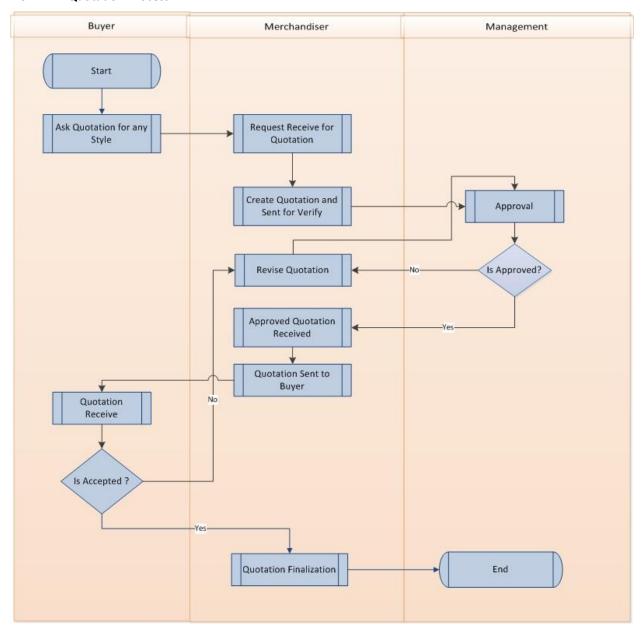


Fig: Pre-Quotation



Use Case ID: UCD/	/Mer/001			
Use Case Name: Quotation Process				
Created By: GenWeb2 Ltd. Date Created: 10 September 2015				
Actors: • Merchandiser, Buyer, Management				
Trigger:	When buyer wants to know the costing of any certain style			
Business Rule	Pre cost calculation and finalization			
Description:	 Buyer ask the quotation for any specific Style 			
	II. Respective Merchandiser goes for every single elements to			
	calculate the costing along with CM and Profit margin			
	III. Prepare quotation			
	IV. Merchandiser takes approval from management on the			
	prepared quotation			
	V. If the quotation is approved then merchandiser submit the			
	· · · · · · · · · · · · · · · · · · ·			
	quotation to Buyer else he revises the quotation and resubmits			
	for approval			
	VI. Negotiation may take place with buyer			
	VII. Based on negotiation between merchandiser and buyer,			
	merchandiser can submit quotation multiple times.			
	VIII. In one stage of negotiation both party finalize the quotation			
Frequency of	High			
Use				
Preconditions	Defining Style Tack reads details			
Doct conditions	Tech pack details Order confirmation hashing or concellation by the buyer.			
Post conditions	Order confirmation, booking or cancellation by the buyer			
Assumption	Already in practice			
Goal	Enter new quotation in system to make it easy and integrated to the antire system, where it can be followed by the uncoming store and			
	entire system, where it can be followed by the upcoming steps and			
	eventually it can show a comparison report of the pre costing and the actual costing			
Normal Flow	Merchandiser creates the quotation, pre costing and does the			
Normaniow	negotiation			
Alternate Flow • N/A				
Exception	• N/A			
Cross Reference	• N/A			



2.3.2 Sample Requisition and submission Process

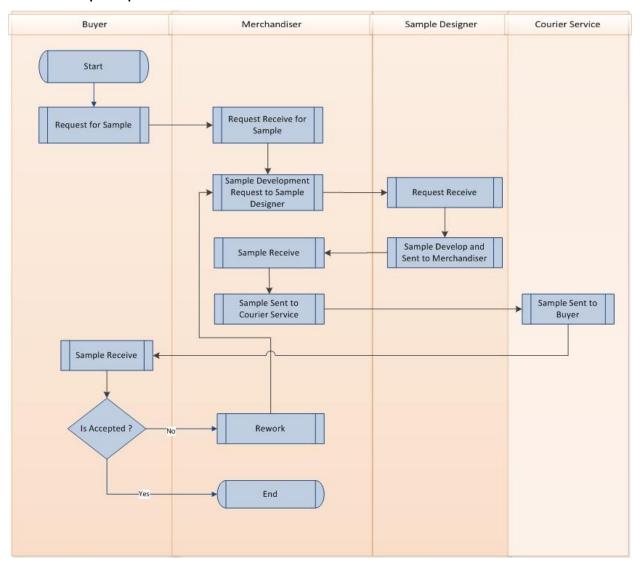


Fig: Sample Requisition and submission Process



Use Case ID: UCD/	/Mer/002		
Use Case Name: Sample Requisition & Submission Process			
Created By: GenW	Created By: GenWeb2 Ltd. Date Created: 10 September 2015		
Actors:	Buyer, Merchandiser, Designer(Sample Manager)		
Trigger:	When buyer wants to have any type of Sample from the		
	Manufacturer. Even though it can be in pre-sales stage.		
Business Rule	Buyer give the sample requisition to the respective Merchandiser and		
	Merchandiser develop the sample through sample department as per		
	asking sample type		
Description:	I. Buyer request for Sample		
	II. Merchandiser sends the sample requirement to sample team		
	III. Sample team develops the sample requested.		
	IV. Merchandiser send the sample to the buyer		
	V. If buyer does not approve the sample then merchandiser re-		
	develops the sample with the help of sample team and sends		
	again.		
Frequency of	High		
Use			
Preconditions	Defining Style		
B	Tech pack details		
Post conditions	• N/A		
Assumption	Already in practice		
Goal	Enter Sample Requisition in System to keep the record in system A second of the		
	where it can minimize the Sample Requisition and Submission process with actual data. Eventually this information can help the		
	organization to analysis anything regarding sampling process.		
Normal Flow	Merchandiser receive sample request from the Buyer		
Normal Flow	Merchandiser receive sample request from the Buyer Merchandiser forward the instruction of sample development to the		
	sample development team		
Alternate Flow	N/A		
Exception	• N/A		
Cross Reference	• N/A		



