



GLOBAL
SURGERY
GROUP

ETHICON
a Johnson & Johnson company

MENTOR
MAKE LIFE MORE beautiful.

Ethicon
Endo-Surgery
a Johnson & Johnson company

Biosense Webster
a Johnson & Johnson company

Cordis
a Johnson & Johnson company

STERILMED

Acclarent

Johnson & Johnson
Wound Management

ETHICON
Women's Health & Urology

Suture & Endo-Mechanicals

Singapore Healthcare Supply Chain Management Congress

21st Aug 2013

Vikram Mulchandani
Global Surgery Group Manufacturing

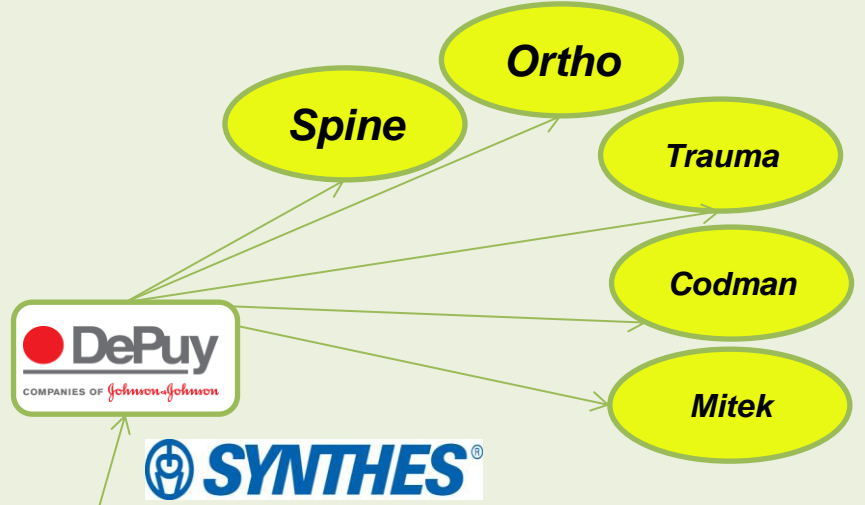


Agenda

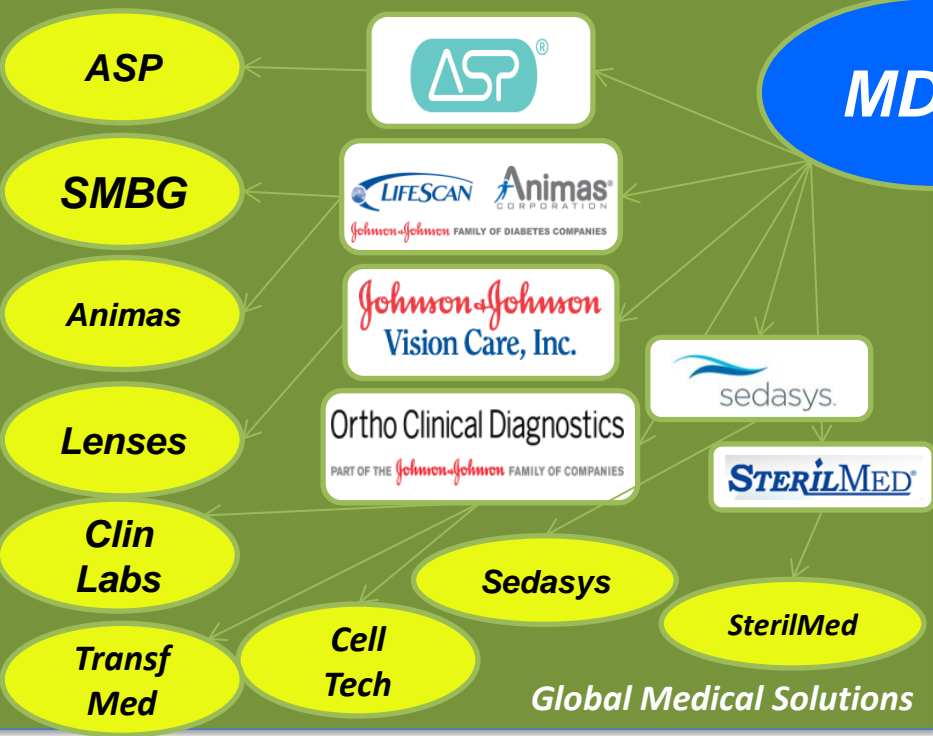
- J&J Global Surgery Overview
- Suture Manufacturing – Quality & Efficiency through Automation
- Customer Supply Chain Partnership Initiative - Endo-Surgery & beyond
- Lifecycle Management at ETHICON – A Journey in Progress

