OPERATIONAL EXCELLENCE IN YOUR OFFICE: HOW TO ACHIEVE AUTONOMOUS VALUE STREAM FLOW

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This session is based on the two new books released this year on OpEx in the office
IMPROVING FLOW IN OFFICES
CONTINUOUS IMPROVEMENT

Companies have done continuous improvement activities for years...
CONTINUOUS IMPROVEMENT

Pareto
CONTINUOUS IMPROVEMENT

Impact

Effort
CONTINUOUS IMPROVEMENT
THE LEAN JOURNEY

Sustain

Improve

Sustain

Improve

Sustain

Improve

Sustain
OPERATIONAL EXCELLENCE

Mature lean company

LEVEL OF IMPROVEMENT

TIME IN YEARS
DEFINING OPERATIONAL EXCELLENCE

“Each and every employee can see the flow of value to the customer, and fix that flow before it breaks down.”

Kevin J. Duggan
THE EIGHT PRINCIPLES OF OPERATIONAL EXCELLENCE

1. Design lean value streams.
2. Make lean value streams flow.
3. Make flow visual.
4. Create standard work for flow.
5. Make abnormal flow visual.
6. Create standard work for abnormal flow.
7. Have employees in the flow improve the flow.
8. Perform offense activities.
DESIGN LEAN VALUE STREAMS:
OFFICE FLOW

• Eight guidelines for end-to-end value stream design.
• Ten guidelines for the mixed model pacemaker.
• Six guidelines for shared resource flow.
• Nine guidelines for office flow.
• Seven guidelines for supply chain flow.
THINK ABOUT IT...

• Who is the customer for the activities that happen in an office?
• How much cost is generated in the office?
• What is value to the customer in an office?
• Can you see the rate of customer demand?
• How often does the customer want something done?
• Does the office workflow from process to process?
• Was the current office layout designed to support flow?
SERVICE FAMILY DEFINITION

- A service family is a group of activities or services that follow similar processing steps.
- It is a critical first step in determining which services can follow the same flow.
SERVICE FAMILY MATRIX

A service family matrix containing many services and activities
THE 9 GUIDELINES FOR THE OFFICE

- Takt capability
- Continuous flow
- FIFO
- Workflow cycles
- Integration events
- Standard work
- Single-point initialization
- Pitch (visual management timeframe)
- Changes in demand
1) TAKT CAPABILITY

- Takt time traditionally means the customer demand rate

\[
\text{TAKT} = \frac{\text{Effective Working Time per Time Period}}{\text{Customer Requirement per Time Period}}
\]

- Takt Capability is customer demand in terms of volume (how much) and type (the mix) of service
TAKT CAPABILITY

- Customer demand can vary every interval
- We need to ask "WHY"
MULTIPLE TAKT CAPABILITIES

Current Demand Profile

- Takt Capability 3
- Takt Capability 2
- Takt Capability 1
2) CONTINUOUS FLOW

Batch Processing – 1 minute per piece
2) CONTINUOUS FLOW

Continuous Flow – Make One Move One

- Estimating Processing Cell
  - Estimate
  - Engineering Verify
  - Purchasing Check
  - Sales Review
CONTINUOUS FLOW

- Work elements must be defined at the activity level for each activity within the value stream.
- These activities are then balanced to takt for a specific value stream to meet demand.
CONTINUOUS FLOW

Work Balance Chart (Current State)

Work Balance Chart (Future State)
CONTINUOUS FLOW: INFORMATION PROCESSING CELL

Review Final Interview Results

1st

2nd

3rd

Create Offer Letter

Configure Compensation Package

Mail
3) FIFO – FIRST IN FIRST OUT

FIFO is similar to ping pong balls going through a pipe. They always come out in the same order, and the pipe is only so big. Once you fill it, the supplying process stops.
MULTIPLE FIFO LANES

FIFO lane on wall in Request for Quote (RFQ) area in Sales
4) WORKFLOW CYCLES

What is a workflow cycle?

• A work-flow cycle refers to the rate at which work moves or flows within or between different work areas or departments along a specific pathway.

• Additionally, these cycles should occur at prescribed time intervals to ensure consistent, predictable results at both the process and value stream levels.
Global sales sends in requests for quotes

Max = 2 days

GTT = 2 days

M/W/F 1 p.m. - 4 p.m.
WORKFLOW CYCLES

Establish intervals at which information will flow.