2.3.3 **Buyer Order Confirmation**

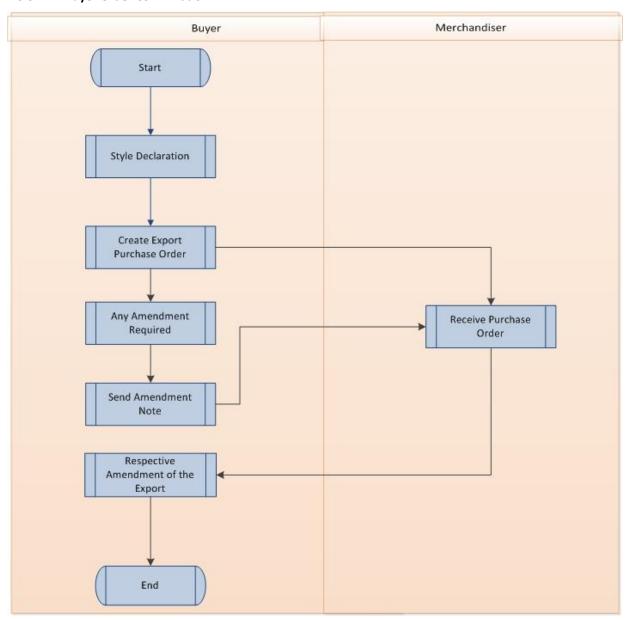


Fig: Buyer Order



Llas Casa ID: LICD	/h.l.o.v./00.4			
Use Case ID: UCD/Mer/004				
Use Case Name: Buyer Order Confirmation Process Croated By ConWob3 Ltd				
Actors:	Created By: GenWeb2 Ltd. Date Created: 10 September 2015 Actors: • Buyer, Merchandiser			
Trigger:	When Any Buyer confirms any Order (Give the Purchase order).			
	when Any Buyer commissions order (Give the Furchase order).			
Business Rule	 Buyer confirms any order by giving Purchase order. It contains all the color size wise order quantity and rate 			
Description:	 Buyer gives the Export Purchase Order after quotation finalization. 			
	II. Export Order contains details Color and size wise order			
	quantity, Unit of measurement, rate, Currency, Shipment Date,			
	Shipment Destinations, Shipping Mode, HS Code, tolerance,			
	Delivery Terms etc.			
	III. If there is any amendment in Export Purchase Order then			
	concern merchandiser receive that amendment note from			
	buyer and address those amendment in Export Purchase			
	Order.			
Frequency of Use	High			
Preconditions	Style Information			
	Pre Costing/Quotation finalization			
Post conditions	Production Preparation & Execution. (Bill of Materials generation,			
Assumption	Sourcing the raw materials, Production Planning • Already in practice			
Goal	 Already in practice All the production preparation and execution actions happen to execute the Purchase Order given by Buyer, so keep a record of the Export PO creates the relation what will be used as reference in every steps (BOM, Sourcing, Planning, Production & Shipment) to ensure the smooth tracking and productivity. 			
Normal Flow	Buyer Confirm the Order/Gives purchase order after successful sampling process and finalization of Quotation			
Alternate Flow	Buyer can confirm the order/gives purchase order as a reorder of any earlier style or reference.			
Exception	Buyer can give the order as a whole. Color size and destination wise			
	breakdown may be confirmed later on.			
	Buyer can give a verbal confirmation. Actual Export PO may be given			
	just before starting the production			
Cross Reference	N/A			
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2.3.4 BOM (Bill of Material) Generation Process

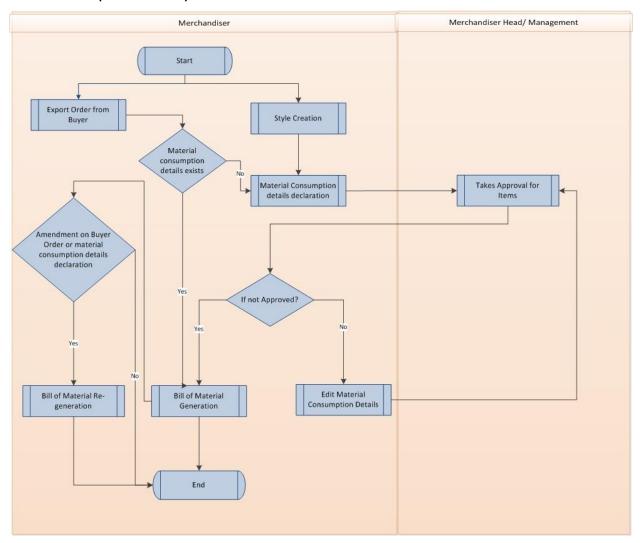


Fig: BOM (Bill of Material)



