



for a safer world!



TRANSFORMATION IN A WORLD CLASS MANUFACTURING

“WCM olympia”

BASED ON LEAN MANAGEMENT PRINCIPLES

BRIEF PRESENTATION - FRAME

LEAN FOR OLYMPIA means

Lean

“A team based approach to identifying and eliminating waste (non-value-adding activities) through continuous improvement that shortens the time line between the customer order and the shipment in pursuit of **perfection**.

This approach started as WCM⁽¹⁾ and to be continued as OOS⁽²⁾ ”

WCM⁽¹⁾ : world class manufacturing

OOS⁽²⁾ : olympia operating system system

THE NEED TO BE *WCM*

1. On-Time delivery
2. Improved response
3. Reduced inventory
4. Improved quality
5. Improved workflow
6. Achievement of flexibility
7. Culture change
8. Delegation of accountability
9. Better use of plant
10. Better use of skilled labor
11. Job satisfaction
12. Information Flow



OTHER SIDE BENEFITS BECOMING **WCM**



1. Simplified Scheduling
2. Less Transactions
3. Less Variation, “More” Predictability
4. Forecasts Become More Accurate
5. Quicker Response To Design Changes
6. Quicker Market Response
7. Problems Are Visible
8. Product Team Organization
9. Eliminates Departmental Conflicts
10. Facilitates Cross Training

7 MAIN DRIVERS OF

WCM



1. People Development
2. Business Results Quality
3. Delivery
4. Cost
5. Financial Impact
6. Business Results
7. Competitive Impact



13 KEY PROCESS SECTORS OF *WCM*

1. Commitment to Continuous Improvement
2. Performance Results
3. Management Systems and Planning
4. HS&E Management
5. New Product Development
6. Process Quality Management
7. Quality Systems
8. Manufacturing Capability & Improvement Process
9. Sub tier Relationships and Control
10. Financial and Material Control
11. Sales Inventory & Operations Planning (SIOP)
12. Lean Manufacturing
13. Process Control Management

KEY PROCESS SECTORS & DRIVERS

1. People Development

Respect for the individual and employee involvement requires that an organization not only mitigate risks, but proactively protect the health and safety of its employees and the community. Ongoing improvement in the conditions of the workplace, reduced consumption of resources, and protecting the environment are all part of these values. Measurement categories include KPS's measured with KPI's for :

1. Commitment to Continuous Improvement

4. HS&E Management

2. Business Results Quality

The objective of Quality and quality improvement is to ensure that no errors — whether in the form of materials or information — are passed to a downstream process or to the external customer, and that in-process defects are continually reduced. The goals are zero defects and continually improved stability throughout the value stream.

Quality measurements should be developed and regularly monitored by management in the following KPS's categories measured with KPI's for:

6. Process Quality Management

7. Quality Systems



KEY PROCESS SECTORS & DRIVERS

3. Delivery

The objective of delivery and service improvement — Flexible Responsiveness — is to ensure that customers are getting what they need in the time, quantity, and manner necessary, and that flexibility exists within the organization to adjust to changing customer needs. Measurements should be regularly monitored by management in the following KPS's categories measured with KPI's for:

11. Sales Inventory & Operations Planning (SIOP)

9. Sub tier Relationships and Control

4. Cost

There is clearly an objective of continuous improvement focused on reducing cost structure, resulting from careful changes in product and process design, and waste elimination effort. Organizations must be vigilant in assuring that “cost cutting” does not erupt into senseless elimination of essential process that support stability, standardized work, or quality, such as maintenance, critical spare parts, training, employee development, qualified materials, etc. Rather, the focus is on carefully examining customer need at the conceptual level, enabling the identification and elimination of wastes.

Categories of importance include the following KPS's measured with KPI's for:

8. Manufacturing Capability & Improvement Process



KEY PROCESS SECTORS & DRIVERS

5. Financial Impact



Financial impact is a function of consistent, predictable growth in cash flows over time compared to risk. Growth is therefore an important measure, along with revenue, market share, cash flow, and long-term profitability. All these measures are impacted by lean: cost and productivity, for example, are tied directly to the elimination of waste. Consistency in processes leads to predictability which leads to lower perceived risks, which improves the flow of value to all stakeholders, including customers, employees, investors, and community.

Categories of importance include the following KPS's measured with KPI's for :

10. Financial and Material Control

2. Performance Results



KEY PROCESS SECTORS & DRIVERS

- 6. Business Results
- 7. Competitive Impact



Competitive impact cannot be completely measured through traditional financial measures. Many of the capabilities of formidable competitors will not show up in the financials immediately.

For example, shorter lead time provides substantial competitive advantage. However, the financial impact of this advantage will not be fully realized until the organization can leverage that advantage into increased market share, higher pricing, and deeper customer partnerships. Customer satisfaction has a similar competitive impact.

