# Third International TOCPA Conference 24-25 November 2012, Moscow





# "Transforming for New Market Conditions" Ovejita Supply Chain - Venezuela

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# TOCPA Theory Of Constraints Practitioners Alliance SHARING EXPERIENCE

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- 15 years of experience in TOC
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# **Ovejita - Company Background**

Founded in Venezuela in 1947 and owned by German immigrant Second generation owners now live in Europe

- Revenue 105 million US dollars
- Clients: 650 Wholesalers, 50 independent shops and 48 own shops
- In 2011 Colombia : small manufacturing and 2 own shops
- 2200 employees





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# **Ovejita - Company Background**

### Manufacturing and Supply chain:

- Prodalam: yarn and knitting manufacturing
- TLR : dying process
- Catia: Sewing Center
- Distribuidora Charallave : single Distribution Centre
   Chacao : Main office and headquarters
   Yarn Knitting
   Centre Centre
   Components



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### **Chronology and Market Conditions**

- Hostile extremely socialist government increasingly pressuring businesses – 25% inflation, prices being regulated, expropriation
- · 2009

Sales: 2,800,000 dozens Production: 10,000 dozens/day in 4 main products

Remainder of products – imported Distribution Center: 1,000,000 dozens

· 2010 - 2011

Difficult economic and political situation in the country – owners say no more investment

Dollars available for imported products dropped from 30 US million dollars to 8 US million dollars

Clients: from 650 wholesalers to 300 wholesalers

Sales 2010: 1,800,000 dozens Sales 2011: 1,400,000 dozens

Production: 5,500 dozens/day - diversify production - more minutes per piece

Distribution Center: 400,000 dozens Forced into a SAP Implementation

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### **TOC** in Ovejita

### August 2009:

Strong end of the month Syndrome

2 Day Introductory Workshop

Good results – President bought in to TOC

### 2010 - 2011:

Frequent Contact with the President BUT

SAP Implementation takes a huge amount of internal time

Market conditions changing dramatically

Never seems to be the right timing to start on TOC properly

### 2012:

Fill rate at warehouse around 30% of the orders from wholesalers and shops

6 month contract agreement to implement a TOC replenishment solution to the Central Warehouse [not yet for the shops]





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### **Replenishment Solution in supply to Central Warehouse:**

- Building an IT solution using the SAP platform as data host
- Training and changing the manufacturing planning processes
  - > Conversion from an 8 week forecast driven schedule
- Implementing replenishment solution for imported products
- Implementing replenishment solution for purchase products



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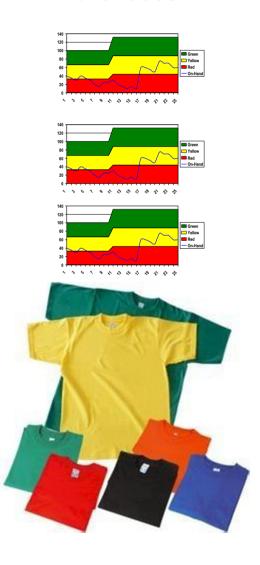
The Ovejita warehouse (Charallave) Buffer Targets for each product are set as the peak demand in the time to reliably replenish (Problem – many products were stocked out or only produced occasionally in the past – so what is real demand?)

Not able to immediately fill up to the buffer targets – due to capacity constraints in both Dying and Sewing

The buffers will indicate the amount required to be made based on the consumption as follows:

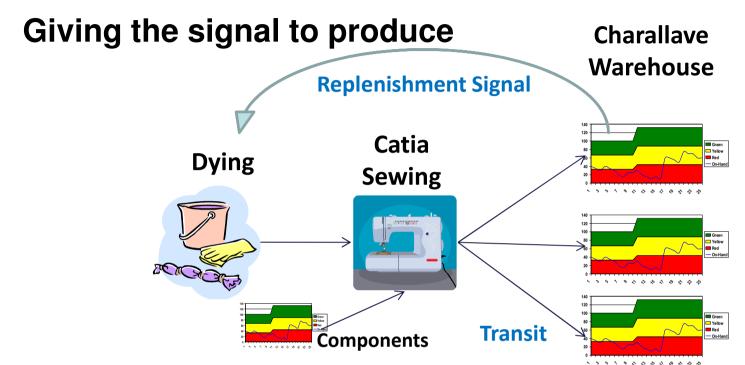
 Target number of dozens, minus the number of dozens actually in stock, minus the number of dozens "In transit" from Catia to the Warehouse = Required Dozens per Product

# Charallave Warehouse



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Catia can only produce garments if it gets the dyed rolls.

