



Lean ITIL at Jazz Aviation

April 2014



Professional Development Summit (PDS)

Agenda

- A bit about Jazz...
- Lean at Jazz
 - Six Sigma and Continuous Improvement
 - How to know which tool to use
 - Examples from “the shop floor”
- What can you do differently tomorrow?

Jazz

Jazz



One of the world's largest regional airlines

- 79 destinations across Canada and the U.S.
- 4,730 employees
- 127 aircraft
- 800 flights each weekday (approx.)
- 30,000 passengers Carried Daily
- 9.7 million Passengers Carried Annually (2013)
- \$1.7 billion Operating Revenue (2012)



The scope of our network



Effective February 2014
Routes subject to change.

Culture of Continuous Improvement

*At Jazz we use a multidisciplinary toolkit
to drive business improvement*

This includes - Six Sigma, Lean, PMBOK®, BABOK®, Meyers Briggs

- 2002 Six Sigma – focus on quality and customer satisfaction
 - Reduce defects and improve process
- 2007 Lean - focus on flow and waste reduction
 - Remove waste and deliver value to the customer
- 2011 ICS and Continuous Improvement teams merge
 - Close alignment between IT and improvement teams

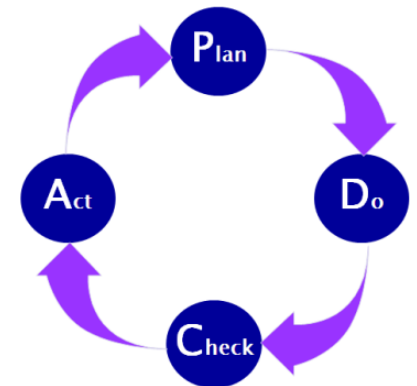


Continuous Improvement

The result:

- Customer focused
- Consistent, documented, repeatable processes
- Following demonstrated best practices
- Methodical strategy for improvement efforts

For IT -- ITIL provides the idealised end-state vision



What to use when...

<u>Lean Focus</u> Waste and Flow	<u>Basics</u> <ul style="list-style-type: none">▶ Customer value▶ Process▶ Flow▶ Pull▶ Perfection	<u>Examples of Tools Used</u> <ul style="list-style-type: none">▶ Simulation▶ Value stream maps▶ Standard work▶ Visual management▶ Takt time
<u>Six Sigma Focus</u> Variation	<u>Basics</u> <ul style="list-style-type: none">▶ Process▶ Correlation▶ Discipline (DMAIC)▶ Data	<u>Examples of Tools Used</u> <ul style="list-style-type: none">▶ Quality Function Deployment▶ Critical To Quality (CTQs)▶ Pareto▶ Regression
<u>ITIL Focus</u> BDPs Roadmap	<u>Basics</u> <ul style="list-style-type: none">▶ Customer value▶ Process repeatability▶ Service Lifecycle	<u>Examples of Tools Used</u> <ul style="list-style-type: none">▶ Workflow diagrams▶ Standard procedures▶ Customer perspective

What is Lean?

A Strategy For Maximizing Value to Customers

The relentless pursuit of the perfect process
through *waste elimination*



Lean Principles



- 1. Value... defined from the customer's view**
- 2. Value Stream... identify the process**
- 3. Flow... keep it moving left to right**
- 4. Pull... from the prior step in the process**
- 5. Perfection... always improve the process**

Lean Thinking by J. Womack

Value and the Value Stream

Value

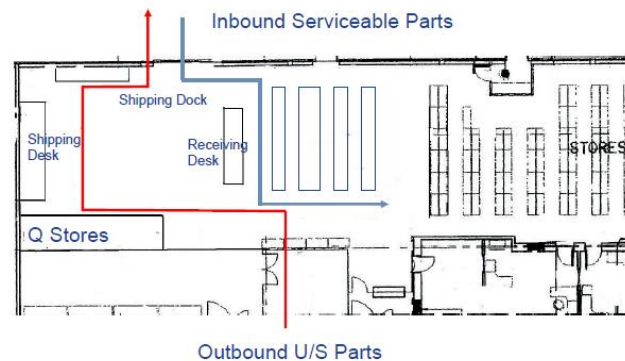
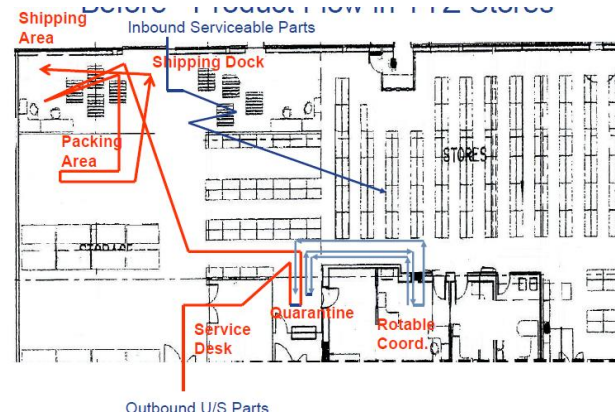
- Activity that changes the form, fit, or function of the product
- Defined by whether or not the customer is willing to pay for it
- Solutions provided at the right place and time
- Fit for purpose and fit for use