Medical Devices & Diagnostics

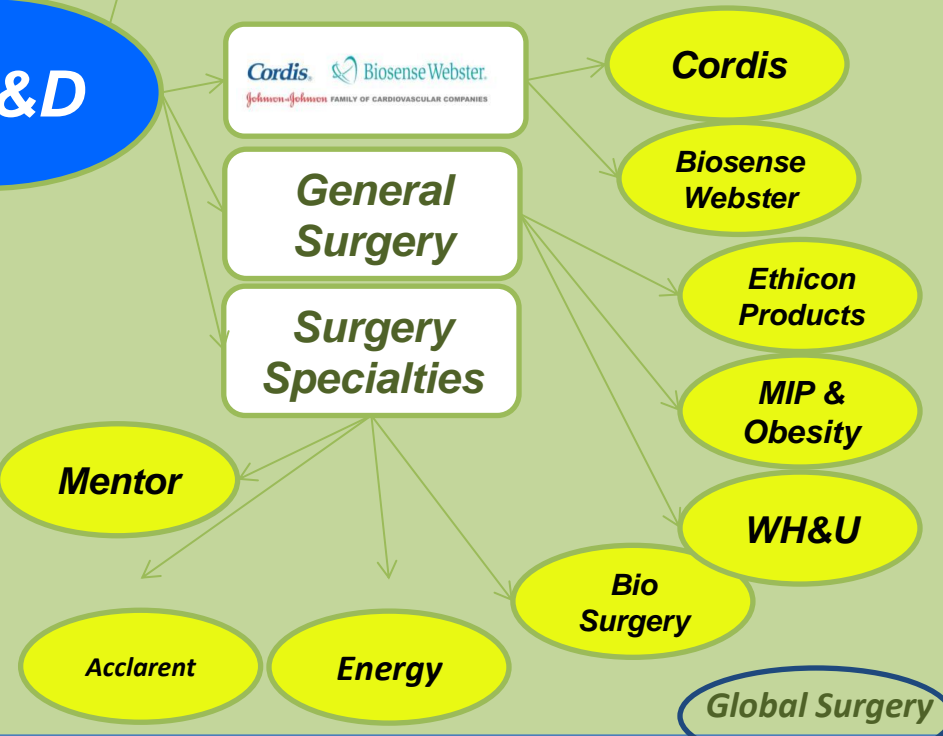
23 Business Units



Global Orthopedics



Global Medical Solutions



Global Surgery

GLOBAL SURGERY GROUP – STRATEGIC FRAMEWORK

OUR CREDO

Caring, one person at a time, we help billions live longer, healthier, happier lives

OUR GROWTH DRIVERS

Creating Value
Through Innovation

Global Reach,
Local Focus

Leading with
a Purpose

Execution Excellence

Innovation driven by customer insights to advance patient care

Market Relevant
Innovation



Geographic Scale
and Reach



Global Leaders,
Talent and Culture



Customer Centricity
and Competitiveness



GLOBAL SURGERY SUPPLY CHAIN

Transitioned to One Team in Q4 2012!

