Wells Fargo

Document Management Operational Excellence

Lean Transformation Summit Break Out Session

March 6, 2008

Who We Are

Wells Fargo & Company (NYSE: WFC) is a **diversified financial services company** providing banking, insurance, investments, mortgage and consumer finance through almost 6,000 stores, the Internet and other distribution channels across North America and internationally.

We're headquartered in San Francisco, but we're decentralized so every local Wells Fargo store is a headquarters for satisfying all our customers' financial needs and helping them succeed financially. Wells Fargo has $575 billion in assets and 1XX,000 team members across our 80+ businesses. We're the United States' 25th largest employer. We ranked fifth in assets and sixth in market value of our stock among our peers as of June 30, 2007.

Our vision: We want to satisfy all of our customers' financial needs, help them succeed financially, be the premier provider of financial services in every one of our markets, and be known as one of America's great companies.
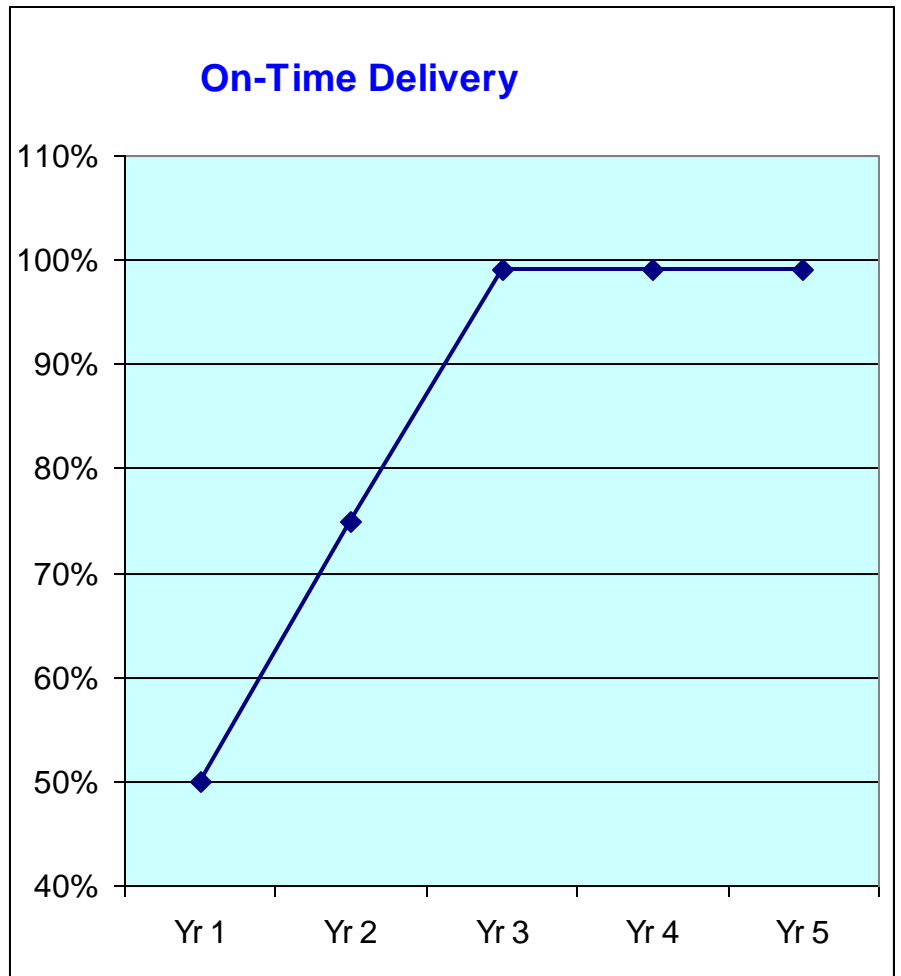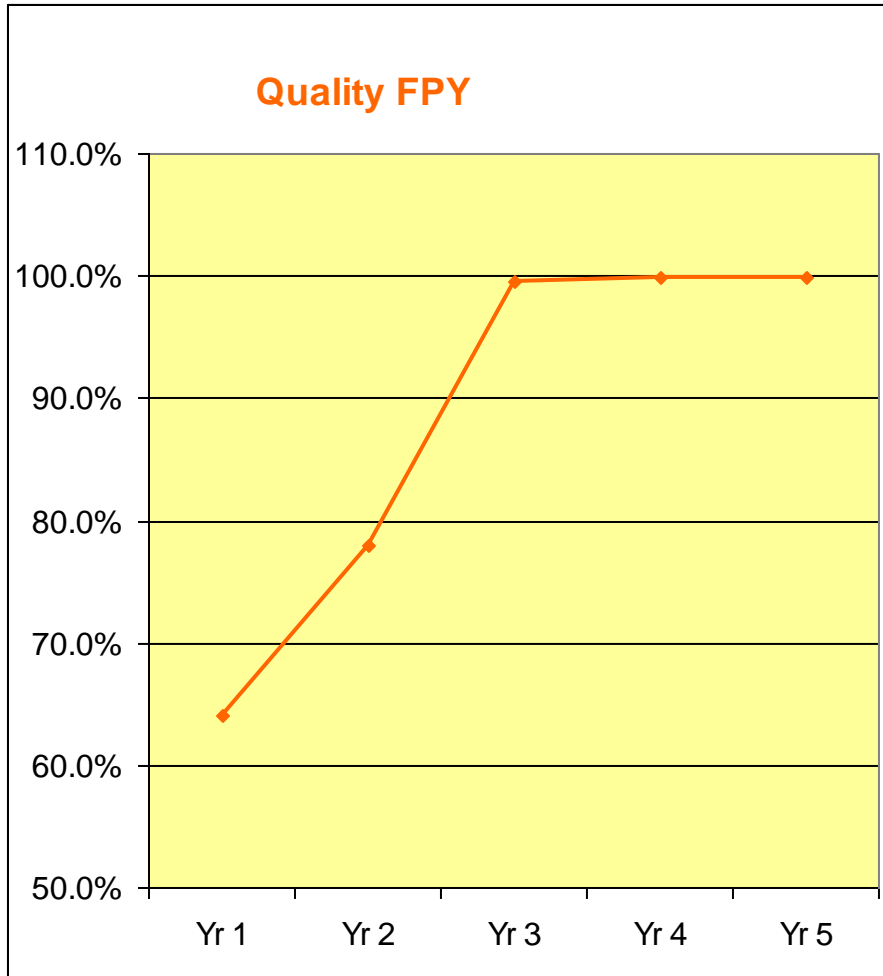
Document Management