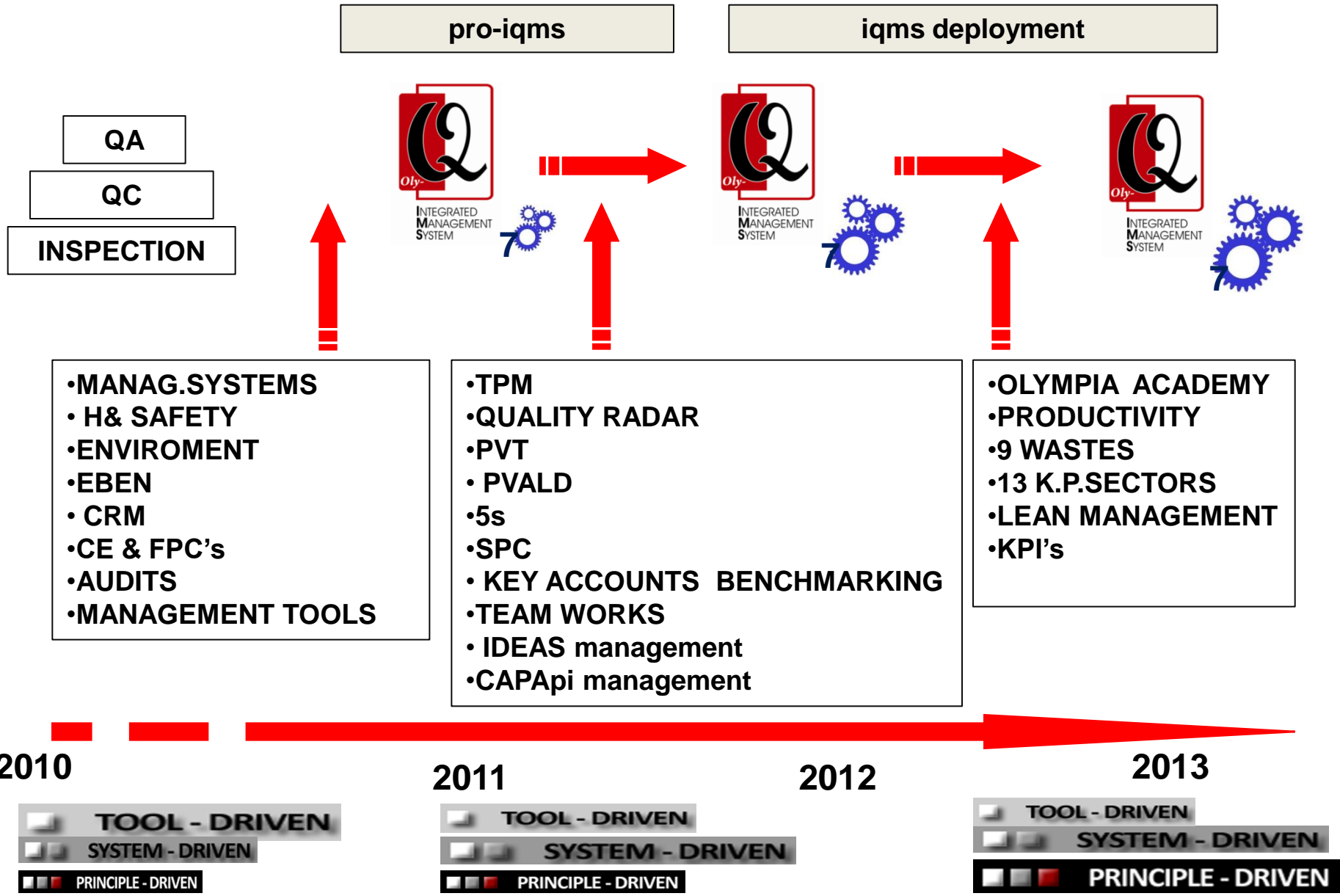
Categories of importance include the following KPS's measured with KPI's for :

- 3. Management Systems and Planning***
- 12. Lean Manufacturing***
- 13. Process Control Management***
- 5. Support to New Product Development***

KPI's BASED ON "9 WASTES"

- I-1 TRANSPORTATION WASTES(ΜΕΤΑΦΟΡΑ)
- I-2 INVENTORY WASTES (ΑΠΟΘΕΜΑ)
- I-3 MOTION WASTES (ΚΙΝΗΣΕΙΣ)
- I-4 WAITING WASTES (ΑΝΑΜΟΝΕΣ)
- I-5 OVERPRODUCTION WASTES(ΥΠΕΡΠΑΡΑΓΩΓΗ)
- I-6 OVERPROCESSING WASTES (ΥΠΕΡΕΠΕΞ/ΣΙΑ)
- I-7 DEFECTS WASTES (ΕΛΛΑΤΩΜΑΤΙΚΑ)
- I-8 TALENT WASTES (ΑΝΘΡΩΠΙΝΟ ΔΥΝΑΜΙΚΟ)
- I-9 ENERGYWASTES (ΕΝΕΡΓΕΙΑΚΑ)

WCM DEPLOYMENT 2010-2013



WCM DEPLOYMENT 2013-2018



Building On Lean Foundation...

lean
Tool Based

- Experts lead the process
- Project focused improvement
- Informal best practice sharing



OOS
System Based

- Leaders own the process – coach teams
- Continuous improvement (Kaizen)
- Institutionalized knowledge sharing

2014

2015

2016

2017