Value Stream

- In the perfect process, every step is:
 - Valuable
 - Capable
 - Available
 - Adequate
 - Flexible
- Map the process – is every action adding value to the customer?

7 Types of Waste

1. Defects
2. Over production
3. Inventory
4. Motion
5. Extra processing
6. Transportation
7. Waiting



Flow



- Move the product/transaction down the value stream
- Continuous... any stop or reverse is waste
- Flow reduces cycle time and thus waste

Gemba Walks



Black Belt on the Floor

- Introduction to a new area, opportunity to learn
- Find out what is happening on the shop floor
- Go out and “walk the process”, map it in action
- Document your observations
- Establish rapport within the group
- Engage the people closest to the process

Black Belt on the Floor



What did I learn?... Process challenges:

- **Tracking System**

- “for the Helpdesk”
- Not all teams using the tool
- Inconsistent use and disagreement

- **Customer frustration**

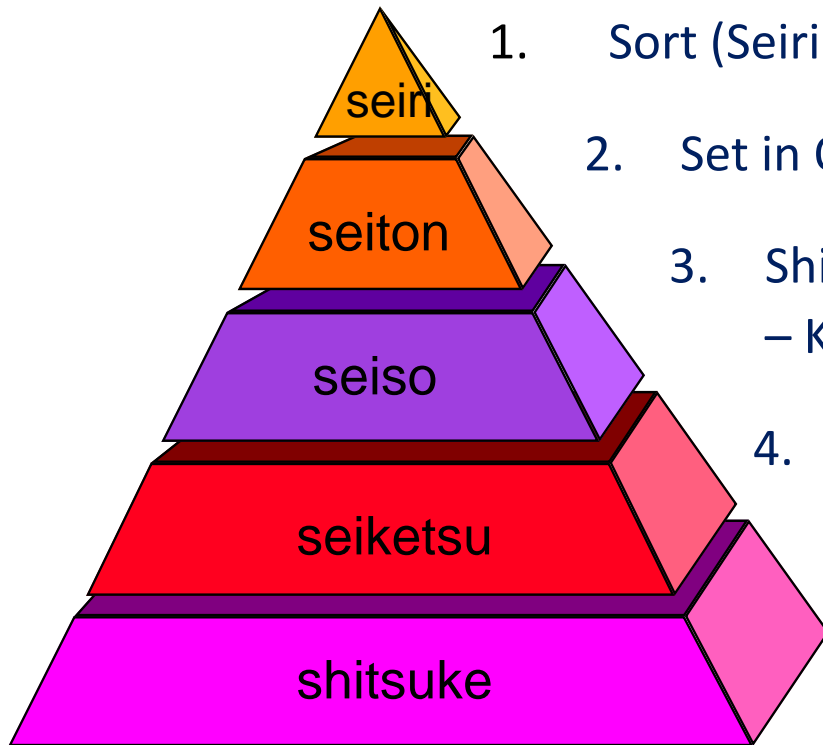
- Frustration with the Helpdesk, requests “getting lost”
- Outside HQ – tendency to engage the local rep directly

- **IT forms** – customer confusion about which form to use

BB on the Floor - Quick Wins

- **Service Desk**
 - Rebranding
 - Expand job duties to resolve straightforward incidents
- **Implement call waiting**
 - Provide options to callers, rather than just going into v-mail
- **Confirm all messages** with a personal follow-up
 - Documented communication procedures at customer touch points
- **Automation** – customer updates
 - E-mail confirmation of ticket closure
 - Email to the requestor when a change is approved

What are the 5S's?



1. Sort (Seiri) – Eliminate unneeded items
2. Set in Order (Seiton) – A place for everything
3. Shine (Sweep) (Seiso)
– Keep the workplace clean
4. Standardize (Seiketsu)
– Identify work standards
5. Sustain (Self Discipline) (Shitsuke)
– Keep it up!