DM is a WF internal service provider of:
- Paper to image conversion
- Electronic document routing
- Data lifting
- Document storage

DM is:
- 600 team members
- Located in NC, MN, and IA
- Producing 30 million document images / month

Rapid Improvement

Rapid Improvement

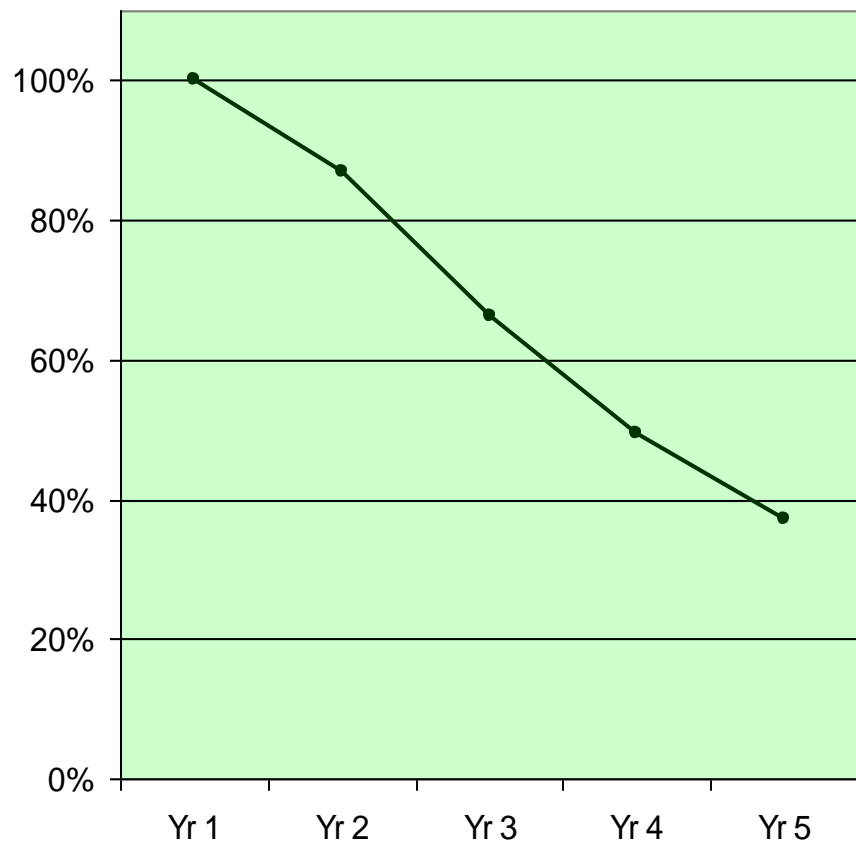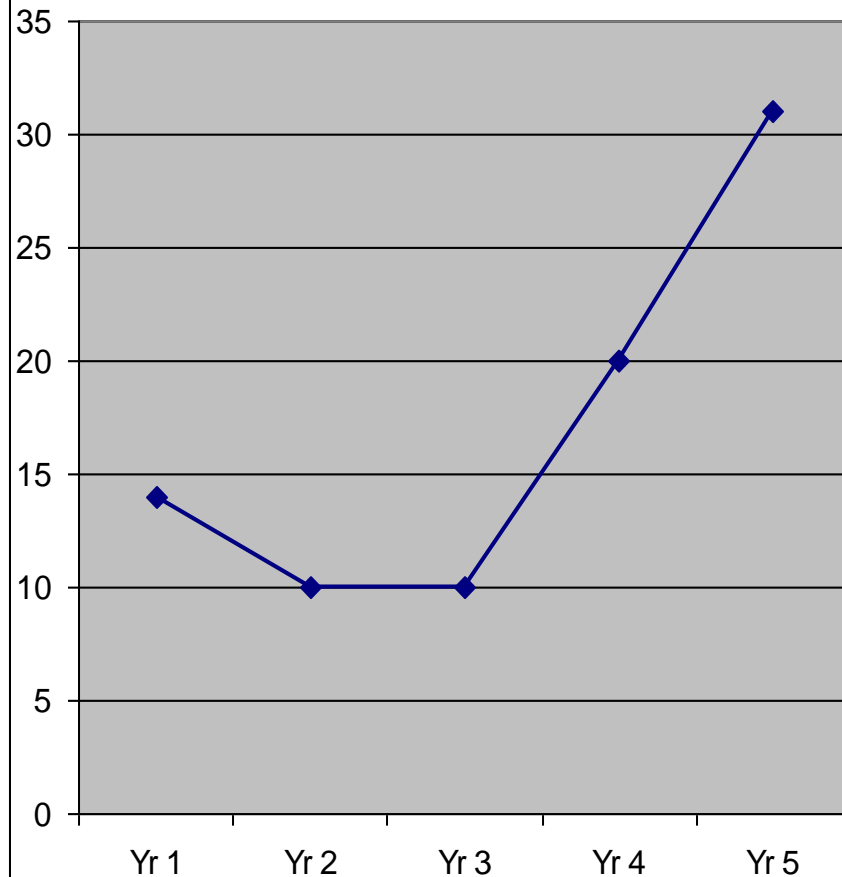**Cost per Image Reduction**

