



“Case Studies of Business Process Management (BPM) in clinical supply operations – application of process improvement methodologies and tools”

The application of Six Sigma techniques to improve operational performance at Fisher Clinical Services (UK)

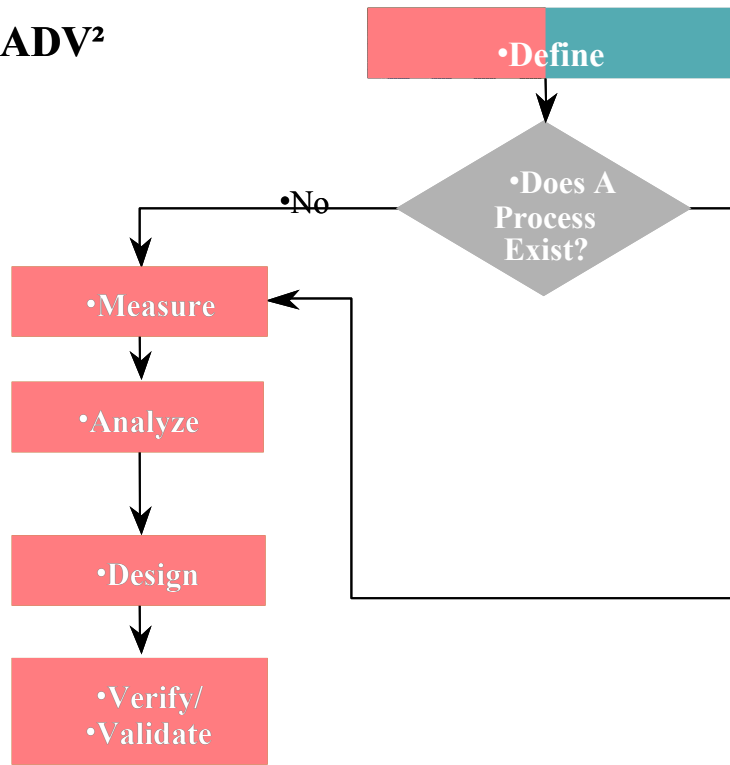
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DMADV² AND DMAIC

