WRITING OBJECTIVE PROBLEM STATEMENTS

Manufacturers Alliance
Providing Training & Education Peer to Peer

GUEST SPEAKER

- ✓ Define an objective problem statement
- ✓ Outline the process used to write one

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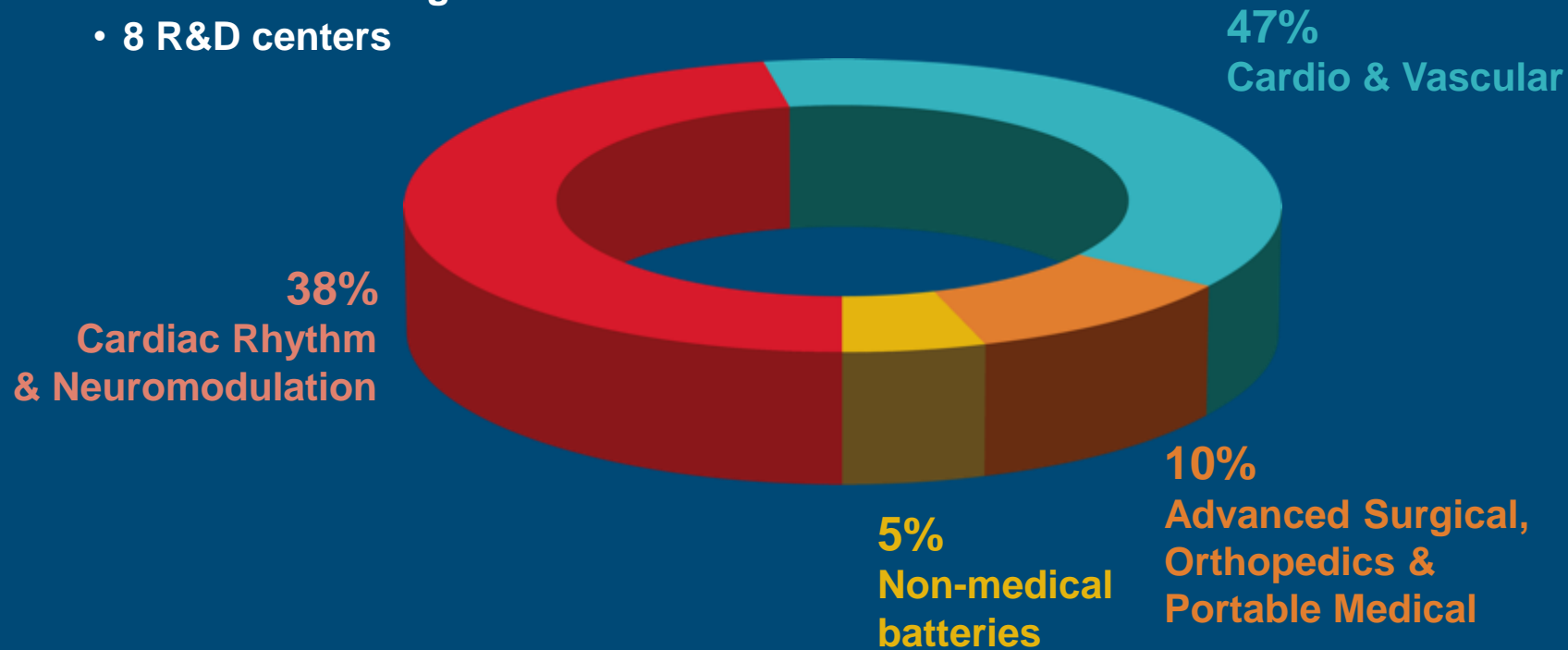Integer

About Me

Integer Holding Corporation

We're a diversified medical technologies company

- **$1.2B in revenue**
- **8,200+ associates**
- **23 locations worldwide**
- **13 manufacturing sites**
- **8 R&D centers**

47%
Cardio & Vascular

38%
**Cardiac Rhythm
& Neuromodulation**

10%
**Advanced Surgical,
Orthopedics &
Portable Medical**

5%
**Non-medical
batteries**

Integer

A global presence with world-class facilities

United States
Alden, NY
Beaverton, OR
Brooklyn Park, MN
Chaska, MN
Clarence, NY
El Paso, TX
Minneapolis, MN
Plano, TX*
Plymouth, MN
Quakertown, PA
Raynham, MA
Salem, VA
Trenton, GA
Wilmington, MA

Mexico
Juarez
Tijuana (North & South)

Ireland
Galway
New Ross

Switzerland
Biel/Bienne

Israel
Netanya

Malaysia
Penang

Uruguay
Montevideo

*Company headquarters

Our vision: To enhance the lives of patients worldwide by being our customers' partner of choice for innovative medical technologies and services.