Image Volume (millions)

What We Looked Like: Then and Now

Initial State – What you would see

- People working in cubicles
- People assigned to cubicle
- Work brought to the people
- All work is done sitting down
- Every work station looked different even when the tasks were the same
- Hundreds of carts full of files
- Carpeted office environment
- Extra Equipment

Year 4 – What you would see

- People working in cells
- People move between cells
- Mix of standing and sitting
- Standardized work stations
- One to two days inventory on carts
- Production environment with hard flooring
- Each cell outfitted with exact equipment needed
- Andons, tracking boards, standardized work charts in each cell

Our Journey:
Learning and Building Culture by Doing

- Take action to make problems visible
- Learn what you don't know by trying
- Improve Daily
- Embrace the tension between engineering and operations

Initial State

Management System

➢ Control

➢ Set Individual Performance Standards

➢ Personal Accountability

➢ Technology Solutions

➢ Get the Work Through and Fix Problems When Business Is Slow

Team's Thought

➢ All that's required of me is to do as I'm told

➢ Hit My Standards

➢ Personal Responsibility

➢ Solutions Come From Technology And Management People

➢ Quantity before Quality

Initial State - What We Thought

- On budget = successful

- If there is a problem, it must be someone's fault. It should be handled discretely.

- Inventory protects me from the problems of others.

- We're making record earnings so it must be working

Initial State – How we worked

- Built reports to become more efficient at solving the same problems over and over

- Built reports to measure individual performance to identify people who weren't performing

- Work content was simple and batches large to support standards and reporting

- Process was designed by technologists to support the technologies they chose

- Managed from anecdotes; prioritized based on level of business partner anger

- End-to-end process was not documented or understood

Year 4 – Where We Are Now

Management Vision

- Operational Excellence
- Reduce waste
- Organizational decisions to fit process (not vice versa)
- Create flow
- Make the process visible
- Fact based decisions
- Change Control
- Continuous Improvement
- Involvement of all team members

Team Thinks

- Improve quality and throughput
- Teams and individuals succeed together
- People are the key
- Problems are expected
- Participation from everyone is expected
- Team members share ownership of improvements with management

………but in Year 1

Management Vision

- ➢ Operational Excellence
- ➢ Reduce waste
- ➢ Organizational decisions to fit process (not vice versa)
- ➢ Create flow
- ➢ Make the process visible
- ➢ Change Control
- ➢ Continuous Improvement

Team Thinks

- ➢ Management is trying to reduce costs
- ➢ Lean = assembly lines = flow
- ➢ Inventory protects me from problems
- ➢ Visual = scarlet letters
- ➢ I need approval to fix problems
- ➢ Constant change

Year 1 - Cultural Disruption

- Rapid Change
- Conflict with prevailing culture
- Sorting out of what beliefs still work
- Can't go back (if not commitment to move forward)

      ……..and thus:

- Problems viewed negatively
- Struggles to build new barriers to replace dismantled ones
- Communication difficult as terms became meaningless
- Struggle for individualism

However, Wells Fargo's Vision and Values Statement fit well with lean thinking.

Year 1 - Layout

Production Floor Layout - Before Lean

1200 ft. File Travel (min.)
8 Back Flows (min.)
9 Intersections (min.)

1. Mail In
2. Open Mailers
3. Notes and Checks to Top
4. Labels
5. Receiving
6. Headers
7. Scan Batching
8. Prepping
9. Scanning
10. Reconstruction
11. File Room
12. Off-Site Queue
13. Files Out

