

MIT OpenCourseWare
<http://ocw.mit.edu>

16.660 / 16.853 / ESD.62J Introduction to Lean Six Sigma Methods
January (IAP) 2008

For information about citing these materials or our Terms of Use, visit: <http://ocw.mit.edu/terms>.



Accounts Payable I Case Study Introduction

Learning Objectives

At the end of this module, you will be able to:

- **Recognize how case studies can be used to practice applying concepts**
- **Apply lean thinking and analysis tools to an office process**
- **Sketch a future state value stream map**
- **Recall the impact that variability has on process performance**

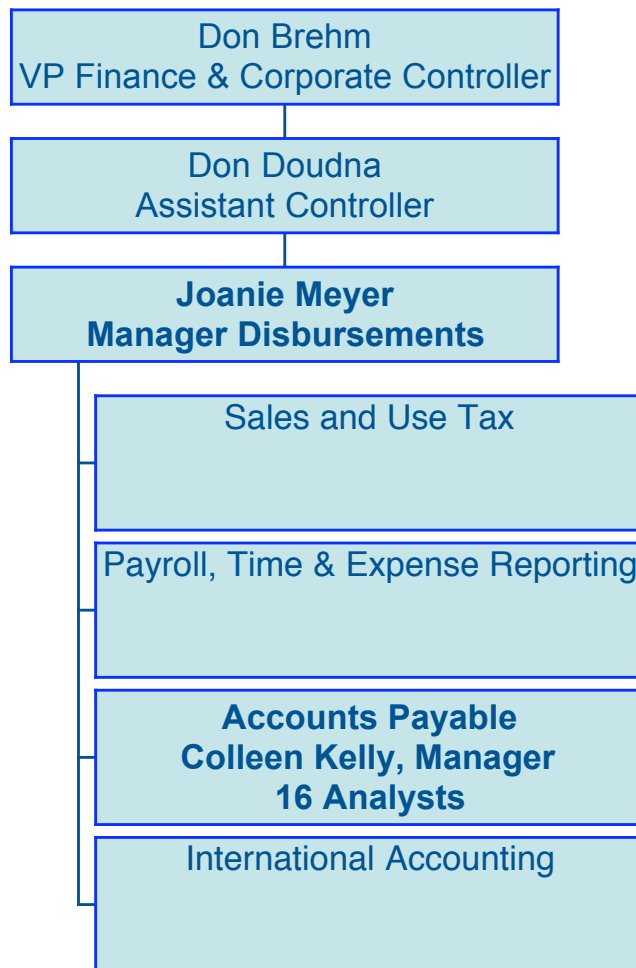
Rockwell Collins Background

- **Leading provider of commercial and military avionics systems and information technology**
- **History of Rockwell Collins**
- **Founded in 1933 as Collins Radio Company**
 - **Acquired by Rockwell International in 1973**
 - **Spun-off in 2001 as an independent publicly traded company**
- **Today, more than 20,000 employ at over 60 locations in 27 countr**
- **1998 - “Lean Electronics” launched by CEO Clay Jones as RC’s operating philosophy**



Accounts Payable Overview

Organizational Structure



- Switched to invoice-less “Pay From Receipt” or PFR system in 1993
- Implemented in SAP corporate data base system in 1999
 - Purchasing Department issues Purchase Order (PO) into SAP
 - Receiving Department enters data into SAP upon receipt of shipment
 - Vendor payment triggered when PO and receipt reconciled
 - Vendor charges shipping to RC account
 - RC pays taxes
 - No invoice needed from vendor
- 80% of suppliers currently on PFR
- Processing the remaining invoices is a problem

Quarterly AP Metric Summary

	1st Q	2nd Q	3rd Q	4th Q
Non PFR Invoice Volume (nearest 100)	13,700	14,500	15,200	15,600
Average Cycle Time (weeks)	5.8	6.1	6.3	6.4
Percent Past Due	8%	10%	11%	12%

Increasing Volume
Lengthening Cycle Time
Growing Number of Past Due Payments to Suppliers

Process Improvement Flow

- **AP has developed a VSM for their process**
 - It is in your folders
- **Value stream analysis (VSA) needs to be done to prepare for an upcoming AP Rapid Process Improvement (RPI) event**
 - You will do this tonight and discuss tomorrow.
- **RPI event will identify improvement strategies and develop a future state VSM**
 - We will do this in class tomorrow
- **An implementation plan for the new VSM will be worked out during Lean Implementation module**

Rapid Process Improvement

- **RPI is a specific instance of a general continuous improvement approach called Kaizen**
 - **Event is a day to a week in duration**
 - **Focused on a specific improvement opportunity**
 - **Chartered by a sponsor who gives improvement goals and organizational constraints**
 - **Involves all important stakeholders**
 - **Experts and facilitators provided as needed**
 - **Data driven process**
 - **Ends with implementation plan**
 - **Outcomes measured after plan implemented**

Homework

- **Read the case study in your folder**
- **Verify that the provided Value Stream Map accurately reflects the data in the case study**
- **Work out the answers to Questions 1-4**
- **Come to class prepared to discuss the case study and perform further analysis.**