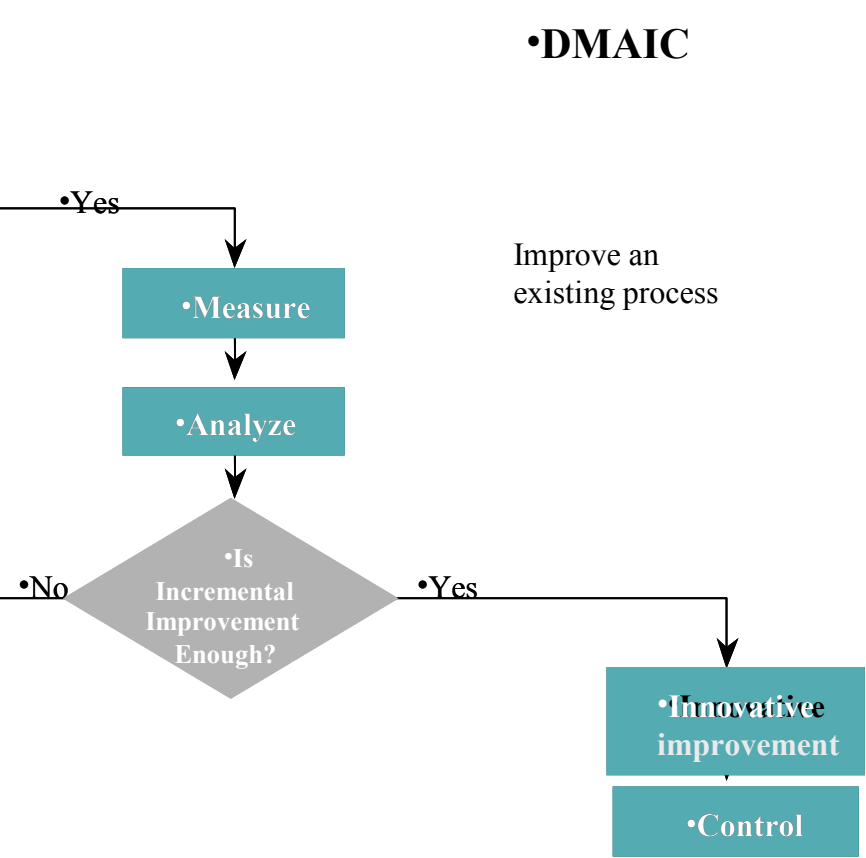
•DMADV²

Design a
new process



•DMAIC

Improve an
existing process



DMAIC

Define

...a strategic, customer-focussed improvement opportunity

Measure

...relevant, process-focussed things

Analyze

..., trend, get to root causes & develop solutions

Improve

..., prioritize solutions, implement & monitor

Control

..., institutionalize, change behaviors



DMAIC

DEFINE

MEASURE

ANALYZE

IMPROVE

CONTROL

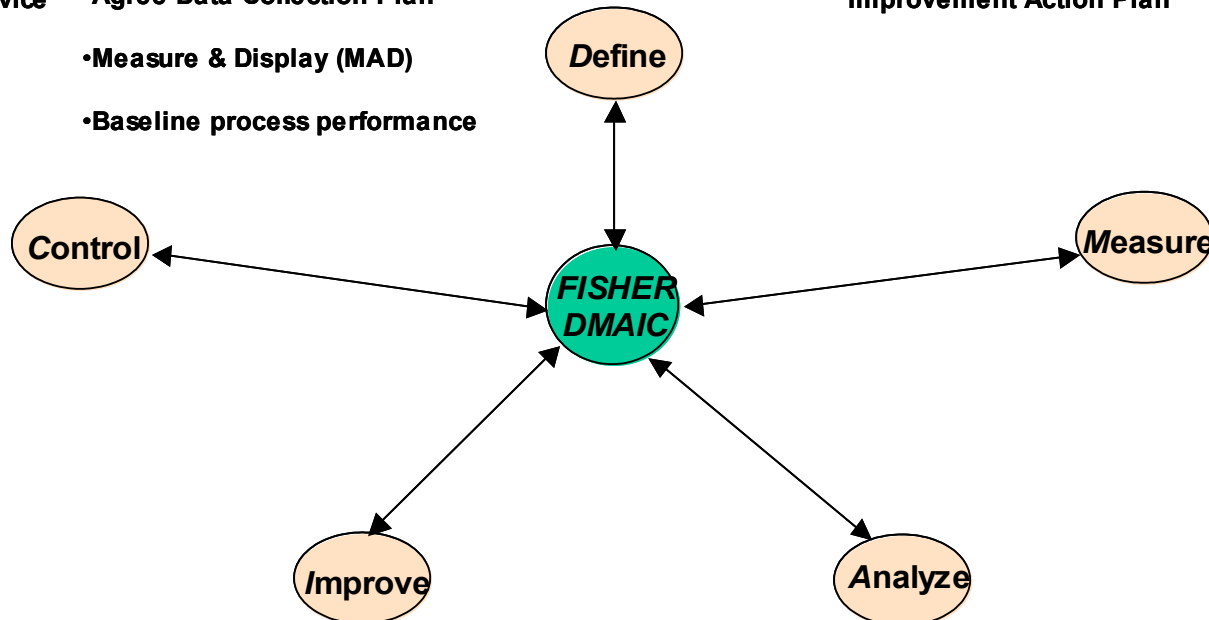
- Confirm links to strategy
- Establish customer needs & Requirements – use of Voice of Customer (VoC) techniques
- Specify Critical To Service (CTS) Requirements

- Develop “As Is” process Map using SIPOC tool
- Filtering – define the CTS-related critical few Measures
- Agree Data Collection Plan
- Measure & Display (MAD)
- Baseline process performance

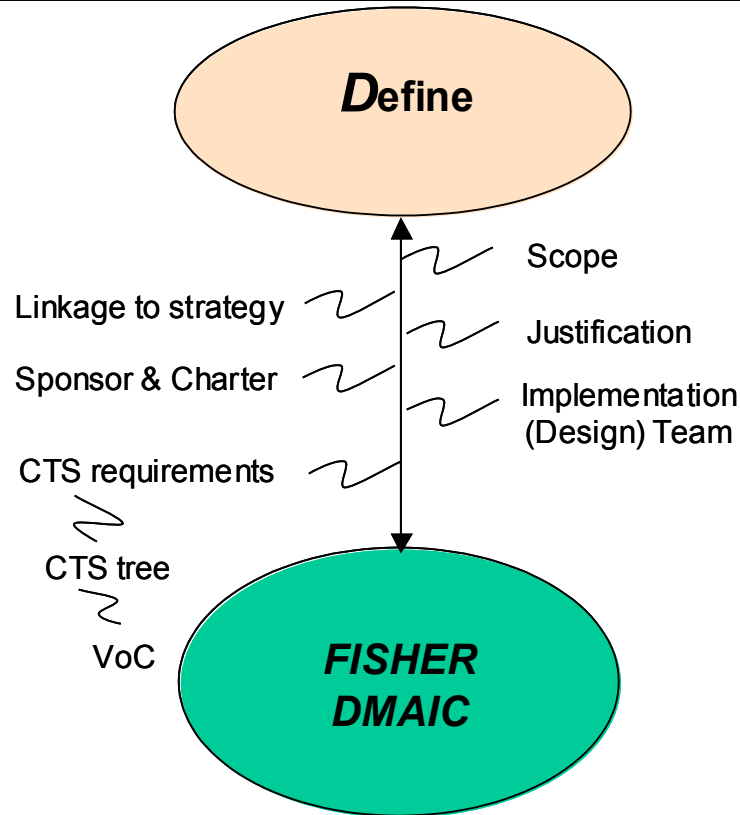
- Establish Drivers of Variation in the process

- Develop solutions
- Create “To Be” process map
- Identify Risks
- Agree prioritised Improvement Action Plan

- Standardize the “To Be” process
- Develop supporting
 - SOP regime
 - Skills/Competencies
 - Metrics systems
- using Turtle Diagrams
- Monitor improvement and evaluate results
- Capture learning