Use Case ID: UCD/	/Mer/005			
	Bill of Material generation Process			
Created By: GenWeb2 Ltd. Date Created: 10 September 2015				
Actors:	Merchandiser			
Trigger:	When Buyer confirm the order quantity in details (Color & Size wise) and actual raw material consumption and been defined.			
Business Rule	Generating all the raw material requirements details along with preferred and buyer nominated supplier details			
Description:	I. Merchandiser gets export order from buyer			
	II. Respective Merchandiser generates the raw materials consumption of an ideal Finished Goods quantity (style).			
	III. Merchandiser will take consumption approval from			
	management. IV. Considering the Export PO and Consumption logic, Total Raw material and quantity get generated.			
	V. Total raw material quantity generates by considering the shipment tolerance and wastage percentage.			
	VI. If Amendment on buyer order takes place after BOM			
	generation then BOM will be regenerated.			
Frequency of Use	• High			
Preconditions	Export PO/Buyer Order details			
	Raw material Consumption logic			
Post conditions	Sourcing of raw materials			
Assumption	Already in practice			
Goal	 To generate the Bill of Material in a very easy and effective way Ensuring the quantity of raw materials to in-house where there will be no shortage while the order will be in execution level. Also it will ensure that there will be very minimum number of leftover after production execution 			
Normal Flow	 Merchandiser Receive the confirm Order (with quantity), Identify the raw materials consumption logic. Based on Export order and Consumptions Logic, BOM of materials get generated by multiplication. 			
Alternate Flow	•			
Exception	Buyer may not confirm the order in color size level. In that case			
	Merchandiser generate the BOM as per assumed quanty, where it			
	needs to regenerate while get the actual details order quantity.			
Cross Reference	• N/A			