First Year Layout Change

SHOP LAYOUT AND FLOW
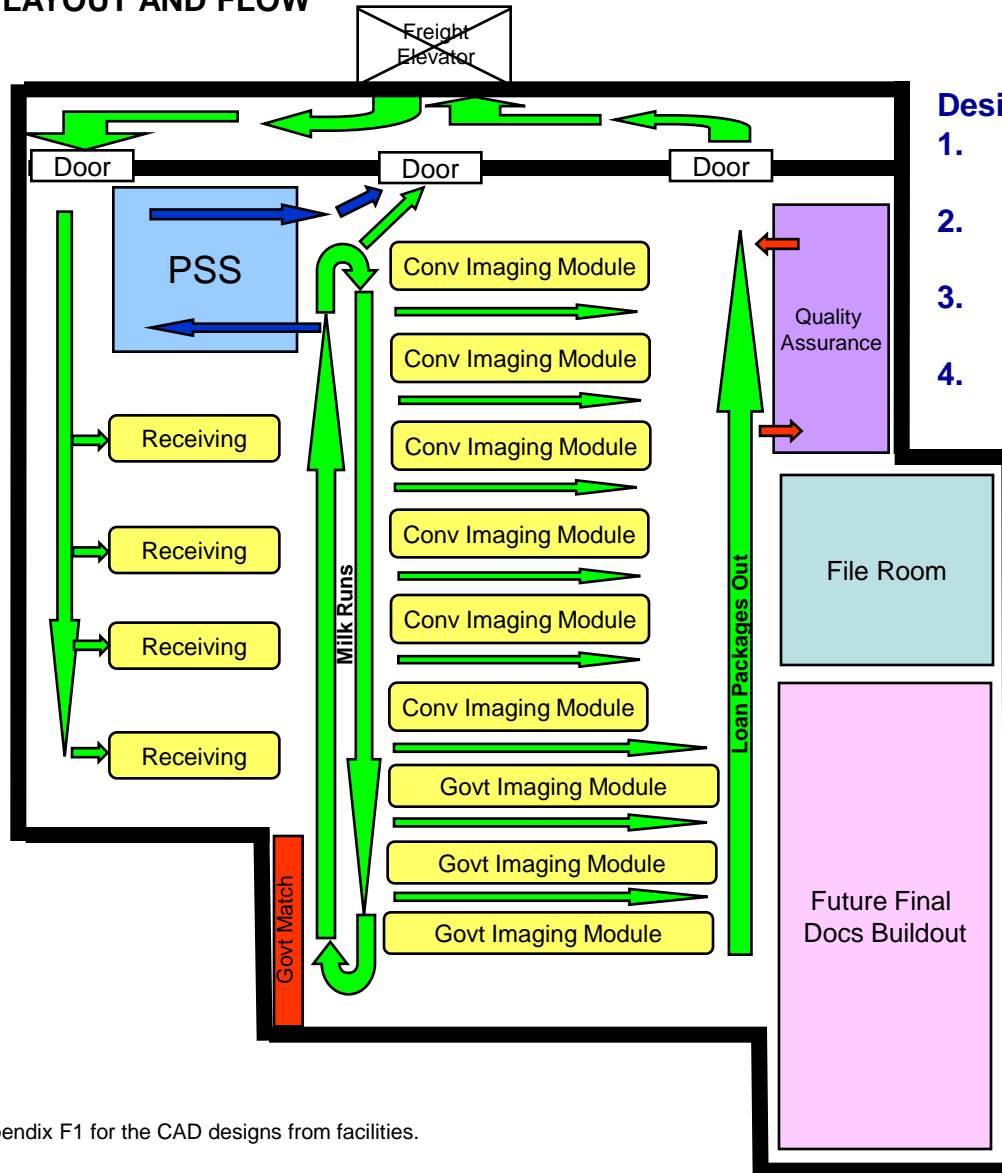
Design Objectives:
1. **Critical path is consolidated into main production space.**