APPLICATION OF DMAIC AT FISHER CLINICAL



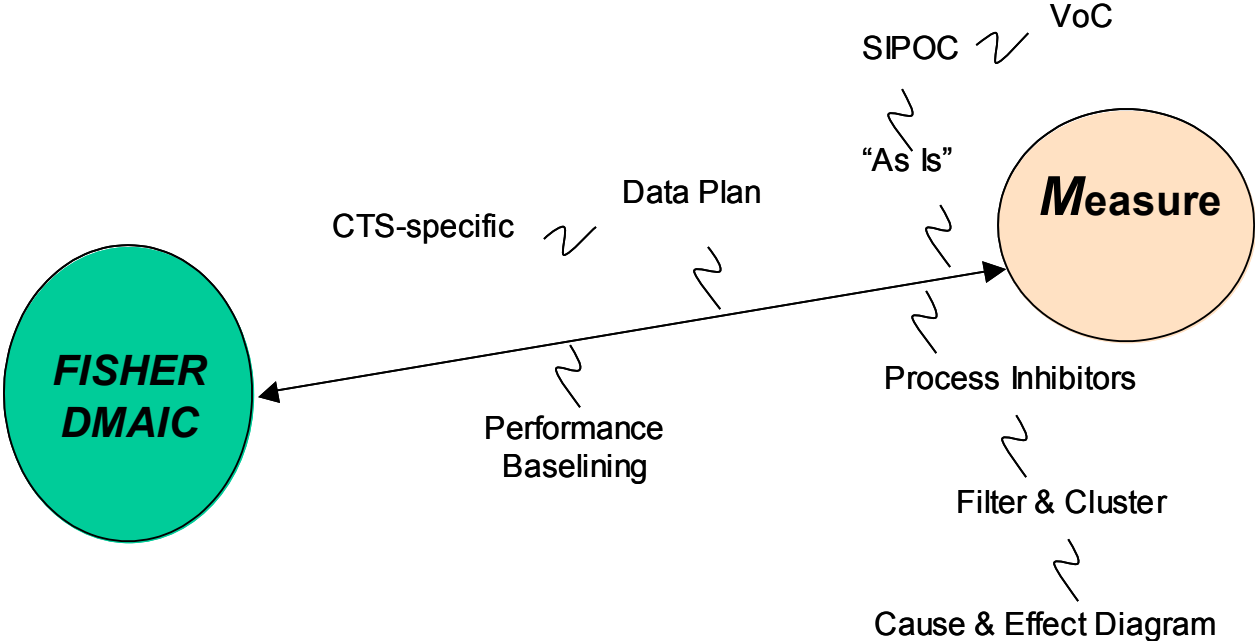
CTS TREE

ROOM 4	
RELATIONSHIP KEY	
Strong	9
Medium	3
Weak	1

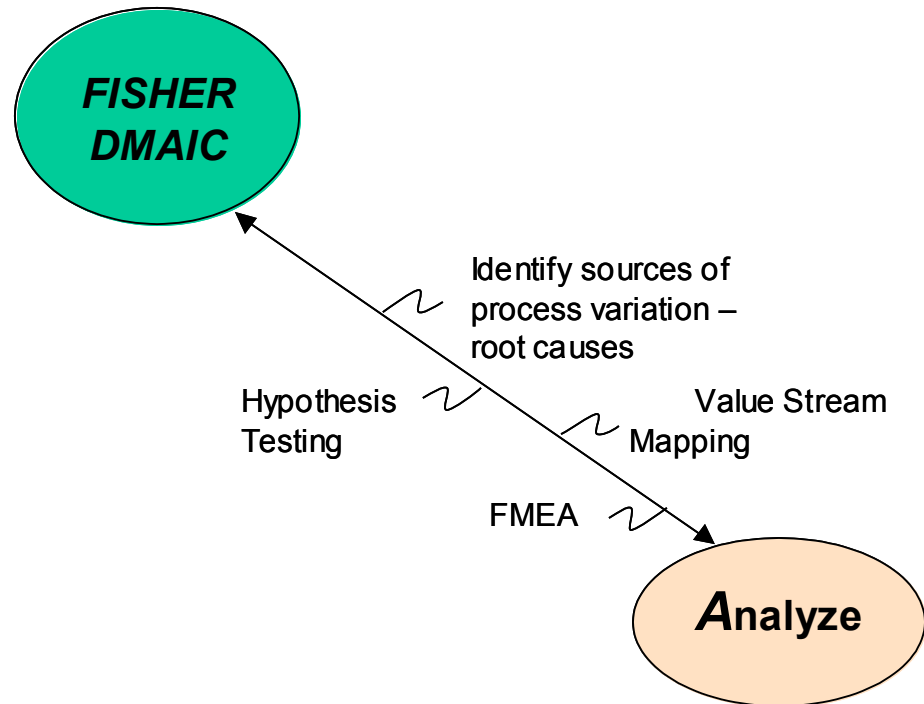
Customers' Desired Outcomes		PROCESS PREDICTIVE MEASURES =CTS'S													
		Correct product rece	Product received on	Product received in f	Product fully docume	ETC	ETC	ETC							
Primary Want	Secondary Want														
	Total Order Fulfilment	x	x												
	On-Time delivery														
	In-full delivery			x											
Reducing Lead Times	Total order accuracy			x	x										
	ETC	RECEIVING													
Total Compliance	ETC														
TARGETS	Measure Description	x%Delivery Accuracy	x%Adherence to Delivery Plan	x%%-age Volume Fulfilment	x%%-age Incomplete										
	Numeric Target														