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5) INTEGRATION EVENTS

• **Integration events** pull work forward when information comes from several different areas.
• Integration events have matching outputs and inputs.
• Knowledge is captured and retained at integration events.
• Integration events are not status meetings, and no decisions are made.
INTEGRATION EVENT
### LEVELS OF STANDARD WORK

- **Activity or process level**
- **Flow level**

<table>
<thead>
<tr>
<th>Order Ent.</th>
<th>Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1: FIFO</td>
<td>1: FIFO</td>
</tr>
<tr>
<td>PT = 10 min.</td>
<td>PT = 55 min.</td>
</tr>
<tr>
<td>C/A = 95%</td>
<td>C/A = 95%</td>
</tr>
</tbody>
</table>

#### Standard Work

1. 
2. 
3. 
4. 

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7) SINGLE-POINT INITIALIZATION

- How do each of the processes along the value stream know what to work on next?
- Who sets the priority?
- Is the priority based on supporting the value stream flow?
- If everything flowed through at a guaranteed time, would there be a need for priorities?
SINGLE-POINT INITIALIZATION

Initialization Point

Order Entry

Flow
Original sequence of work is preserved

Estimating Processing Cell

Flow
Original sequence of work is preserved

Flow
Original sequence of work is preserved

Flow
Original sequence of work is preserved

Customer review occurs outside of the value stream

Additional sequencing point as work returns from the customer to the value stream

Procurement

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SINGLE-POINT INITIALIZATION

• Initialize the service at only one point (usually upstream).
• Work should flow in one-piece continuous flow or FIFO.
• Priorities would be determined either by FIFO or workflow cycles (reduces scatter and handoffs).
8) PITCH – VISUAL TIMEFRAME

Pitch is a set time for everyone to know if the service is on time.

- 1 week
- 1 day
- 1 shift
- 1 hour
- 1 Pitch
- 1 takt
**PITCH – VISUAL TIMEFRAME**

<table>
<thead>
<tr>
<th></th>
<th>7 am</th>
<th>8 am</th>
<th>9 am</th>
<th>10 am</th>
<th>11 am</th>
<th>noon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orders</td>
<td></td>
<td></td>
<td></td>
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</table>

It’s 8:30 am. How are we doing?
9) CHANGES IN DEMAND

What happens when the customer demand exceeds the capability of the lean value stream?
CHANGES IN DEMAND

- Customer demand can vary every interval.
- We need to ask "WHY?"
- If the demand is truly variable, what can we do to satisfy the customer?

Establish a Takt Capability Level
(Satisfies ~ 80% of the conditions)
CHANGES IN DEMAND

Go To Plan “B”

Inbox
CHANGES IN DEMAND

• We need a Plan ‘B’
• Plan ‘B’ would consider:
  – Bringing in another person?
  – Working longer hours?
  – Moving work to another department?
  – Using temporary help?
  – Instituting a second shift?
  – Your ideas?
THE 9 GUIDELINES FOR THE OFFICE

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RAPID PARTS, INC. FUTURE STATE MAP – QUOTING / ESTIMATING PROCESS

Customers ➔ Sales Database ➔ Create File ➔ Design Pkg. ➔ Log File ➔ Email

Takt = 60 min.*
Pitch = 60 min.

Request Form → FIFO → Estimating Cell

Max = 1.5 days

P/T = 15 min.
1 CSR

P/T = 170 min.
PC/T = 55 min.
Op = 3

Estimating Cell → 4-Hr Work-Flow Cycle

4-Hr Work-Flow Cycle

Work Content <= 170 min

1.5 Days + 185 min
L/T
185 min.
P/T

Error-Proof & Standardize Form

Cross-Training

5S Needed

Eliminate Sales Sign-Off

Post Office

4 Estimates per Day

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• Make abnormal flow visual.
• Create standard work for abnormal flow.
• Have employees in the flow improve the flow.
• Perform offense activities.
This one-day workshop details a step-by-step methodology for leveraging traditional lean value stream flow to establish Operational Excellence in business processes.

www.instituteopex.org/events
ONLINE TRAINING

We offer a 3-hour course that expands upon content taught in this webinar.

Available at www.instituteopex.org