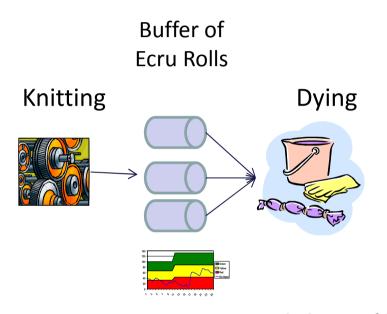
The Replenishment Signal (the Required Dozens per Product] must therefore go to the Dying section from the Warehouse, so they dye enough material for Catia to cut and sew.

Dying is severely capacity constrained and must be exploited carefully. So we developed a special tool to conduct the planning based on the most penetrated buffers



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### **Exploiting the Dying process**



### **Dying Process**

This process, involving several dying machines, needs to be treated as a bottle-neck and never allowed to "stop". In order to support the finished goods buffers we must give Dying some flexibility – not just any work. So the knitting has to be subordinated.

### **Knitting and buffer of Ecru rolls**

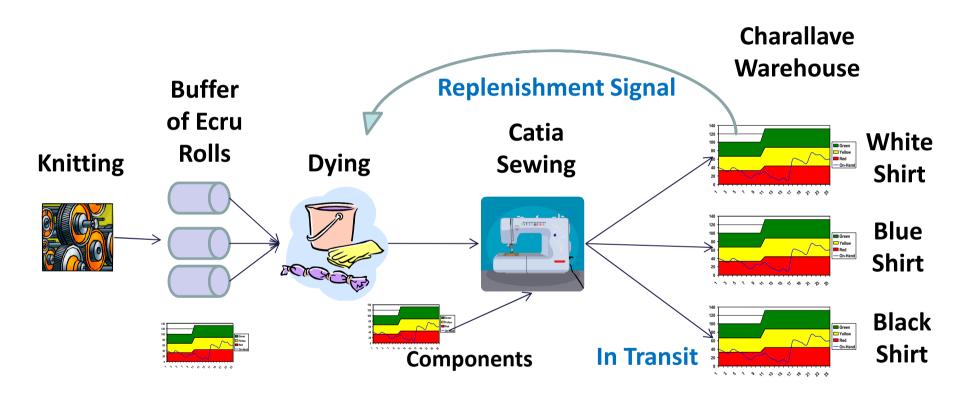
Knitting is a continuous process, with machines that generally only knit one size – little flexibility. However for some sizes, we are overstock and knitting capacity may need to be switched to products that are under stocked, where possible.

Using the buffer concept we give visibility to Knitting to guide the priorities.

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# **Summary of Warehouse Replenishment**

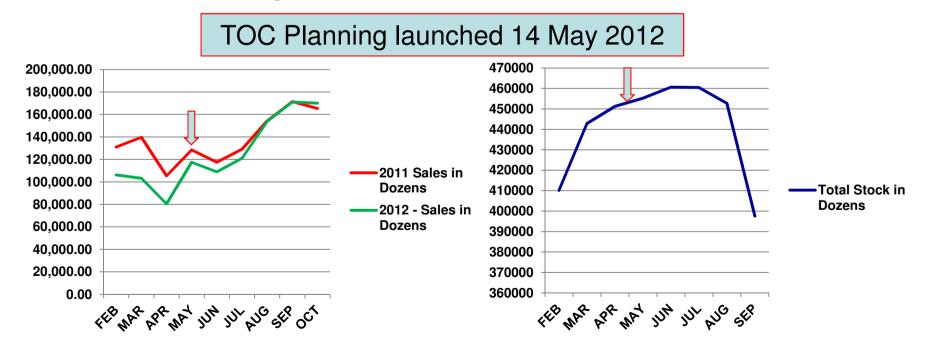


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### **Results on Sales and Stock**

- Sales drop in the early months of 2012 recovered
- 58,000 dozens drop in total stock from launch
- 75,000 dozens less in stock of white products
- Better availability of colour products fill rate more than doubled
- Increased cash generation





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### **Next Steps**

2013

High degree of uncertainty in political and economical situation New Social laws on employee conditions

- Mandatory training time per worker
- More safety requirements

New working contract with the Union to start in 2013

The consequences are less working hours per worker and up to 10% less production capacity per worker

### 2013 for TOC:

Implementing replenishment solution for their own shops – getting the real demand signal