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Agenda / Plan

❖ Define what Objective problem statement is with some examples

❖ Walk you through our approach to arriving at objective problem statements

- Problem Statement – Optiseal Case Study

- Lean Diagnosis principles

- Business Process Hierarchy

- Importance of Honoring the Business Process Hierarchy

- Results

- Summary

What is an Objective Problem Statement

An objective problem statement is a concise description of the problem or issues a project seeks to address. The problem statement identifies the current state, the desired future state and any gaps between the two.   *- Kush, Max (June 2015). "The Statement Problem". Quality Progress. 48 (6)*
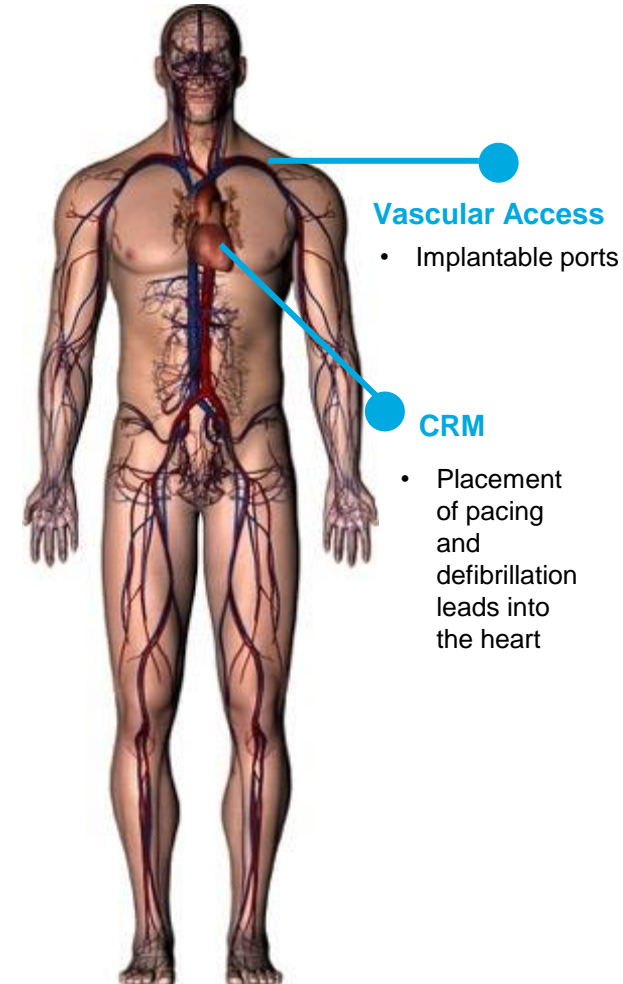
Example of bad problem statement:

The change request used in our manufacturing system should aim at processing changes quickly and efficiently so that our customer service team do not miss client orders as often as they do.

Optiseal Value Stream

Initial Problem Statement:

Pockets of improvements are going on the our Optiseal Value Stream. These improvements are not prioritized or integrated. Demand is projected to double or potentially triple. The manufacturing cost per kit is $X higher than that at our sister site.