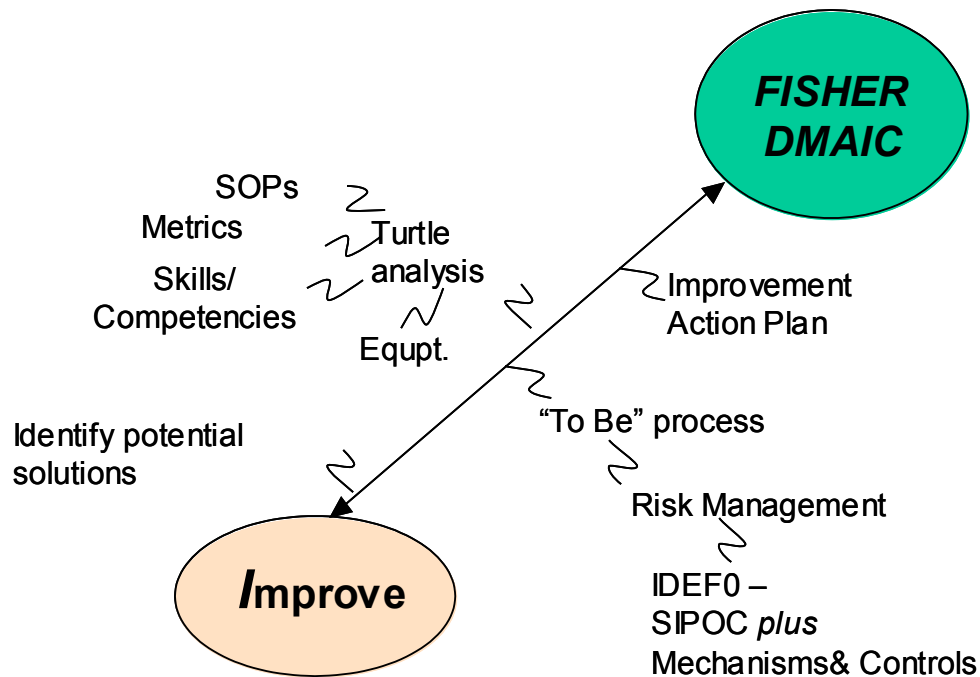
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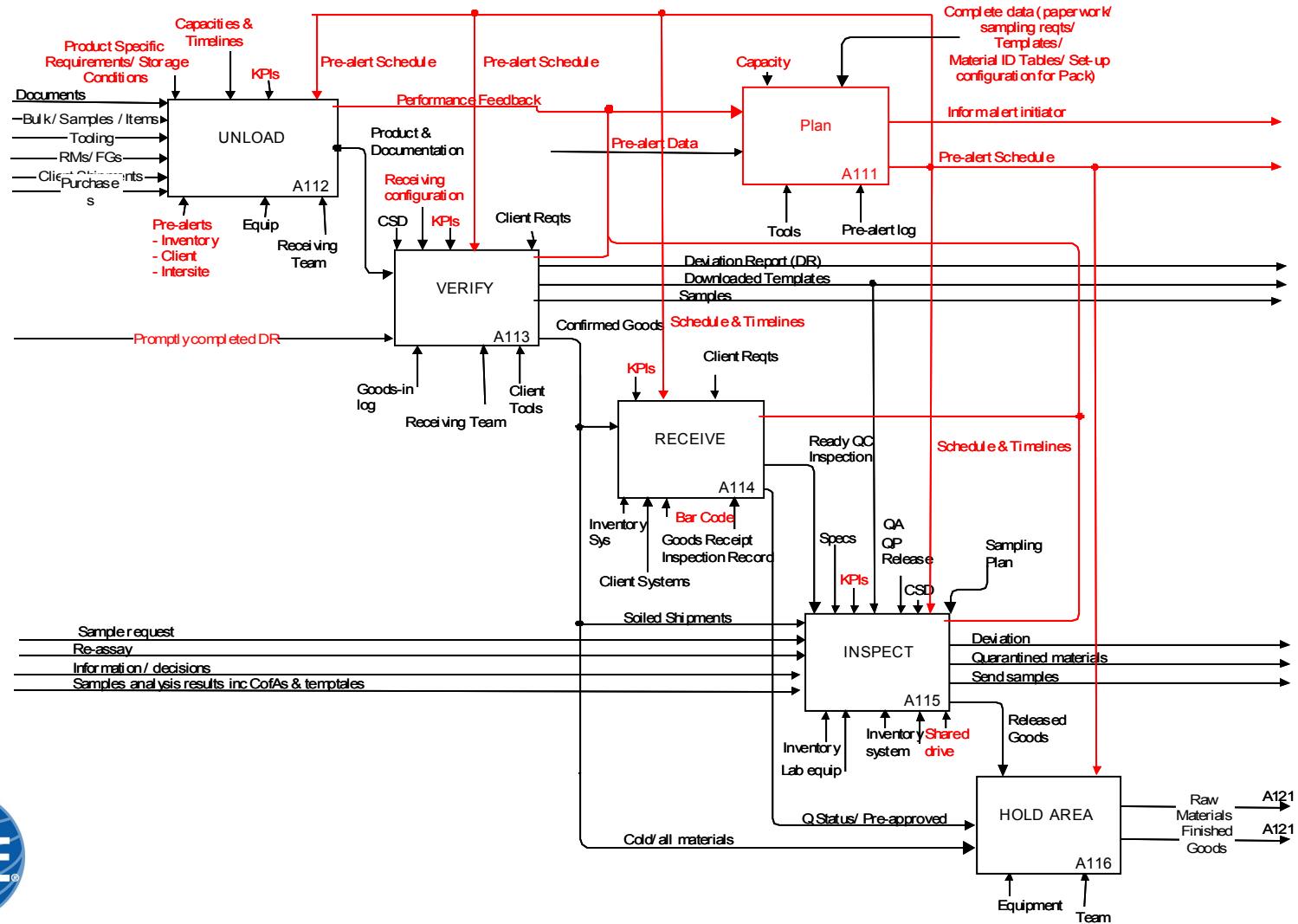
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