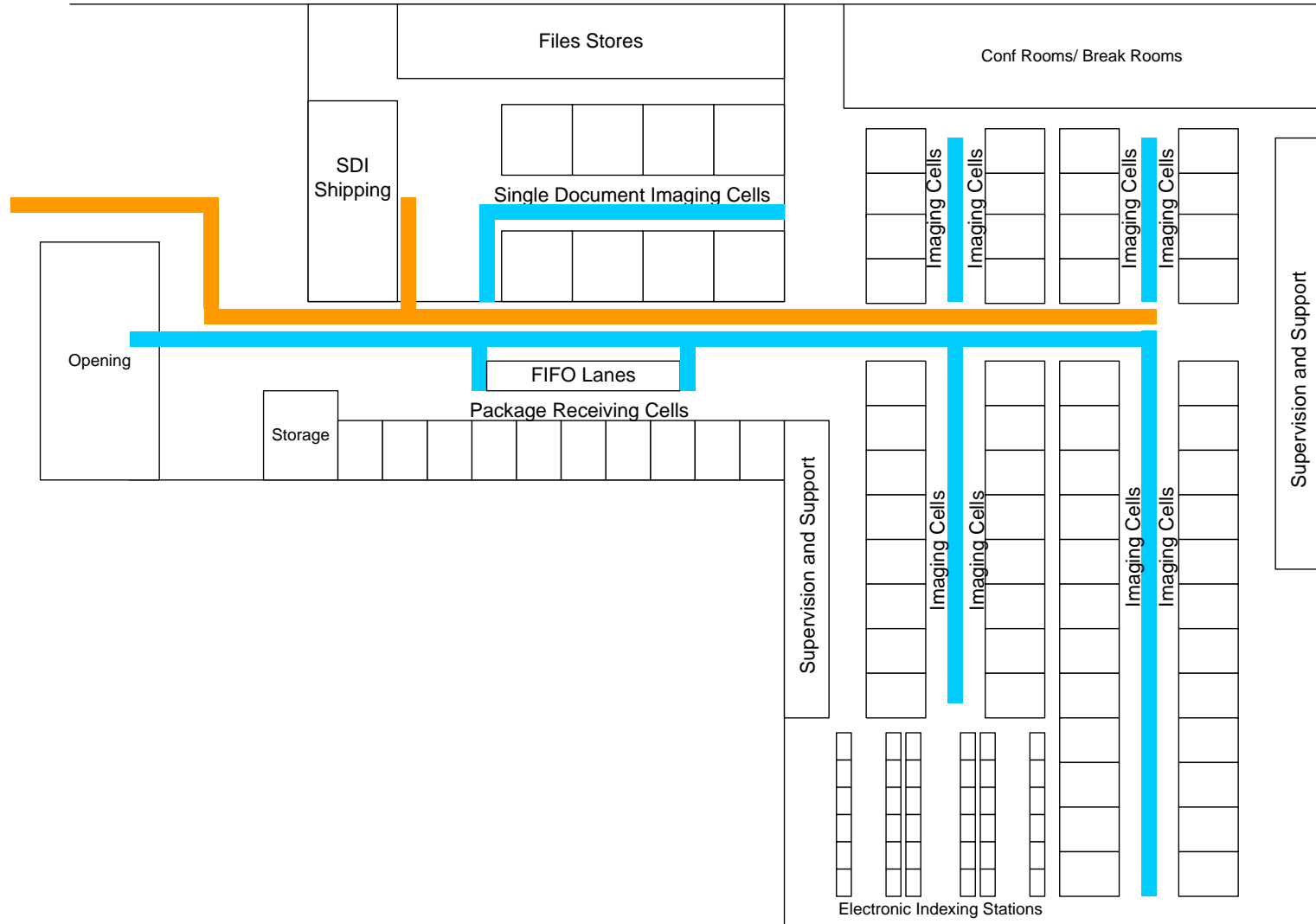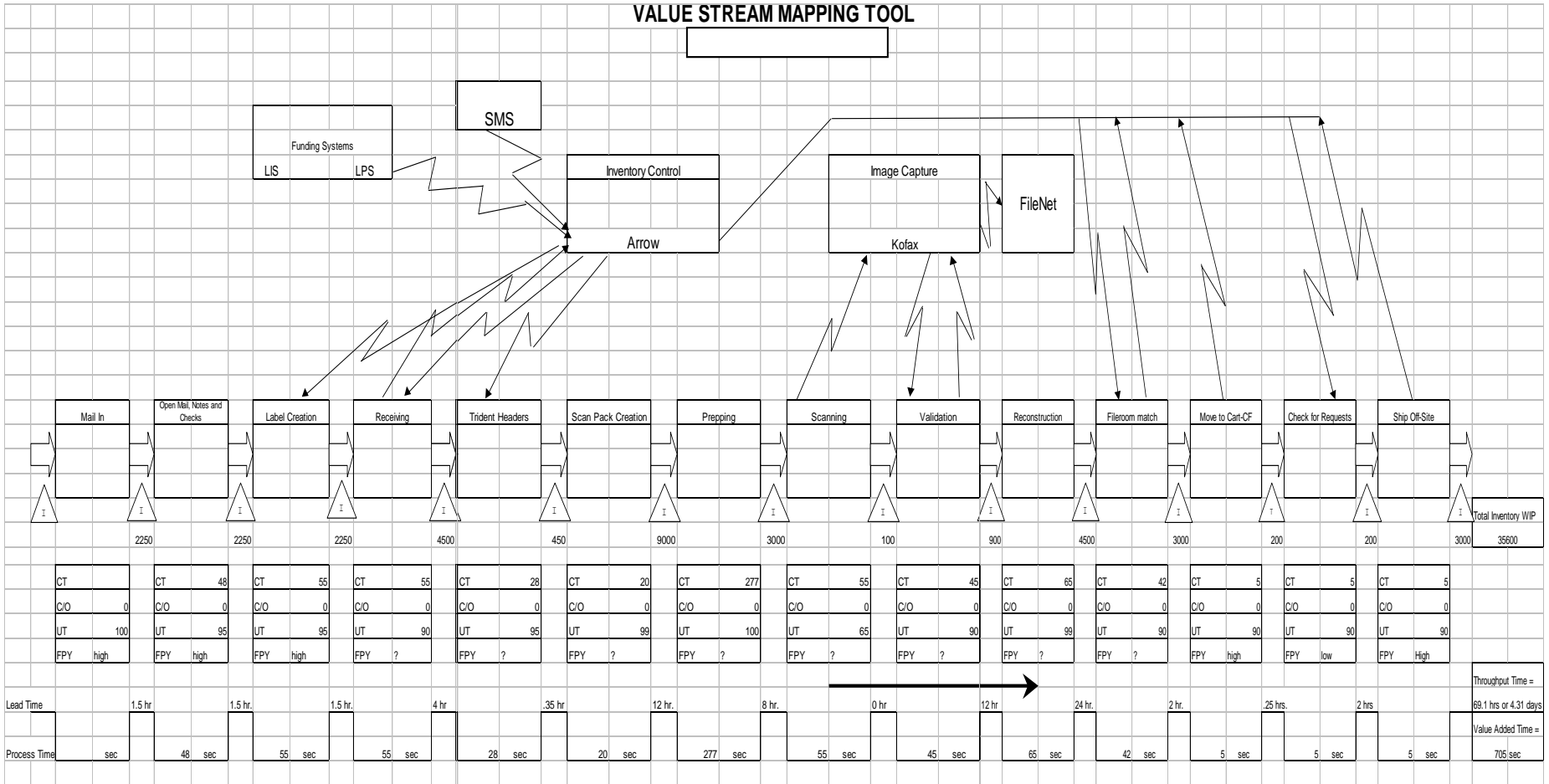2. **Elimination of backflows and intersections.**
3. **Circular flow from monument (freight elevator).**
4. **75% reduction in travel.**