Vascular Access
- Implantable ports

CRM
- Placement of pacing and defibrillation leads into the heart

Clarify Problem & Identify Root Causes
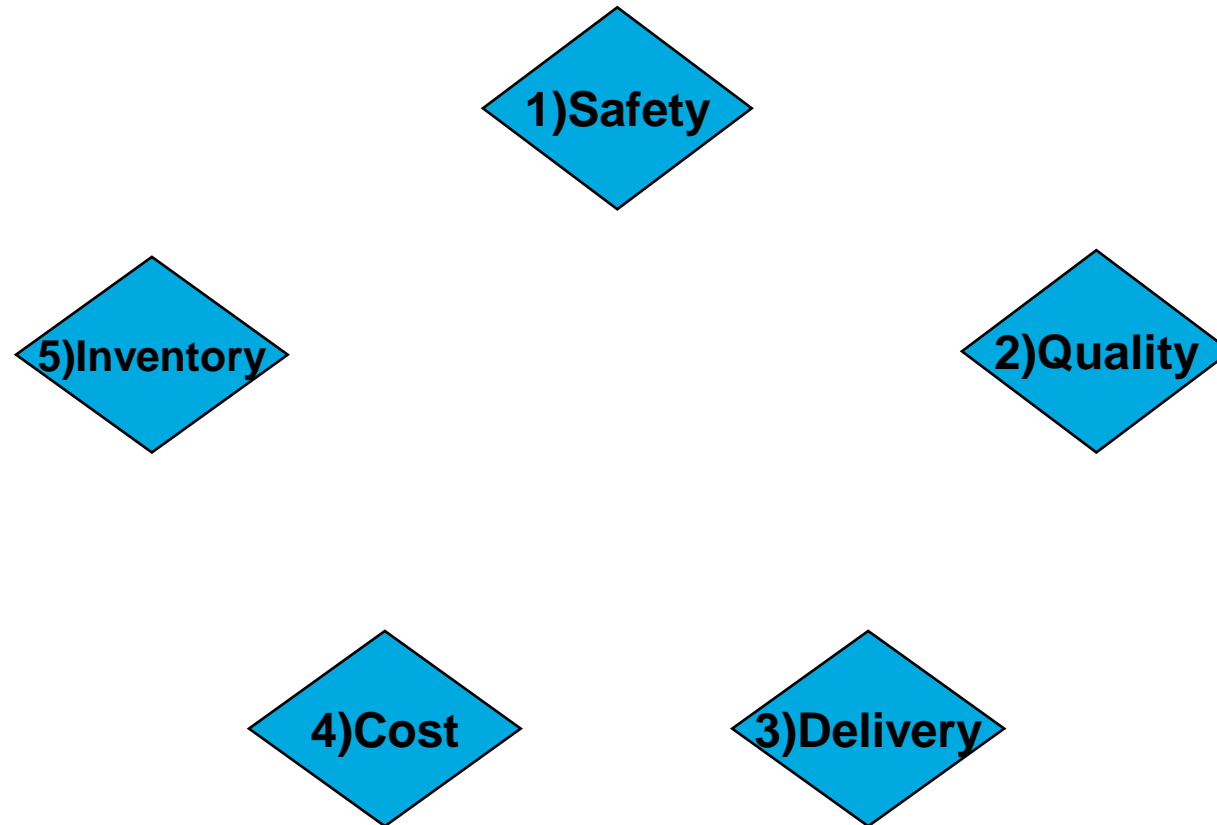## (Lean Diagnosis Approach)

1. Right part, Right time, Right volume

2. Lead Times & Inventory Analysis

3. Built-in Quality Analysis

4. Capacity Utilization

5. Resource Utilization

Redacted data.

Goal Setting
(Business Priority Hierarchy)

Importance of Honoring Business Process Hierarchy

Scenario 1

- Safety is stable, Employee morale is good

- Customer complaint rates are okay but internal scrap is 12% and rework is about 30-man hours and unpredictable

- Delivery – capacity on 3 equipment are 25% lower than required

- Costs are high

| Cost |
| Delivery |
| Quality |
| Safety |

A focus on Delivery could result in:
- Investing in 3 new equipment or adding overtime
- Stressing an already taxed cost system
- Result in quality escapes, unhappy customer and worse cost picture

Greatbatch Medical   Lake Region MEDICAL   ELECTROCHEM

Importance of Honoring Business Process Hierarchy

Scenario 2

- Costs are 20% high

- OTD is 84%

- Caused 2 major recalls last year

- 35 OSHA Recordables, 2 employees hospitalized, 40% turnover

- Inventory Turns = 2

Cost
Delivery
Quality
Safety

A focus on Quality would:
- Reduce scrap and rework
- Increase Output
- Reduce some Cost
- But sooner or later, there will no employees to work for the organization
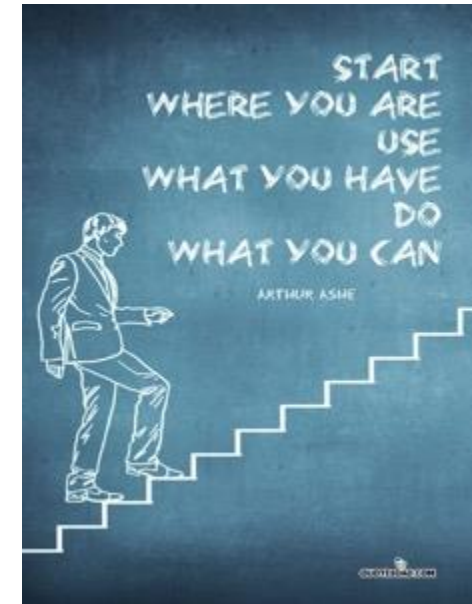
So what is important to this value stream?

- Concise description of the problem or issues a project seeks to address.

  - Identified Quality as the biggest opportunity to address-Customer Complaints

- The problem statement identifies the current state,

  - CCR= 2.3%

- the desired future state and any

  - CCR< 0.025%

- Gap between the two

Final Problem Statement: CCR is currently 2.3%. The desired CCR is 0.025%.

Summary

- Start with what you have

- Data is required to write Objective statements

- Prioritizing objective data is equally if not more important

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