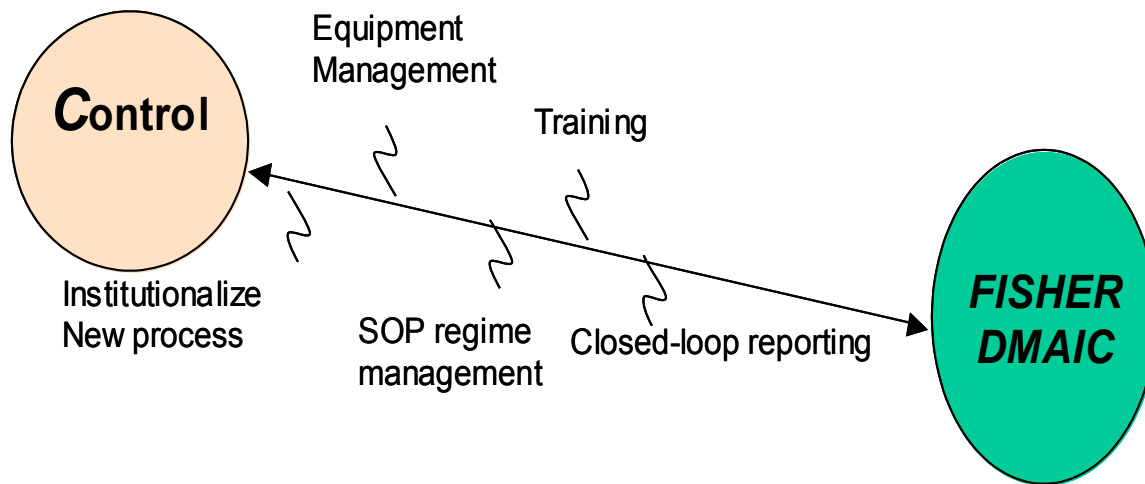
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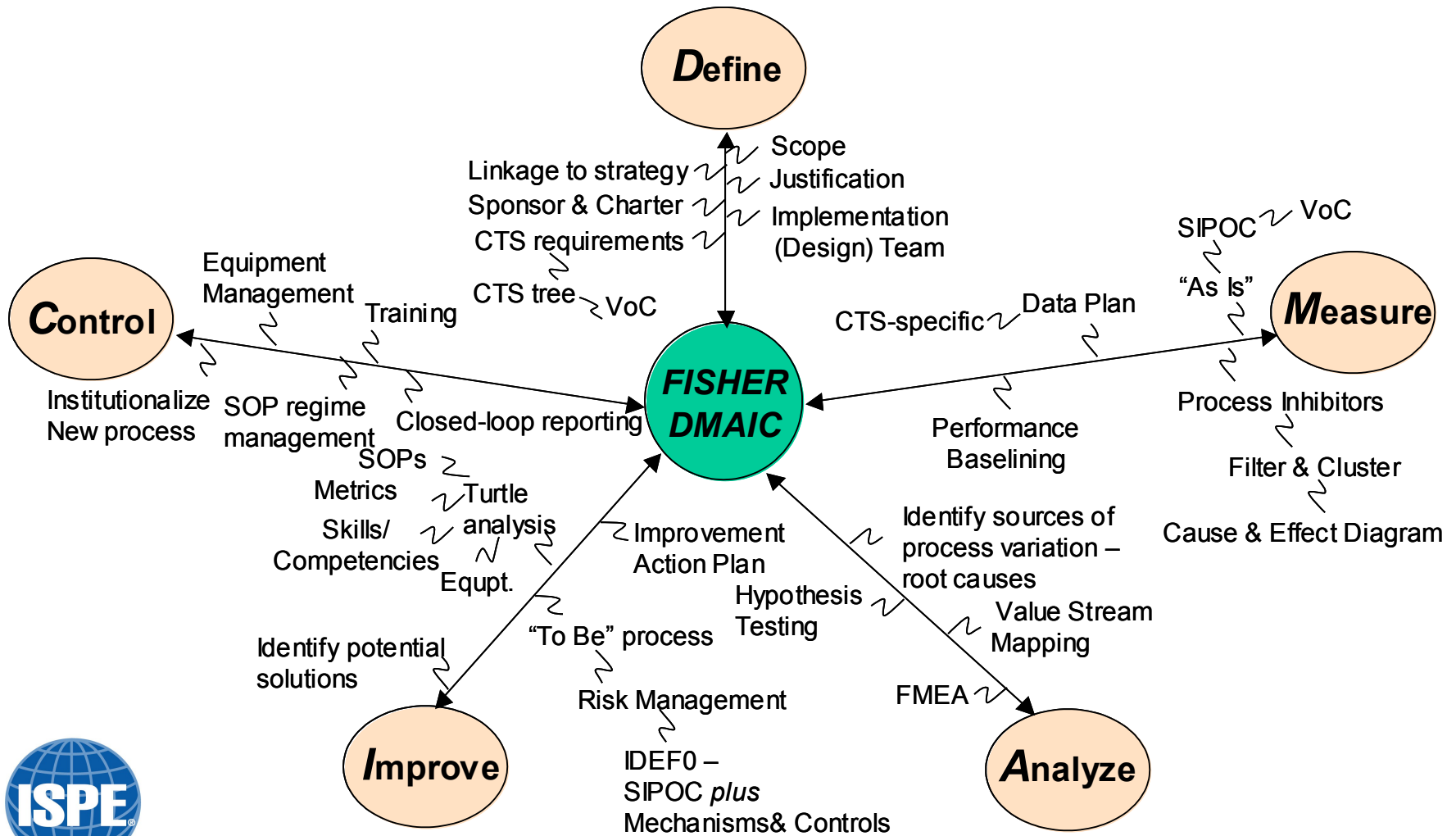
FISHER PROCESS – RECEIVING ‘TO BE’