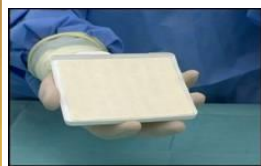
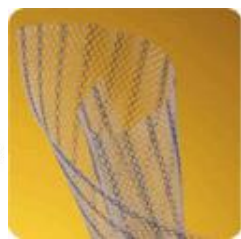


• 25 Manufacturing Sites

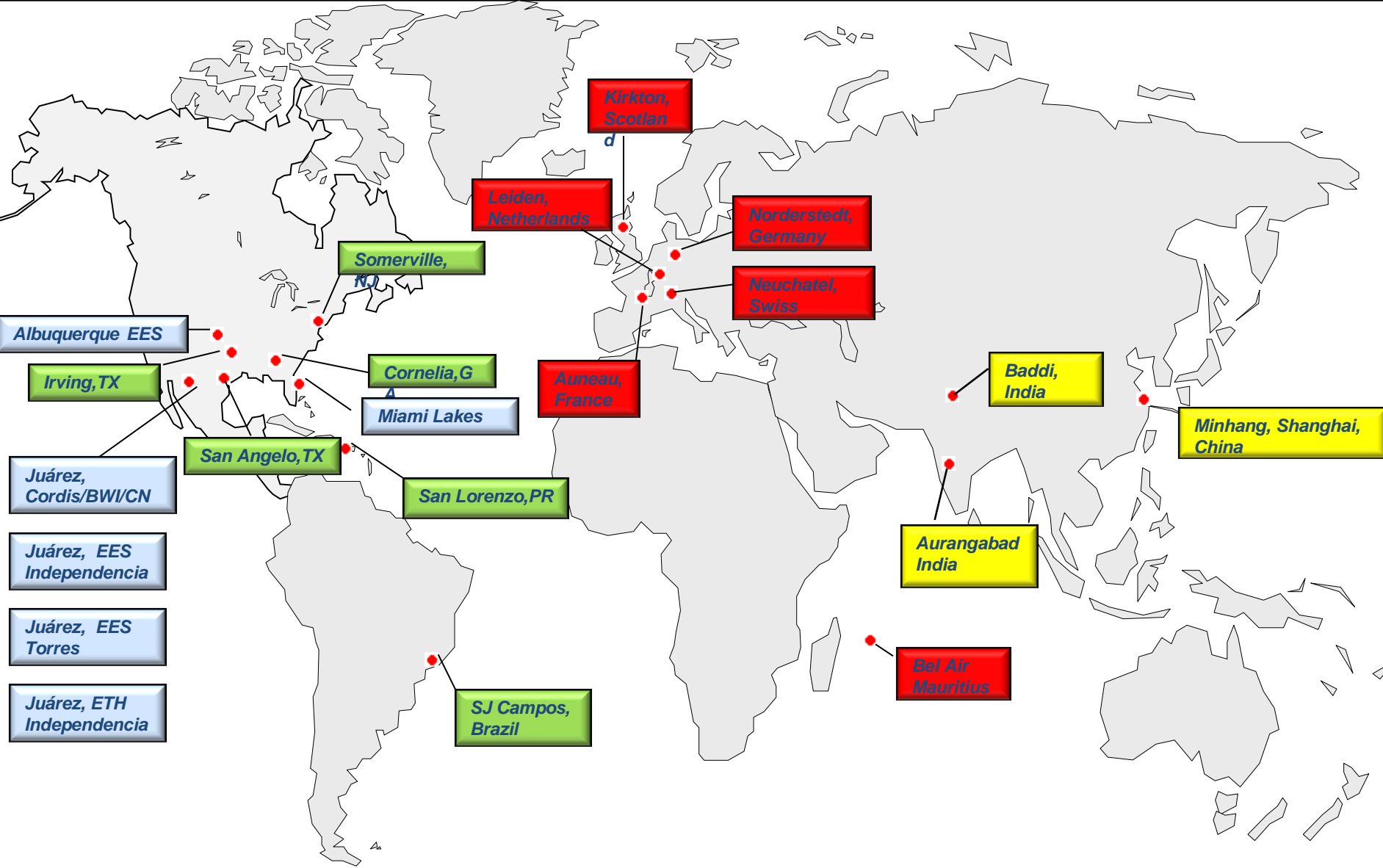
• 13,000+ Employees around the World

• World's Most Diversified Medical Device Manufacturing Company

• Over 1,800 Suppliers / 25K SKU's



Global Surgery Group Internal Manufacturing



Legend:

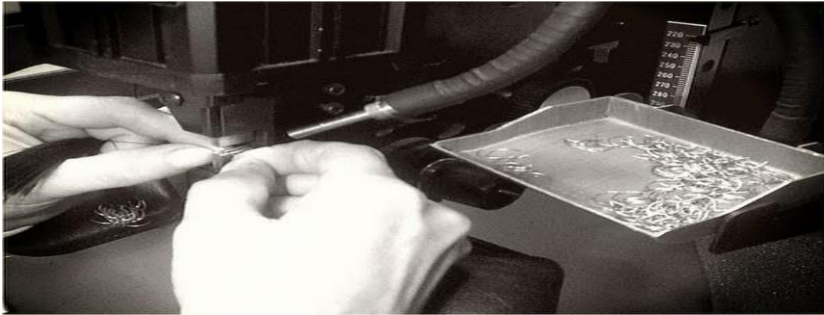
- Juárez+ Cardiovascular Care/Endo (Blue box)
- Americas (Green box)
- EMEA (Red box)
- Asia Pacific (Yellow box)

1. Suture Manufacturing – Quality with Efficiency

Flexible Automatic Swaging (FAS)

Automated Assembly of Needles and Sutures

MANUAL PROCESS

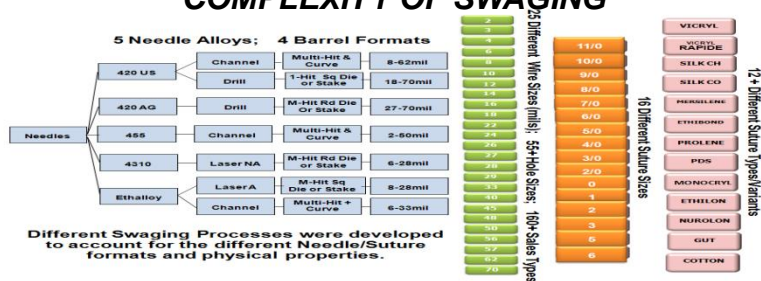


Ergonomic challenges/injuries

*Product Variability concerns
(operator to operator variability)*

*Manual Process :
Needle Pull-Off
Complaints*

COMPLEXITY OF SWAGING



Flexible Automatic Swaging (FAS)

Automated Assembly of Needles and Sutures

MANUAL PROCESS

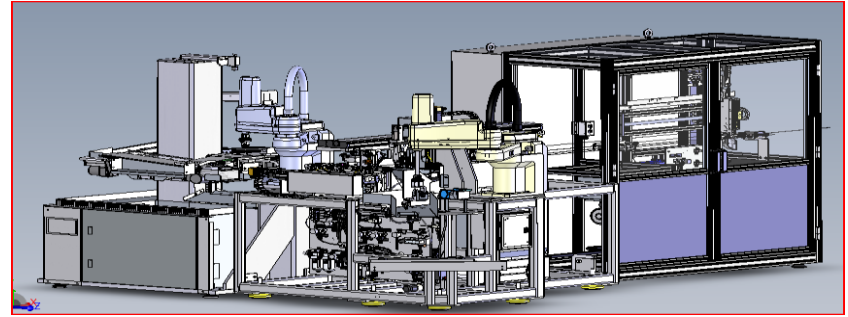


Ergonomic challenges/injuries

*Product Variability concerns
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*Manual Process
Needle Pull-Off
Complaints*