Refer to Appendix F1 for the CAD designs from facilities.

Year 4 - Layout

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Year 1 - Value Stream Map

VALUE STREAM MAPPING TOOL

SMS

Funding Systems

LIS   LPS

Inventory Control

Arrow

Image Capture

Kofax

FileNet

Mail In	Open Mail, Notes and Checks	Label Creation	Receiving	Trident Headers	Scan Pack Creation	Prepping	Scanning	Validation	Reconstruction	Fileroom match	Move to Cart-CF	Check for Requests	Ship Off-Site	Total Inventory WIP
2250	2250	2250	4500	450	9000	3000	100	900	4500	3000	200	200	3000	35600

CT	CT 48	CT 55	CT 55	CT 28	CT 20	CT 277	CT 55	CT 45	CT 65	CT 42	CT 5	CT 5	CT 5	
C/O 0	C/O 0	C/O 0	C/O 0	C/O 0	C/O 0	C/O 0	C/O 0	C/O 0	C/O 0	C/O 0	C/O 0	C/O 0	C/O 0	
UT 100	UT 95	UT 95	UT 90	UT 95	UT 99	UT 100	UT 65	UT 90	UT 99	UT 90	UT 90	UT 90	UT 90	
FPY high	FPY high	FPY high	FPY ?	FPY ?	FPY ?	FPY ?	FPY ?	FPY ?	FPY ?	FPY ?	FPY high	FPY low	FPY High	

Throughput Time = 69.1 hrs or 4.31 days

Value Added Time = 705 sec

Lead Time	1.5 hr	1.5 hr.	1.5 hr.	4 hr	.35 hr	12 hr.	8 hr.	0 hr	12 hr	24 hr.	2 hr.	.25 hrs.	2 hrs

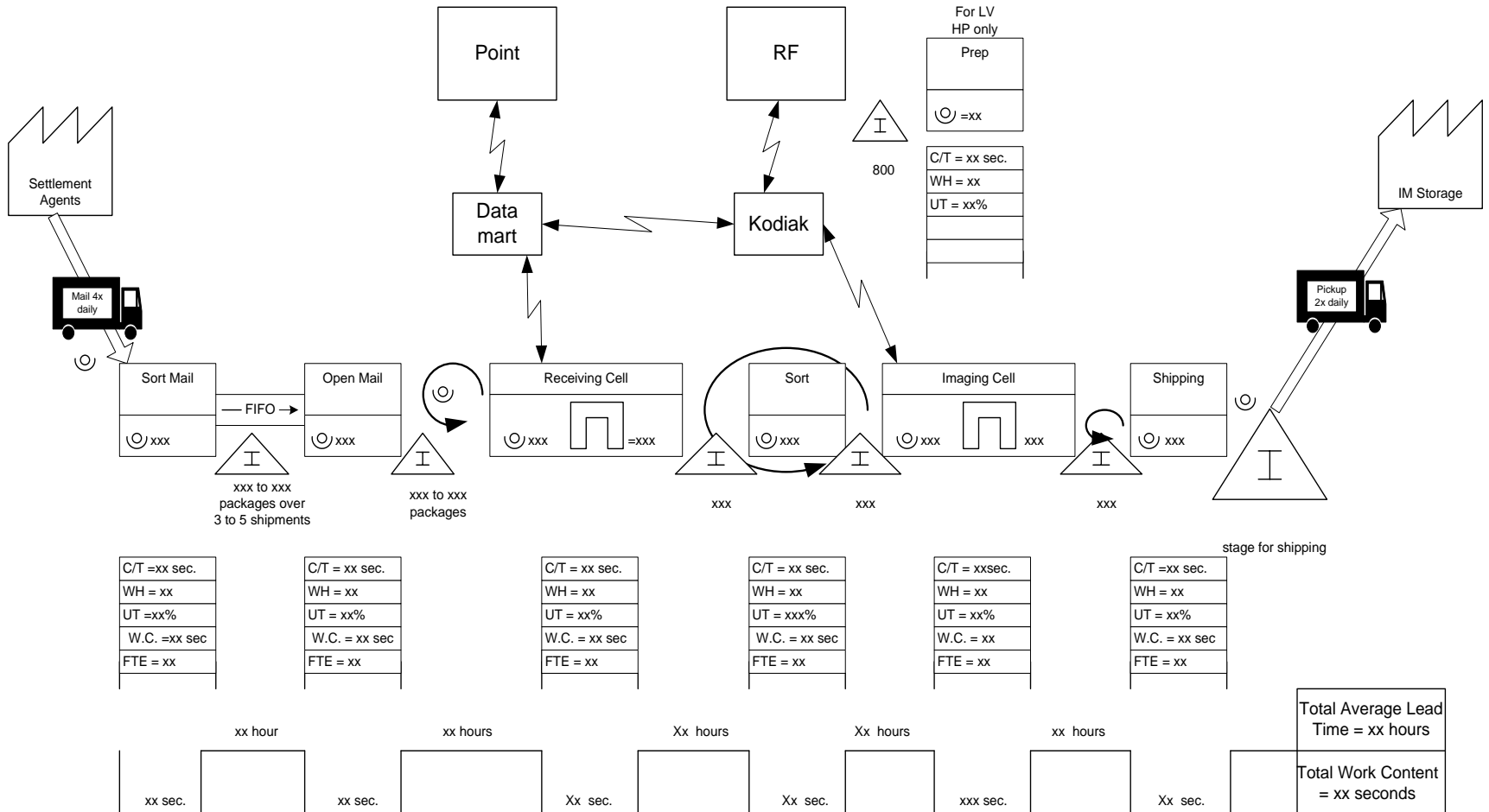| Process Time	sec	48 sec	55 sec	55 sec	28 sec	20 sec	277 sec	55 sec	45 sec	65 sec	42 sec	5 sec	5 sec	5 sec