APPLICATION OF DMAIC AT FISHER CLINICAL



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ROLES & RESPONSIBILITIES

SI Associates

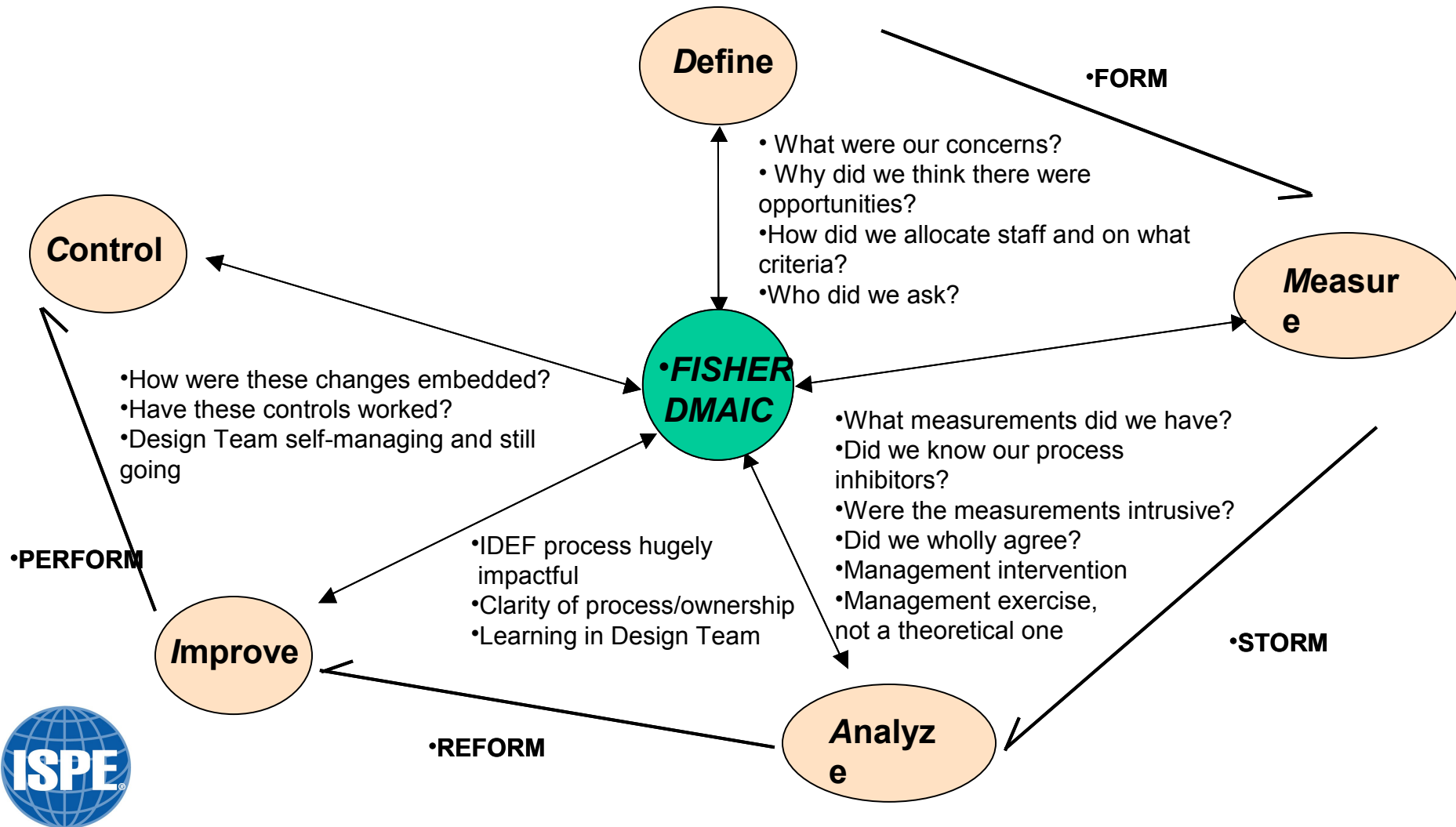
- Become part of the project team
- Apply a robust, structured, proven methodology
- Challenge, even provoke
- Build a sense of “team”, basis of ownership of improved process
- Apply best practice from within, and outwith, the sector
- Form new paradigm for practices and behaviors
- Ensure skills transfer to FCS to enable continuous improvement