FAS PROCESS

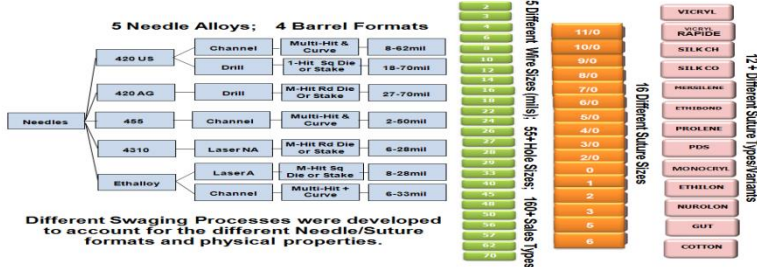


Elimination of ergonomic high-risk jobs

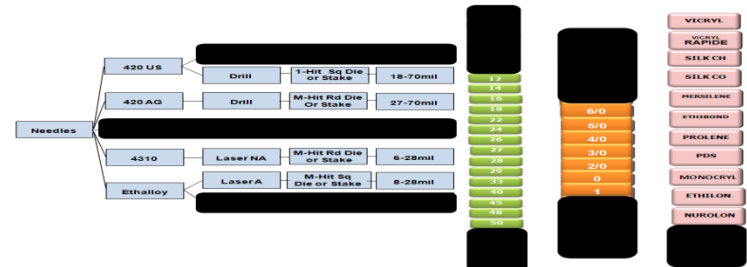
*SPC-controlled process
eliminating operator to operator variability*

*>70% reduction in
Needle Pull-Off
Complaints*

COMPLEXITY OF SWAGING



FAS CAPABLE SWAGE RANGE



Flexible Automatic Swaging (FAS)

Automated Assembly of Needles and Sutures

Designed to be flexible and capable...



81% of all ETHICON Needle & suture volume can be run in a FAS machine



Product change –over performed by machine operators



Product –specific variables downloaded at batch start



Batch quality and volume information uploaded during each batch



Robotic offload of product allowing choice of winding machines



FAS WITH CONVEYOR TO REMOTE WINDER



FAS WITH HOWI WINDER



FAS WITH ZIPPER WINDER



FAS WITH BRAZILIAN WINDER

2. Customer Supply Chain Partnership Initiatives – Endo-Surgery & Beyond

Customer Focused Team: Solution Framework

Supply Chain

Service Level
Back Order
Communication
Full Case Orders

ABC Analysis
Stocking Strategy
Vendor Manage Inv

Metric

- *Perfect Order %*
- *Able to Promise*
- *% Order Full Case*
- *\$ Savings (Supply Chain)*

Transactional

E-Commerce
Price & Invoice
Accuracy

Days Sales
Outstanding (DSO)
Prompt Payment
Term (PPT)

Metric

- *Price Accuracy %*
- *Maximize PPT for CSC
(% of Purchase)*
- *% Electronic Orders*

Clinical

Standardization
Consolidation

Optimization
Utilization

Metric

- *Consolidation (# of SKUs)*
- *\$ Savings
(Clinical Efficiency)*
- *Standardization*

Customer Weekly Scorecard

Jan-Feb 2013 Results

JnJ Week	Price Accuracy	Line Fill Rate	% of PPD Taken
4	98.33%	91.67%	11.62%
5	100.00%	94.34%	1.66%
6	98.08%	96.15%	44.21%
7	98.55%	98.55%	85.62%

Apr-May 2013 Results

JnJ Week	Price Accuracy	Line Fill Rate	% of PPD Taken
13	100.00%	100.00%	99.42%
14	100.00%	97.37%	80.08%
15	96.15%	84.62%	60.62%
16	100.00%	98.21%	94.30%

Customer Testimonial

- **PRICE ACCURACY AT 99% - IT'S BENCHMARK!**
- **ABLE TO PROMISE IS TREMENDOUS – HAVING BACKORDER SHIP DATE PUTS J&J AHEAD OF OTHER SUPPLIERS**

Customer - Perfect Order Trend



Customer Case Study

Consolidated Service Center

- CFT Project Management
- Collaborative Start Up

Order Management Efficiencies

- Order Mode Analysis
- Economic Order Quantities

Inventory Management

- ABC Inventory Analysis
- Vendor Managed Inventory

Customer VMI Results

- 99%+ Service Level
- 49% Increase in Inventory Turns
- 2.5X increase in EES Codes Ordered in Full Case Qty
- 10% Decrease in Inventory
- \$ MM in excess inventory identified