2.4 Merchandising User Interface mock-up

2.4.1 **Style**

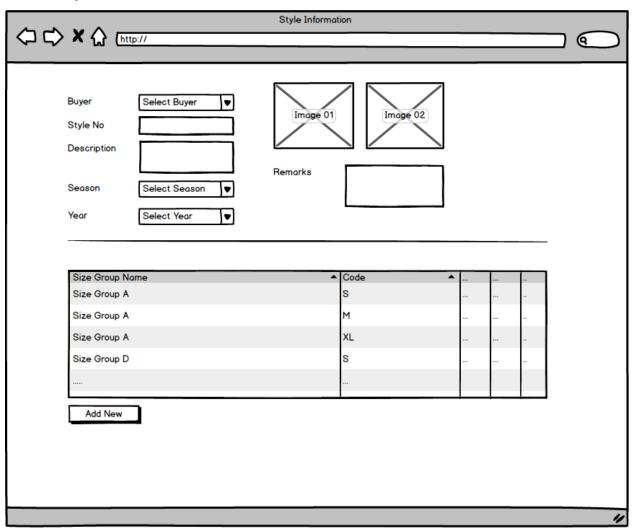


Fig: Style



2.4.2 Sample requisition and submission

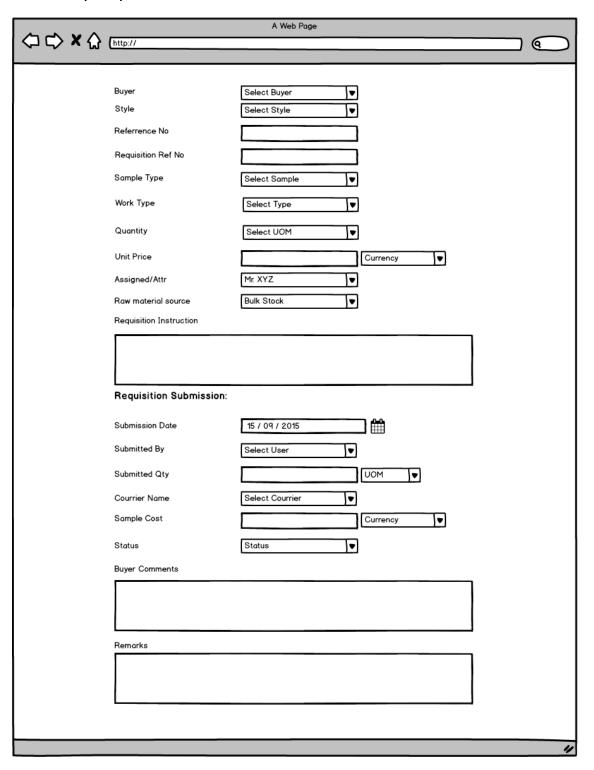


Fig: Sample requisition and submission



2.4.3 Pre-costing mock-up

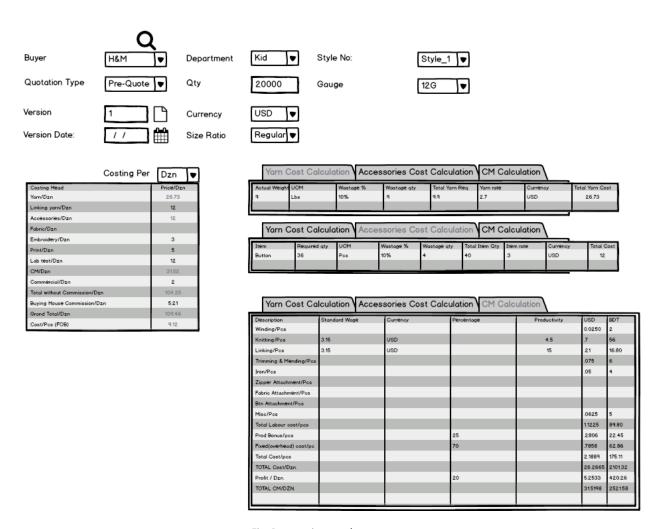


Fig: Pre-costing mock-up



2.4.4 Buyer work order

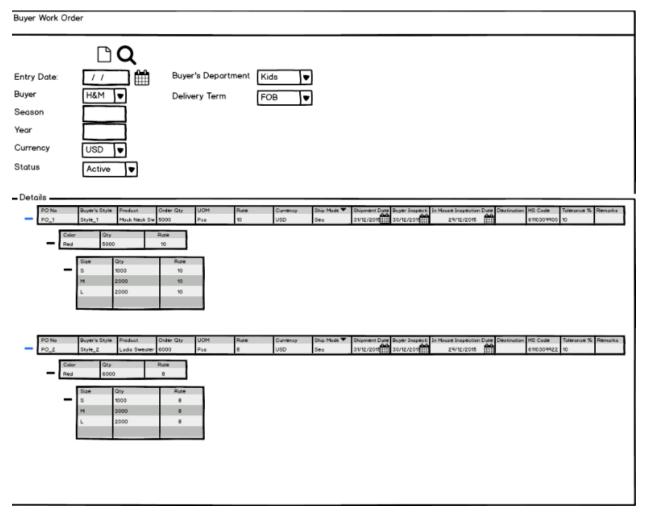


Fig: Buyer work order

2.4.5 Materials Consumption

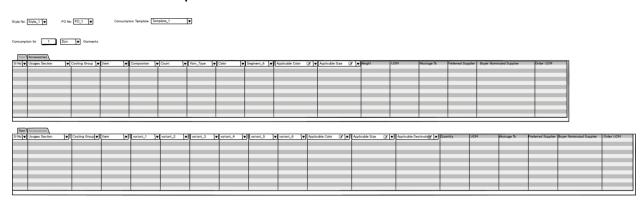


Fig: Material Consumption



2.4.6 Bill Of Material (BOM)

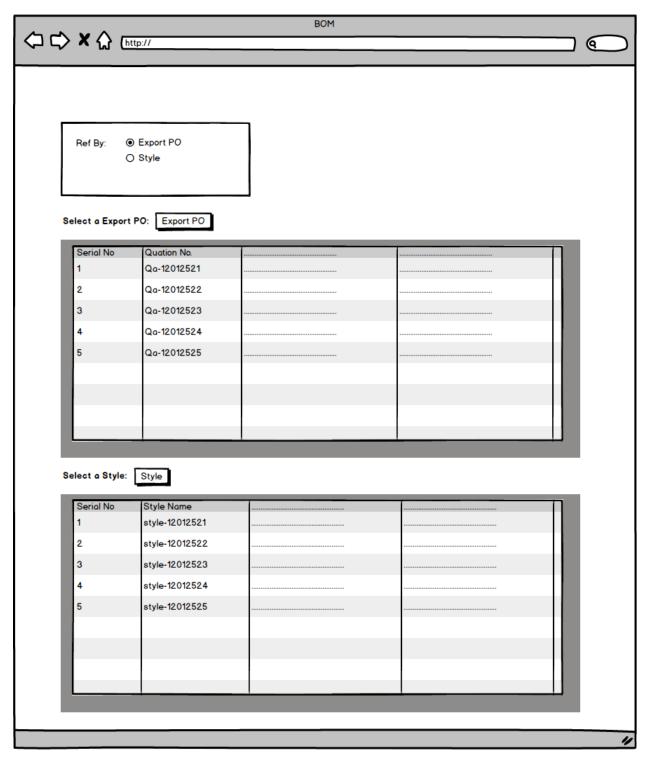


Fig: Bill Of Material (BOM)



3.0 Procurement

3.1 Overview

Procurement is the act of buying goods, services or works from an external source. It is favorable that the goods, services or works are appropriate and that they are procured at the best possible cost to meet the needs of the acquirer in terms of quality and quantity, time, and location. Generic process flow of procurement is:

3.2 **Procurement Process Flow**

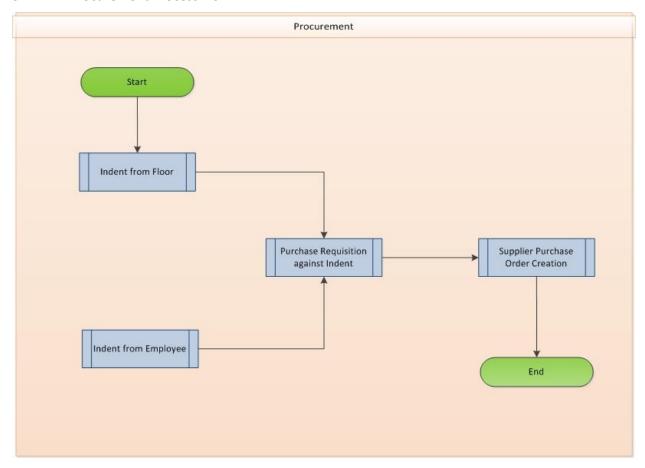


Fig: Procurement process flow diagram



3.3 Procurement use case diagram and description

3.3.1 Purchase Requisition

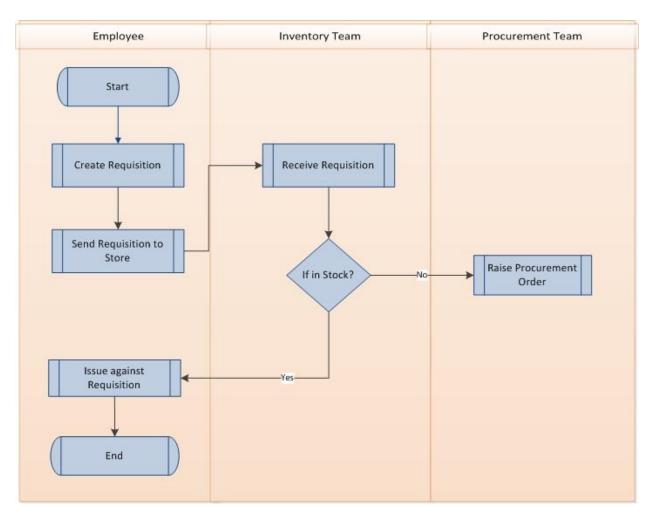


Fig: Purchase requisition



Use Case ID: UCD/Pro/001				
Use Case Name: Purchase Requisition				
Created By: GenW	/eb2 Ltd. Date Created: 10 September 2015			
Actors:	Employee, Inventory manager, Procurement Manager			
Trigger:	When any general item is required			
	 When any raw materials for production (Not from BOM or extended) is required 			
Business Rule	It generate a requisition for some items where those need to be sourced			
Description:	I. Store will receive purchase requisition from either internal			
	floor or from other department.			
	II. Store will check availability of the item in the store.			
	III. If item is not available then will raise a purchase requisition to			
	procurement team.			
Frequency of	High			
Use				
Preconditions	Indent (Optional)			
Post conditions	Inventory Issue (If exists)			
A 1 '	Supplier Purchase Order			
Assumption	To be a book force there are the sound			
Goal	To keep track for any item requirement			
Normal Flow	Making sure to raise purchase order when requires and with chain. And both from a good and the same and			
Normal Flow	Anybody from any department may raise purchase requisition to the for the require items. Inventory to its up that item is it is			
	store for the require items. Inventory try to issue that item is it is available for issue or else supplier purchase order being raised			
	against this requisition			
Alternate Flow	N/A			
Exception	• N/A			
Cross Reference	• N/A			
C. 555 Nererence	- 1971			



3.3.2 **Supplier Purchase Order:**

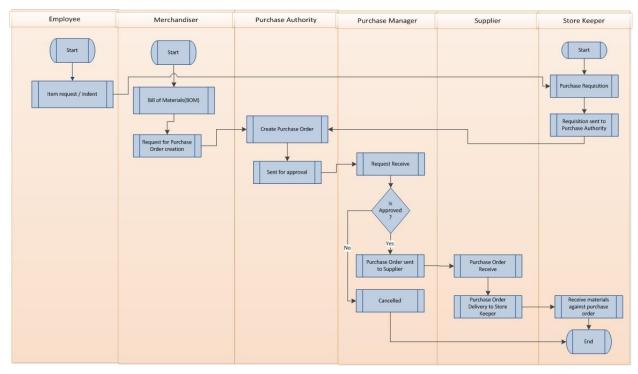


Fig: Supplier purchase order

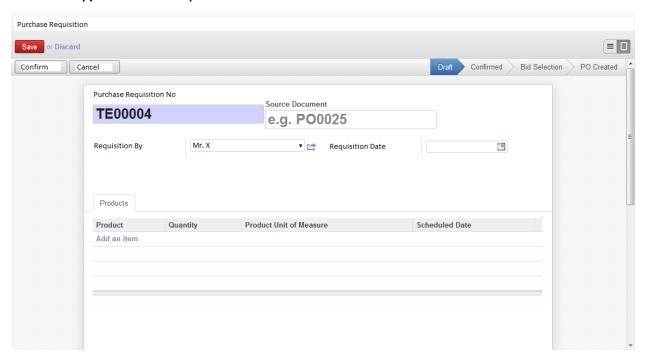


Use Case ID: UCD,	/Pro/002		
Use Case Name: Supplier Purchase Order			
Created By: GenW	Veb2 Ltd. Date Created: 10 September 2015		
Actors:	Procurement Manager, Supplier		
Trigger:	When any items require to purchase doesn't matter whether BOM items or general		
Business Rule	Procurement team gives order to supplier for any goods		
Description:	I. Purchase order can be raised against any requisition from employee		
	II. Purchase order can be raised against the BOM item purchase request		
	III. Purchase order can be raised against regular inventory purchase requisition		
	IV. If approval authority approve then the purchase order moves to supplier		
	V. Supplier deliver the goods to inventory		
	VI. Inventory receives the goods		
Frequency of Use	• High		
Preconditions	Purchase Requisition		
Post conditions	Materials Delivery by supplier and receive by store (For No LC Item)		
Assumption			
Goal	To keep track for any item requirement		
	Making sure to raise purchase order when requires and with chain.		
Normal Flow	 Anybody from any department may raise purchase requisition to store for the require items. Inventory try to issue that item is it is available for issue or else supplier purchase order being raised against this requisition 		
Alternate Flow	• N/A		
Exception	• N/A		
Cross Reference	• N/A		