Fisher Clinical Services

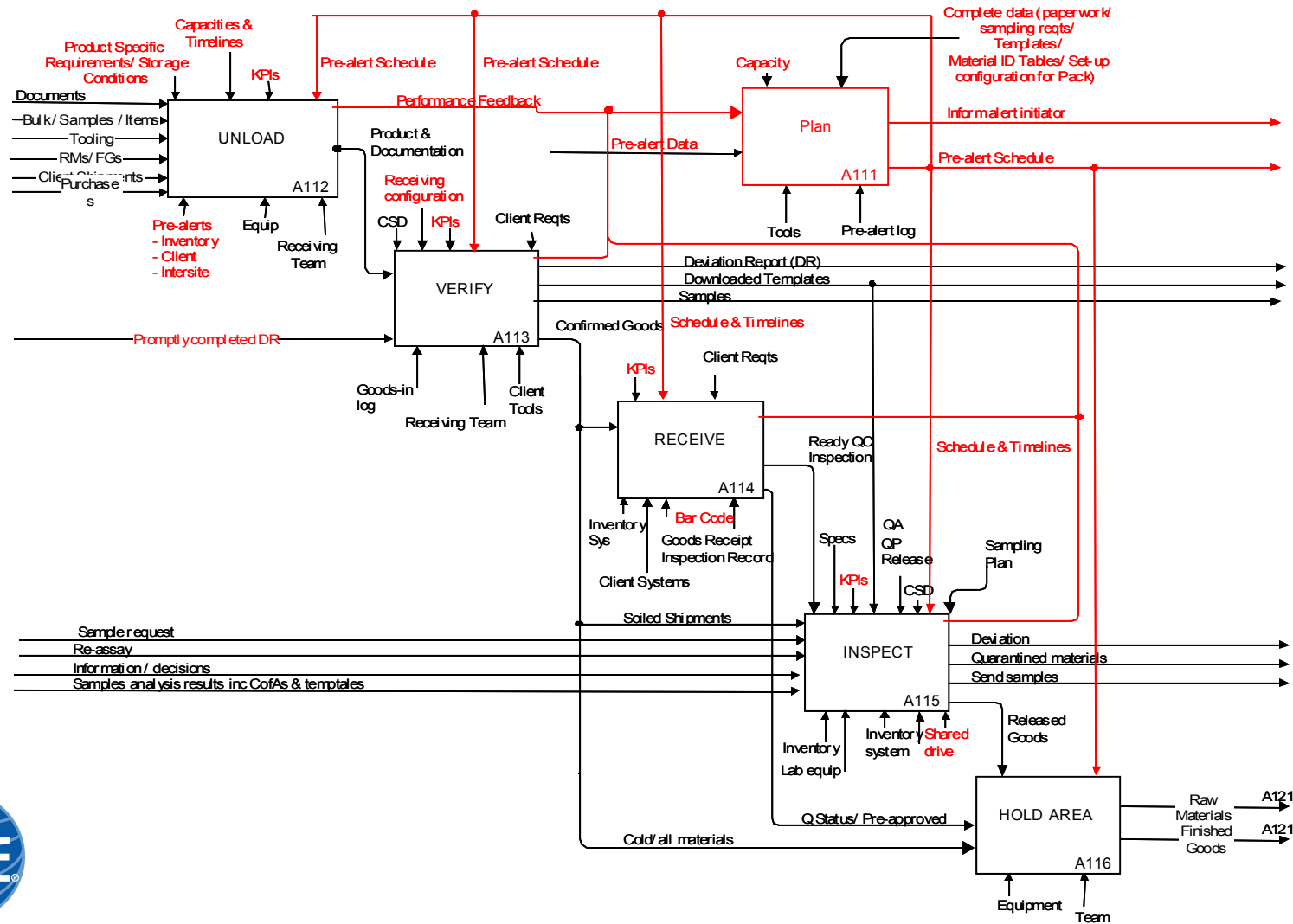
- Outline the strategy.
- Select the Design Team as a cross slice over the business area.
- Oversee the design process with appropriate Executive intervention.
- Ensure that the “To Be” model is firmly owned at first by the Design Team.
- Hold accountable implementing Managers.
- Use KPI’s at top level to monitor continuous improvement.