Legend
CT = Cycle Time
C0 = change over time
UT = uptime
FPY = first pass yield

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Year 4 - Value Stream Map

Package Imaging VSM

Changes to the Work Station

Phase	Looked Like	Progress
Initial	> Cubicles	
	> All sitting	
	> Not Standardized	
	> Production Lines	
		> Visually Understandable
	> Conveyors	
		> Fake Flow
	> Some Standardization	
		> Predictability
	> U-shaped Cells	
		> Efficiency
	> Standing and Sitting	
		> Reliability
	> Work Combinations	
		> One-Piece Flow
Year 4	> Standard WIP	
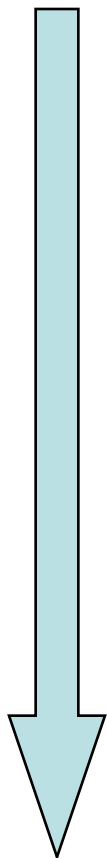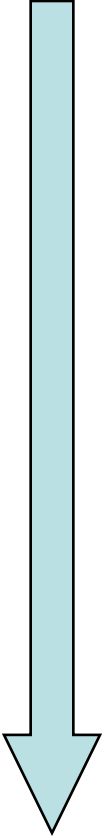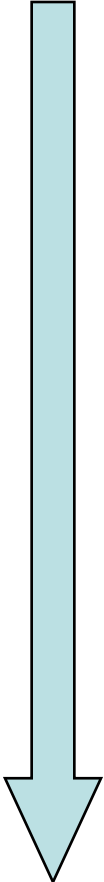
Visual Management

Phase	Looked Like	Progress
Initial	> Spaghetti > Inventory Stashed > Process Not Visible	
	> Straighten Process Flows	> Lack of Flow is Visible
	> Labeled Work Areas & Inv.	> Inventory is Visible
	> Red-Tag 5-S	> Better Flow
	> Tracking Boards	> Visually Understandable
	> Work Directors Initial Tracking Boards	
	> 5-S Everyday	> Problems More Visible
	> Andons	> Support Standard Work
	> Shadow Lines and Signals	> Action against problems
Year 4	> Communication Centers	> Team Member Involvement

Inventory Management

Phase	Looked Like	Progress
Initial	> Carts of Inventory > Tracking Reports > SWAT Teams	
	> Reduced # of Inventory Queues	> Less to Track
	> Carts in FIFO lanes	> Inventory Contained by Process Flow
	> Real-Time Tracking Technology Added	> Less Reliance on Reports
		> Beginnings of Flow
	> Water Spiders	> Process Manages Inventory
	> Defined Locations for All Inventory	> Inventory Tracks Itself
		> Abnormal Inventory Obvious
	> FIFO Flow for Bins	> Smaller Batches Between Cells
	> Precisely Defined Routes	> More Flow Improvement
Year 4	> Abnormal Inventory Conditions Quickly Drive Countermeasures	> Inventory Management Becomes Capacity Management

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Standardized Work

Phase	Looked Like	Progress
Initial	> Lack of Process Documentation > No WIP Standards > Work Standards / Hour (not cycle times)	
	> Cycle Times for Cells Defined	> Fake Flow
	> Basic Work Instructions Written	> Effect of Missing Standards Becomes Visible
	> Push Processing Defeats WIP	
	> More Elaborate Process Written	> Some Stabilization of Work Environment
	> Standard Layouts with Less Space Challenges Lack of WIP Standards	> Stabilization of Process
	> Tools to Control WIP Added to Cells	> Reductions in WIP but Not Standard
	> Everyday 5-S	> Stabilization of WIP
	> Tracking Boards Make Abnormal Visible	> Stable Work Environments
		> Unstable Cycle Time More Visible
	> Standardized Work Chart in Each Cell	
	> Standardized WIP in Each Cell	> Repeatable Quality and Productivity
Year 4	> Standard Cycle Times	