What 5S does...

- Focuses on making waste visible to eliminate it
 - Organisation of the workplace
 - Standardised work procedures
- Ensure that the workplace contains only
 - what is needed
 - when it is needed
 - where it is needed
- Abnormalities are detected at-a-glance

Sort

Distinguish what is necessary

Remove what isn't needed

Leave only the essentials



Set in Order & Shine

Set -- A place for everything...

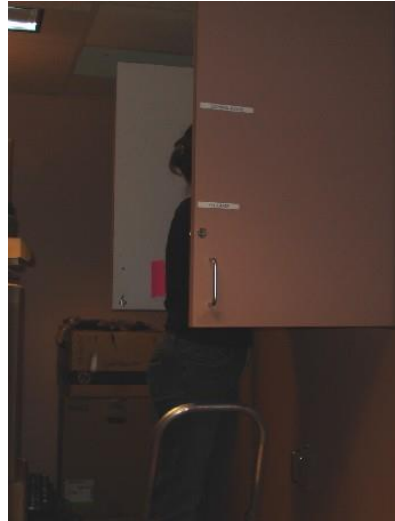
- Align items to facilitate efficient workflow

Shine -- daily clean

- Make this a visible 5-min. habit



Reconfigure PCs



Clean Cabinets



Dispose of old, out-of-service equipment

Standardize & Sustain

Standard systems put in place to highlight abnormalities
Sustain the improvements with day-to-day effort



IS Support Centre (Room B)

Bubble wrap/boxes	Risers/Laptop bags	Station Equipment Monitor cables, Cat 5 cables	Temporary Storage Video cards
Laptop bags	Dell - Mice, Keyboards, laptop power cords	Loaner laptops	Laptop hardware (spare) Spare Exec equipment Spare SOC surge protectors
Dead space	IBM keyboards & mice	Flat screen stands, SOC mice SOC power adapters Int Power Adapter kit Drives (spare)	Temporary PCs
	Trax Cables, Misc	IBM Laptops & Docking Sta's	
	Printers	Boxes, Misc. & Power cables	

Cabinets are labelled, mapped, inventory is tracked, with clear reminders

Standardize & Sustain

IS Equipment Inventory				
Item	Count	Threshold	Comments	Action
SOC Surge protector		n/a		
Monitor Cables				
Cat 5 Cables				
Loaner laptops				
Flat screen stands	2			
SOC power adapters				
SOC mice	4			
Int power adapter kit	1			
Drives (spare)				
IBM laptops				
IBM docking stations				
Power cables	many			
IBM mice	11			
IBM Keyboards	16			
Trax cables	13			
Printers	2			
Dell laptop power cords	1			
Dell mice	9			
Dell Keyboards	13			
Risers	8			
Laptop Bags				



Inventory is tracked...
 Extra equipment is signed out on loan
 Thresholds to trigger replacement purchasing

Preparing a 5S



- Start with something small
- Take photographs to track your progress
- Be positive - make it fun
- Be persistent - don't give up when the going gets tough
- Keep initiatives visible
- Recognise the team
- Maintain the momentum

7 Steps for Error Proofing

1. Map the process
2. Evaluate current procedures
3. Identify defect provoking conditions
4. Identify the root cause(s) of each type of defect
5. Determine the error-proofing device required
6. Try it
7. Measure to ensure effectiveness

It is good to do it right the first time: it is even better to make it impossible to do it wrong the first time.

Managing to Metrics

Weekly Management Reports

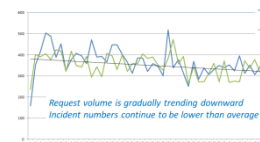
- Trending
- Stale/breaching items
- SLA performance
- First Time Fix
- Highly visible digital signage

Source YTD



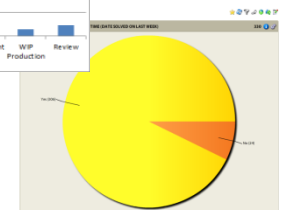
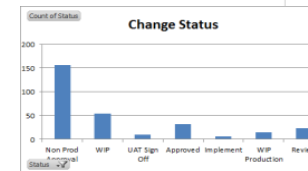
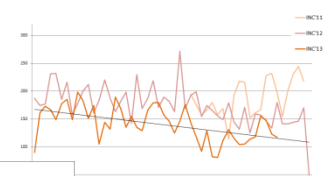
Requests	Opened	Closed	Gap
Incident	124	117	-7
Service Request	124	145	22
Standard Change	62	44	-18
Change	8	11	3
TOTAL	318	318	0