3.4 Procurement User interface mock-up

3.4.1 **Supplier Purchase Requisition**





3.4.2 Supplier purchase order

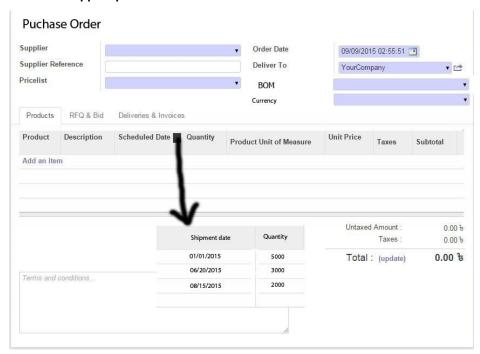


Fig: Supplier Purchase Order

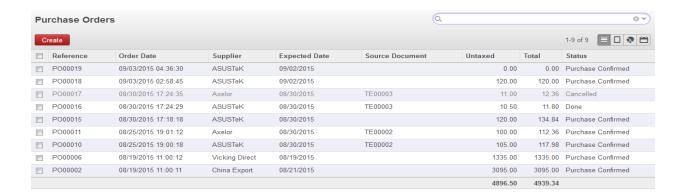


Fig: Supplier purchase order List



4.0 Inventory

4.1 **Overview**

Inventory management is a science primarily about specifying the shape and percentage of stocked goods. It is required at different locations within a facility or within many locations of a supply network to precede the regular and planned course of production and stock of materials.

4.2 Inventory process flow

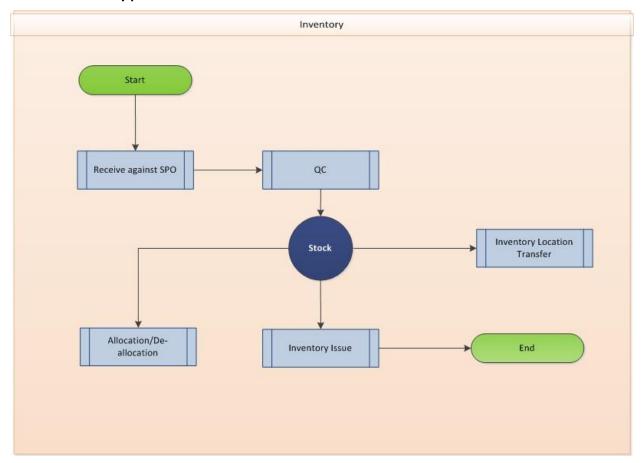


Fig: Inventory process flow



4.3 Inventory Use case diagram and description

4.3.1 Inventory Receive

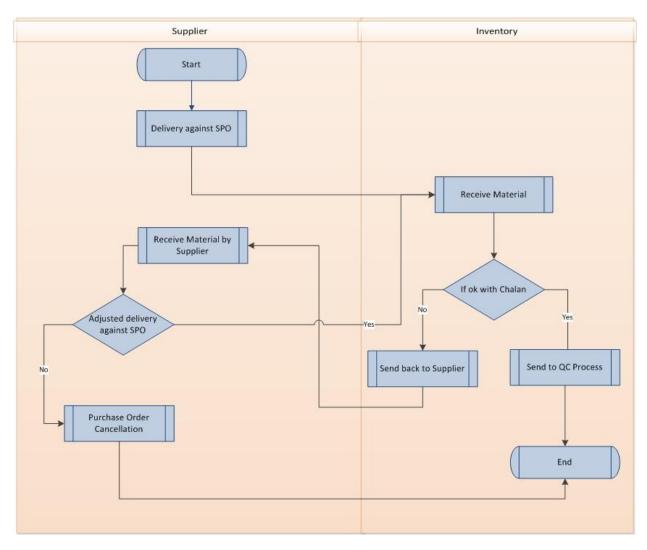


Fig: Inventory Receive



Use Case ID: UCD/Inv/001			
Use Case Name: Inventory Receive			
Created By: GenWeb2 Ltd. Date Created: 10 September 2015			
Actors:	Inventory Authority, Supplements	olier	
Trigger:	When Supplier deliver an	y goods to inventory	
Business Rule	Inventory Authority rece	ive goods against purchase order	
Description:	I. Inventory can receive goods against Supplier Purchase Order II. Inventory can receive goods against commercial Invoice III. Cash purchase item also can be received in inventory IV. Inventory acknowledge the receive items against any Sales Purchase Order (SPO)/Commercial Invoice (CI). V. Only QC passed quantity will moved to stock VI. Failed quantity will move to supplier and then supplier may send replace the QC failed quantity.		
Frequency of Use	VII. Inventory aga by supplier • High	in receive that QC failed replaced item sent	
Preconditions	 Supplier Purchase order Commercial Invoice Cash purchase 		
Post conditions	Inventory QC		
Assumption			
Goal	 To keep track for any inventory receive To make sure to keep transparency in every steps of inventory transactions 		
Normal Flow	Authorized inventory person receive against SPO/CI		
Alternate Flow	• N/A		
Exception	• N/A		
Cross Reference	• N/A		