APPLICATION OF DMAIC AT FISHER CLINICAL



FISHER PROCESS – RECEIVING “TO BE”

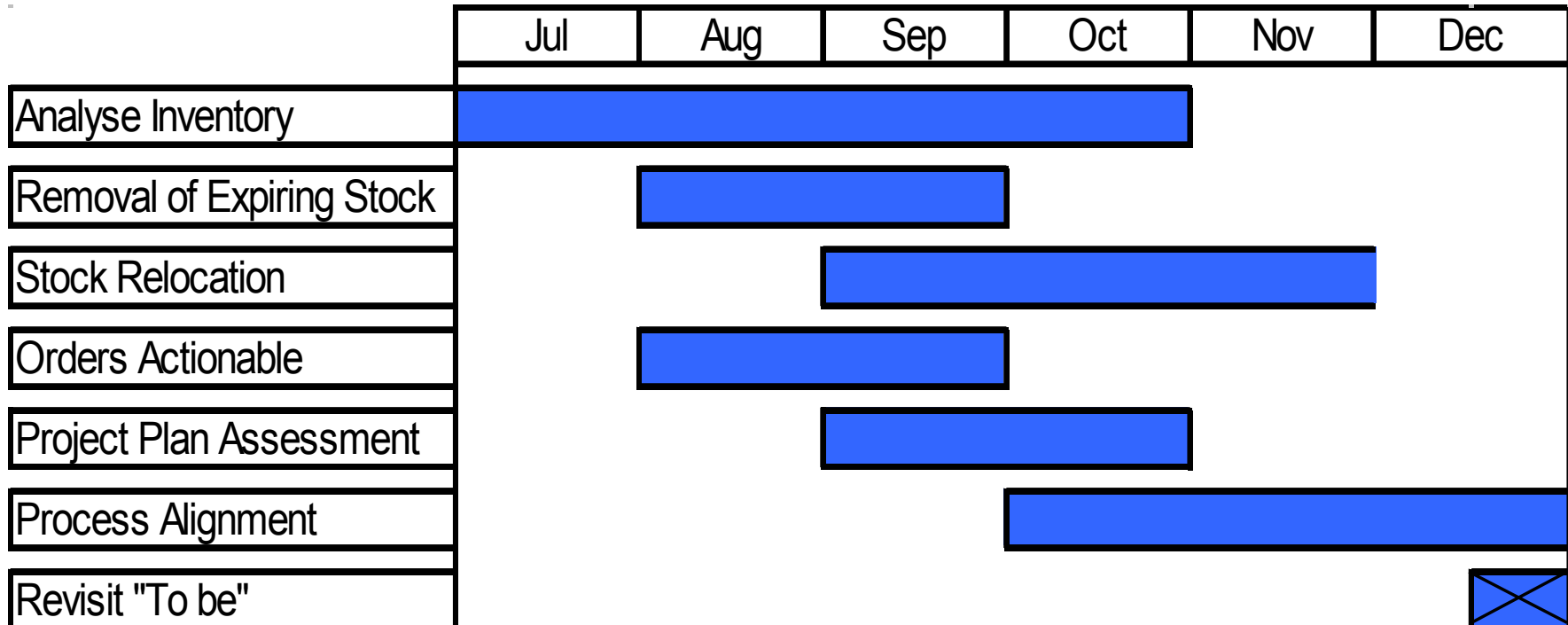


KEY PROJECTS AND OBJECTIVES

1. Ensure a forward look of all incoming goods for all products
 - Balance organizational capabilities with demands
 - Ensure quality built into the process from the start of the process
2. Analyze and Clean Up Inventory
 - Provide additional space in the existing facilities with minimal investment
 - Ensure picking is effective for supplying Customer orders
3. Orders to the Warehouse are Actionable
 - Ensure all work the warehouse does will be value added
 - Ensure orders are not “thrown over the wall” and forgotten
- Ensure all Project Plans are set up correctly and managed
 - Operations can be executed without any delay
 - Customer expectations and requirements are clearly defined and understood throughout the entire organization
5. Realign Operations along processes
 - Ensure organizational structure supports Operations
 - Allow balancing of resources to actual demand while keeping process in control



KEY PROJECTS PHASING



PROJECT OUTCOMES

Projects	Start	Now	Capacity
1. Forward Looking of all incoming Goods			
Goods Received and Booked In (2 days)	46%	87%	1.9
Goods QA Released (2 days)	46%	85%	1.8
Documentation Issues	17%	8%	2.1
2. Analyse and Clean Up Inventory			
Expired Stock	35%	84%	8.7
Effective Picking Automated	56%	86%	1.5
Inventory Management (Destruction expired stock)	49%	83%	1.7
3. Orders Actionable to the Warehouse			
First Time Pick	53%	98%	1.8
Orders shipped by line items	45%	95%	2.1
Scanned Stock	17%	65%	3.8
4. Ensure all Project Plans are set up			
Project initiation checklist Audit	0%	65%	



LEARNING POINTS

- **Unambiguous senior sponsorship**
- **‘Diagonal Slice’ the Design Team**
- **Needs a structured, robust methodology**
- **Must be customer-centric**
- **Translation of VoC and Customer Wants into the ‘To Be’ process design must be explicit – establishment of CTS parameters is pivotal**
- **Must get down to detail - be prepared to get hands dirty**
- **Process must:**
 - Generate involvement
 - Enable detail of Change to be both managed (IDEF0; turtles) and institutionalized
 - Transfer change process skills to, and develop competencies within, client