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Team Member Involvement

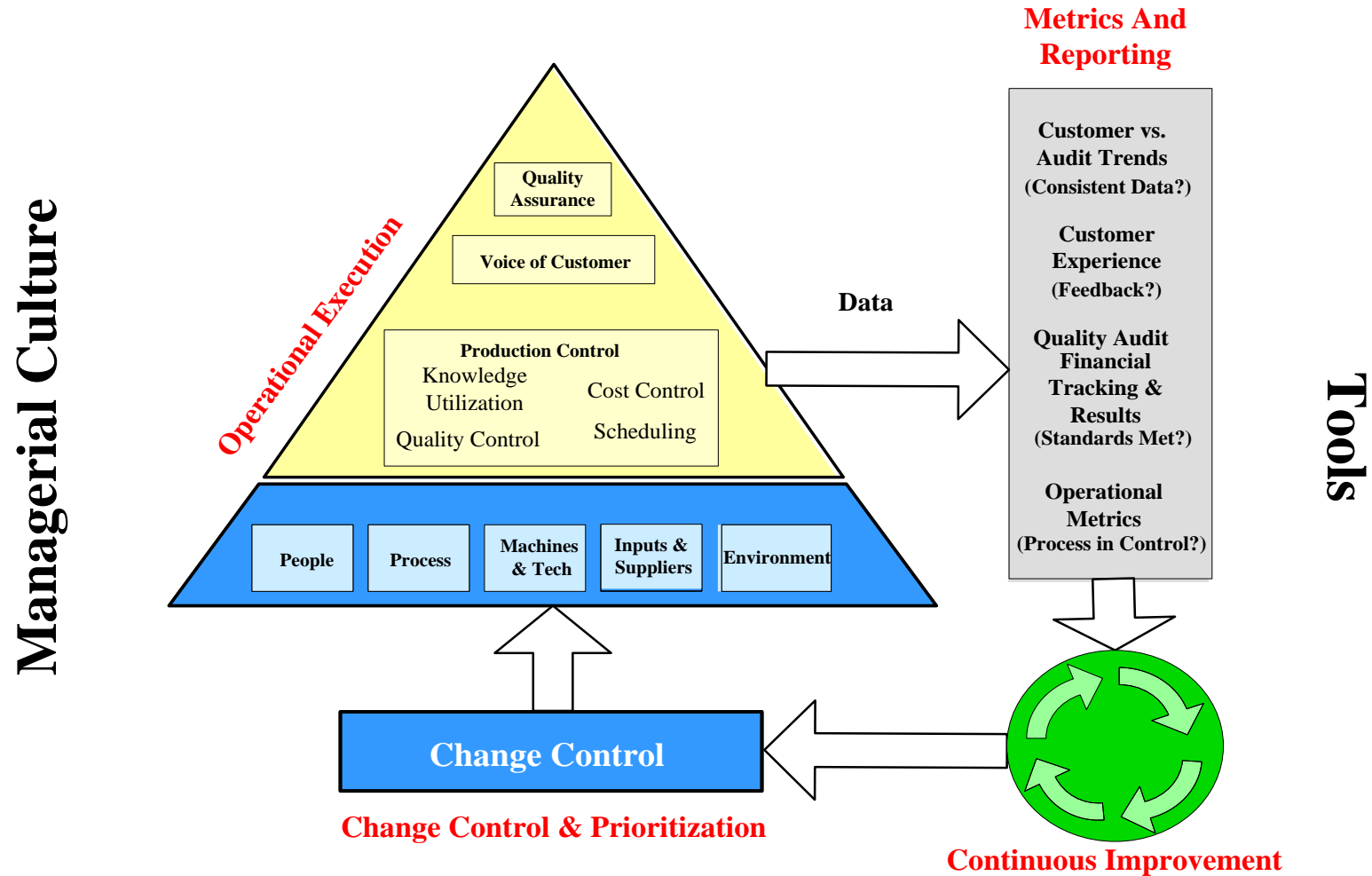| Phase	Looked Like	Progress
Initial	> Culture that Values People > Management from Conference Rooms > Prioritization Process not Visible	
	> Flow Simulations	
	> Occasional Gemba Walks	> Signaled Change > Leadership More Accessible Becomes Visible
	> Production Meetings Moved to Shop Floor	
	> Leadership Breakfasts	> More Open Conversation with Staff
	> Gemba Walks Every Day	> Planned and Reliable Interaction
	> Idea / Action Boards Replace Suggestion Box	> Leadership and Staff Have Shared View of Ideas and Activity Against Them
Year 4	> Communication Centers	> Ideas and Actions Visibly Linked to Problems and Goals

Early Operations Excellence Model - Year 2

Metrics and Reporting

Quality Assurance

Customer Acceptance

Production Control

Process Control

People | Process | Machines & Tech | Inputs Suppliers | Environ-ment

Training & Development | Work Inst Process Control | TPM | Supplier Mgmt | 5S

Change Control

Problems Out (DATA)

Customer vs. Audit Trending (inconsistent data)

Customer Experience (complaints)

Audit Results Systems Metrics (standards missed)

Operational Metrics (process out of control)

Continuous Improvement

Act | Plan | Check | Do

Improvement

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Operations Excellence Model - Year 4

Operational Excellence System

Metrics And Reporting

Managerial Culture

Operational Execution

Quality Assurance

Voice of Customer

Production Control
Knowledge Utilization
Cost Control
Quality Control
Scheduling

People | Process | Machines & Tech | Inputs & Suppliers | Environment

Data

Customer vs. Audit Trends (Consistent Data?)

Customer Experience (Feedback?)

Quality Audit Financial Tracking & Results (Standards Met?)

Operational Metrics (Process in Control?)

Tools

Change Control

Change Control & Prioritization

Continuous Improvement

Philosophical Underpinnings

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Administrative LEAN

Administrative LEAN

I. Thought of all our process as production

II. Reflections:

- Making Problems Visible

- Normal vs. Abnormal

- Exception-based processing

- Emphasize information flows in value stream maps

- Value adding and 5S concepts apply to information

- Pull vs. push applies to gathering and using information

- Technical support model is as critical for administrative process as it is for production

Questions?

Thank You!