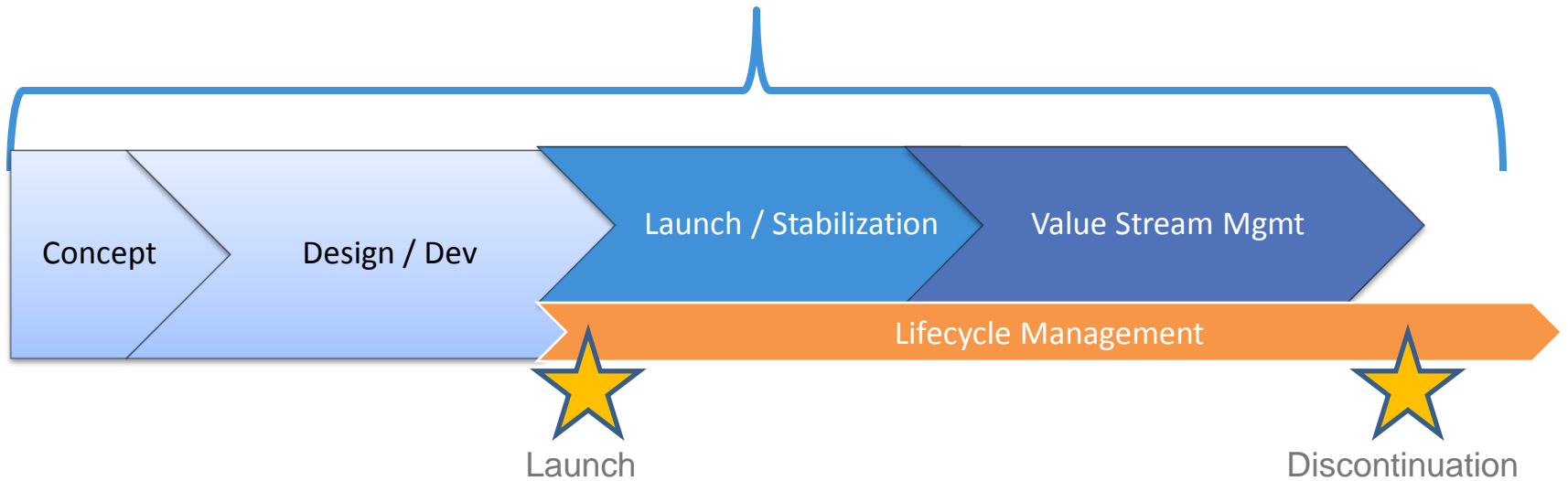
Lifecycle Management at ETHICON – A Journey in Progress

LIFE CYCLE MANAGEMENT: The “Why”

- Maintain Customer Centric Focus
 - Quality
 - Delivery
 - Cost
- Resource / Spend Efficiency
- Growth Through Existing Products

CONSISTENT CUSTOMER EXPERIENCE

Product Lifecycle Management



LIFE CYCLE MANAGEMENT: The “What”

Lifecycle management includes the following activities:

- All product changes that effect product design (i.e. governed by Design Control)
 - Product redesigns to optimize cost
 - Product changes to address customer input/complaints
 - Claims & labeling changes
- Execution of product portfolio initiatives
 - Additions to the product portfolio (i.e. line extensions)
 - Changes to the product portfolio to address local market needs
 - Co-ordination of SC input into portfolio rationalization decisions
 - Execution of product portfolio rationalization decisions
- Quality System Changes/Improvements (Led by Franchise Quality)

Maturity Assessment Model

Purpose:

Demonstrate how product family governance works in the ideal state and how to reach maturity levels over time.

Phase 1:
“Reactive”
Functionally Focused

Phase 2:
“Visibility”
Shared Goals
Common Forums for Decision-Making
Prioritization of Trade-offs Between Functions

Phase 3:
“Alignment and Collaboration”
Consistent Templates for Review
Standard Work and Integration
Joint Understanding of Goals and Priorities In Advance
Can Effectively Operate with Joint Accountability

Phase 4:
“Transformational”
Institutionalize – Decisions made as one collective organization!
High Trust and Commitment to Shared Goals
Quick Decision-Making
Demonstrated Results over Time
Alignment and Advanced Planning Reduces the Need for Trade-off Decisions
Efficient Use of Resources in Accomplishing all of Above

Q&A



Arigato

Mahalo

Grazie

Spasiba

THANK
YOU

Thinks
Moite

Gracias

Merci

Danke

Shukran