4.3.2 Inventory QC

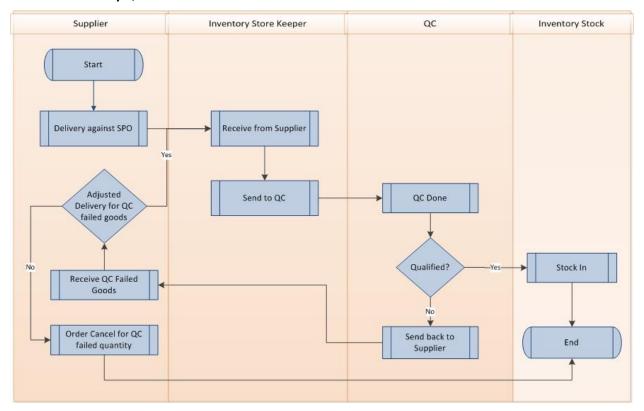


Fig: Inventory QA



Use Case ID: UCD/Inv/002			
Use Case Name: Inventory QC			
Created By: GenW	/eb2 Ltd. Date Created: 10 September 2015		
Actors:	Inventory Authority, Quality Inspector		
Trigger:	When any inventory receive happen		
Business Rule	After inventory receive Inventory QC take place to ensure solid stock in the Inventory		
Description:	 Quality Inspector inspects the received materials and passed 		
	only the quality products. So only accepted products move to stock		
	II. Authority will pay the supplier only the QC passed quantity value		
	III. QC failed quantity goes back to respective supplier		
	IV. If supplier again delivers the replacement of the QC failed		
	items those will be in inventory QC process again.		
Frequency of Use	High		
Preconditions	Inventory Receive		
Post conditions	Inventory Transfer/Inventory Allocation and reallocation/Inventory Issue		
Assumption			
Goal	To ensure only quality products in Stock		
	Not to pay for the disqualified products		
	To avoid any further raw material shortage during production period		
Normal Flow	After inventory receive Quality Inspector do the QC and only passed		
	quality moves to stock		
Alternate Flow	• N/A		
Exception	• N/A		
Cross Reference	• N/A		



4.3.3 **Inventory Transfer**

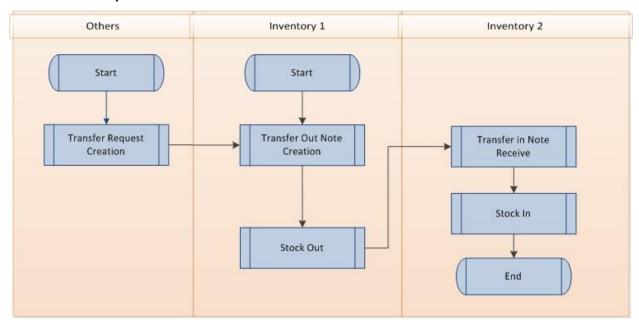


Fig: Inventory transfer



Use Case ID: UCD/	/Inv/003		
-	nventory Transfer		
Created By: GenWeb2 Ltd. Date Created: 10 September 2015			
Actors:	Inventory Authority		
Trigger:	When item transfer happen for any inventory location to another		
Business Rule	Transferring item from one inventory stock to another inventory stock		
Description:	 Against any transfer request any storekeeper create transfer out note. 		
	II. Against that transfer out note stock moves from that		
	respective inventory		
	III. Receivable inventory receive the goods against the transfer		
	note and update the stock.		
Frequency of Use	Medium		
Preconditions	Stock availability		
Post conditions	•		
Assumption			
Goal	To ensure proper inventory stock availability management		
Normal Flow	Transfer happen against any transfer request		
	 Transfer out inventory reduce the transfer quantity from the stock and the transfer receive inventory acknowledge and increase the stock with the receive quantity. 		
Alternate Flow	• N/A		
Exception	• N/A		
Cross Reference	nce • N/A		



4.3.4 Inventory Allocation and De-allocation

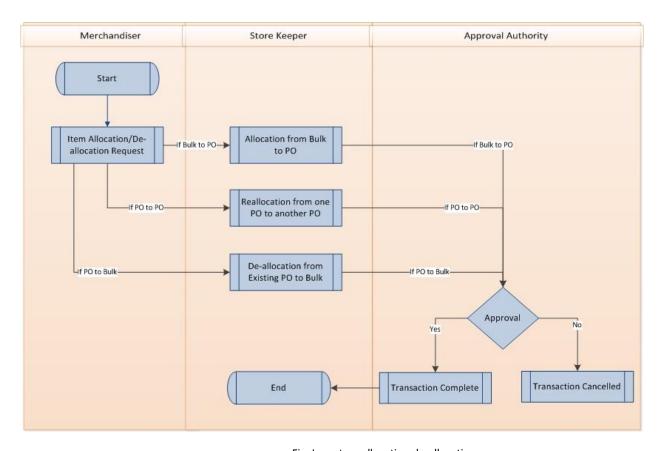


Fig: Inventory allocation de-allocation



Use Case ID: UCD/Inv/004 Use Case Name: Inventory Allocation, De-allocation and reallocation process		
Created By: GenWeb2 Ltd. Date Created: 10 September 2015		
Actors:	Inventory Authority	
Trigger:	When any inventory item need to allocate with certain PO or keep free to use anywhere	
Business Rule	Tagging any item to certain Buyer order so it can be used dedicatedly	
Description:	 I. Allocation request raise from merchandising level. II. There could be 3 types of allocation: a. Allocate bulk/free item stock to any Export PO b. Allocate assigned PO item stock to other PO c. De-allocate any item stock from any PO to Bulk/free III. Approval needed for every request IV. If get approved then stock association will move from one stock to another. 	
Frequency of Use	Medium	
Preconditions	Stock availability	
Post conditions	Issue against PO	
Assumption		
Goal	To ensure proper stock availability as per requirements	
Normal Flow	Allocate bulk/free item stock to any Export PO so that item would be	
	fixed only to issue against that Export PO	
	Allocate assigned PO item stock to other PO so that the stock would	
	be shifted to other PO for issue.	
	De-allocate any item stock from any PO to Bulk/free so stock may	
	stay free to further use.	
Alternate Flow	• N/A	
Exception	• N/A	
Cross Reference	• N/A	