New Requests Created each Week



Request volume is gradually trending downward
Incident numbers continue to be lower than average

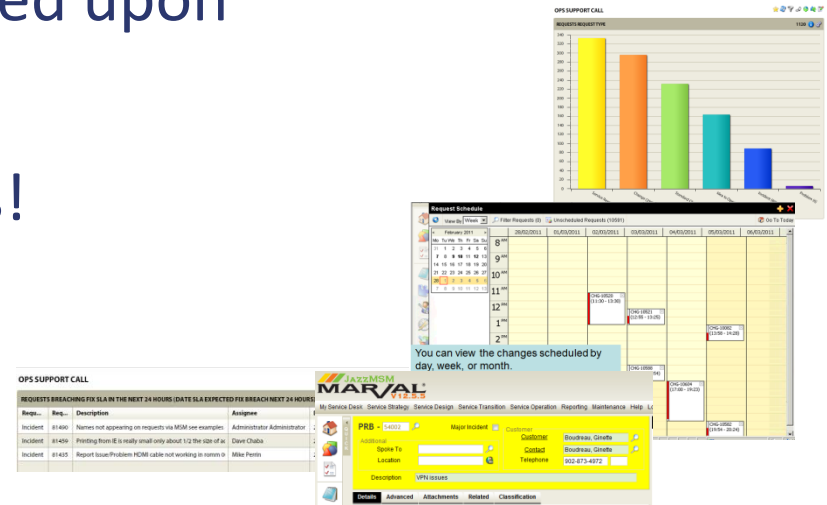
Incidents are trending downward



Daily Priorities

Daily visibility – 24 hour rolling metrics

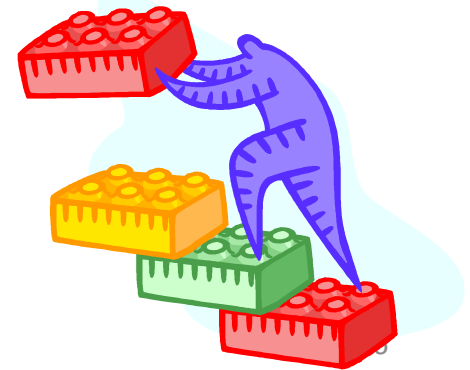
- Daily review with a cross-departmental group
- Key subject matter experts participate
- Problems vetted and agreed upon
- Responsible to the team
- It takes 15 minutes or less!



Clear Goals

Clear goals ensure common understanding

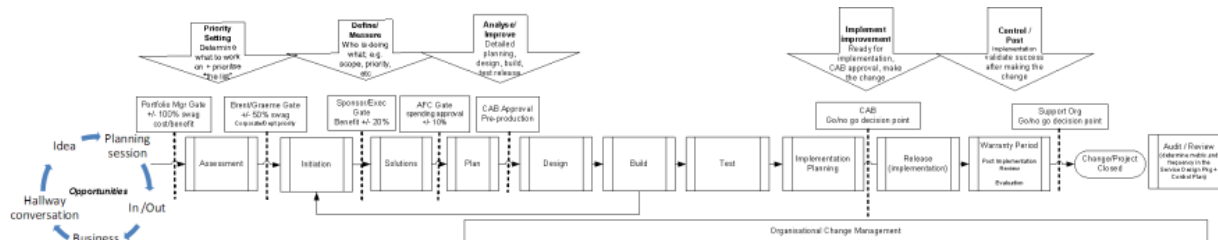
- Keep priorities front and centre
- Encourage consistency with standard requests
- Continual consistent communication
- Multiple communication channels
- Keep it simple



Lean Project Management

I₂O lifecycle-oriented service orientation

- Consistent handling of New initiatives
- Method agnostic
- Not just IT – organisation-wide service management
- Scalable for small and large projects





Keep it simple

- Find out what your **customer** values
- Get to know the **process**
- Design the process to **flow** efficiently
- Create pull from customer requirements
- Keep improving!

Lean demands simplification – it sounds simple
but is really tough to do

Step-by-step



To simplify

- Map the value stream
- Look for opportunities to simplify the flow
- Standardise as much as possible
- Error proof to make it easy to do it right
- Watch out for feedback loops

Get everyone involved

What can you do tomorrow?

- Walk a process
- Involve those who live the process every day
- Be alert for waste in your organisation
- Simple small improvements build over time
- Focus on delivering value to your customer
- Make your goals clear and visible to your team



Questions?