4.3.5 **Inventory issue**

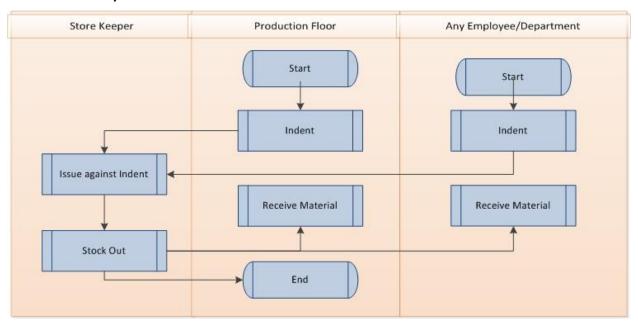


Fig: Inventory issue



Use Case ID: UCD/Inv/005		
Use Case Name: Inventory Issue		
Created By: GenW	/eb2 Ltd. Date Created: 10 September 2015	
Actors:	Inventory Authority	
Trigger:	When any inventory item needs to issue to production floor or any other purpose	
Business Rule	Issuing item stock to production floor or any purpose	
Description:	I. There are 3 types of issue transactions:	
	a. Issuing Item stock to production floor against indent	
	b. Issuing item stock to maintenance purpose against indent	
	c. Issuing item stock to user/employee use against indent	
	II. Every successful transaction will reduce stock	
Frequency of Use	High	
Preconditions	Stock availability & requirement	
Post conditions	•	
Assumption		
Goal	To ensure decrease stock and proper issue log	
Normal Flow	Issue against allocated PO	
	Issue independently	
Alternate Flow	• N/A	
Exception	• N/A	
Cross Reference	• N/A	



4.4 Inventory user interface mock-up

4.4.1 Inventory receive

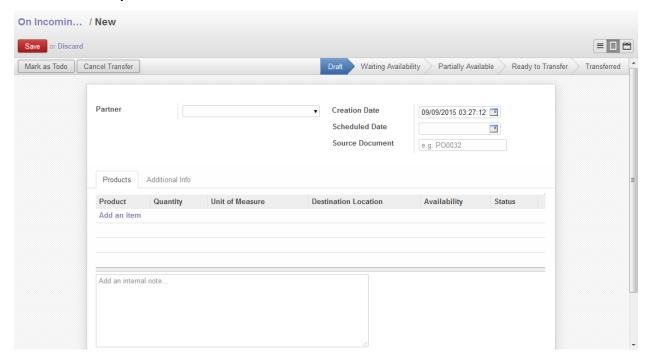


Fig: Inventory Receive

4.4.2 Inventory QC

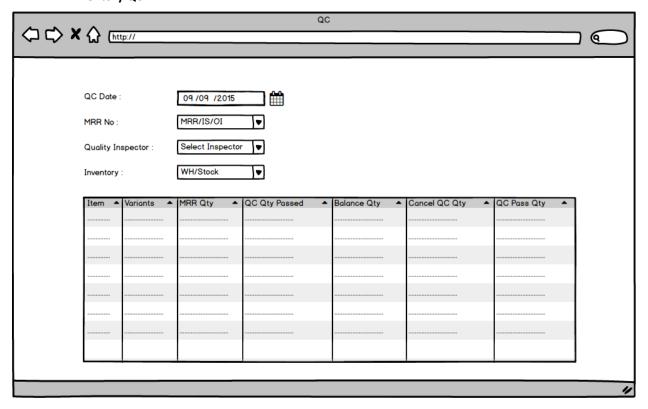


Fig: Inventory QC



4.4.3 **Inventory transfer**

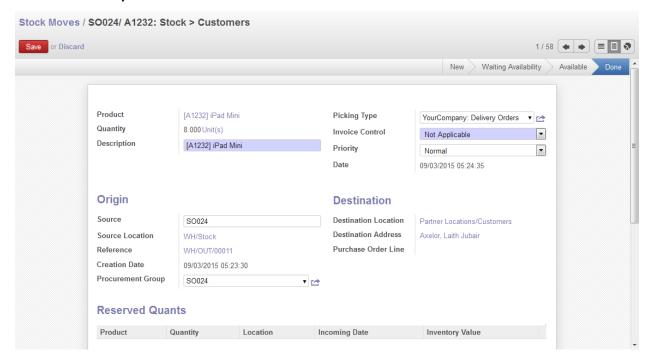


Fig: Inventory Transfer

4.4.4 Inventory Allocation & De-allocation



Fig: Inventory allocation de-allocation



4.4.5 **Inventory issue**

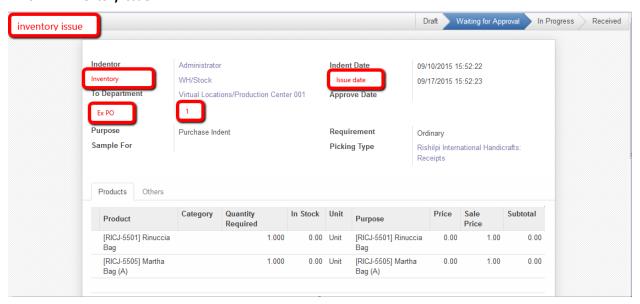


Fig: Inventory issue