



Success Factors For Lean Business Process Implementation



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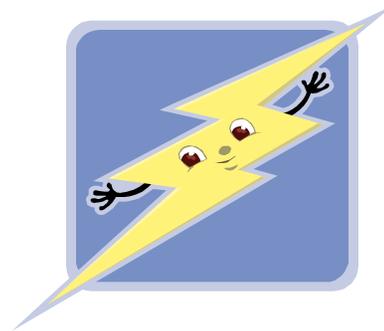
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Agenda

1. Process flow introduction
2. Business process complexity
3. Creating a lean business process
4. Key factors for success
5. Conclusion

Lean Business Process

- To remain competitive, organizations are finding that increasing process speed is critical to remaining competitive.
- In business processes, the critical element is very often speeding the processing of information.



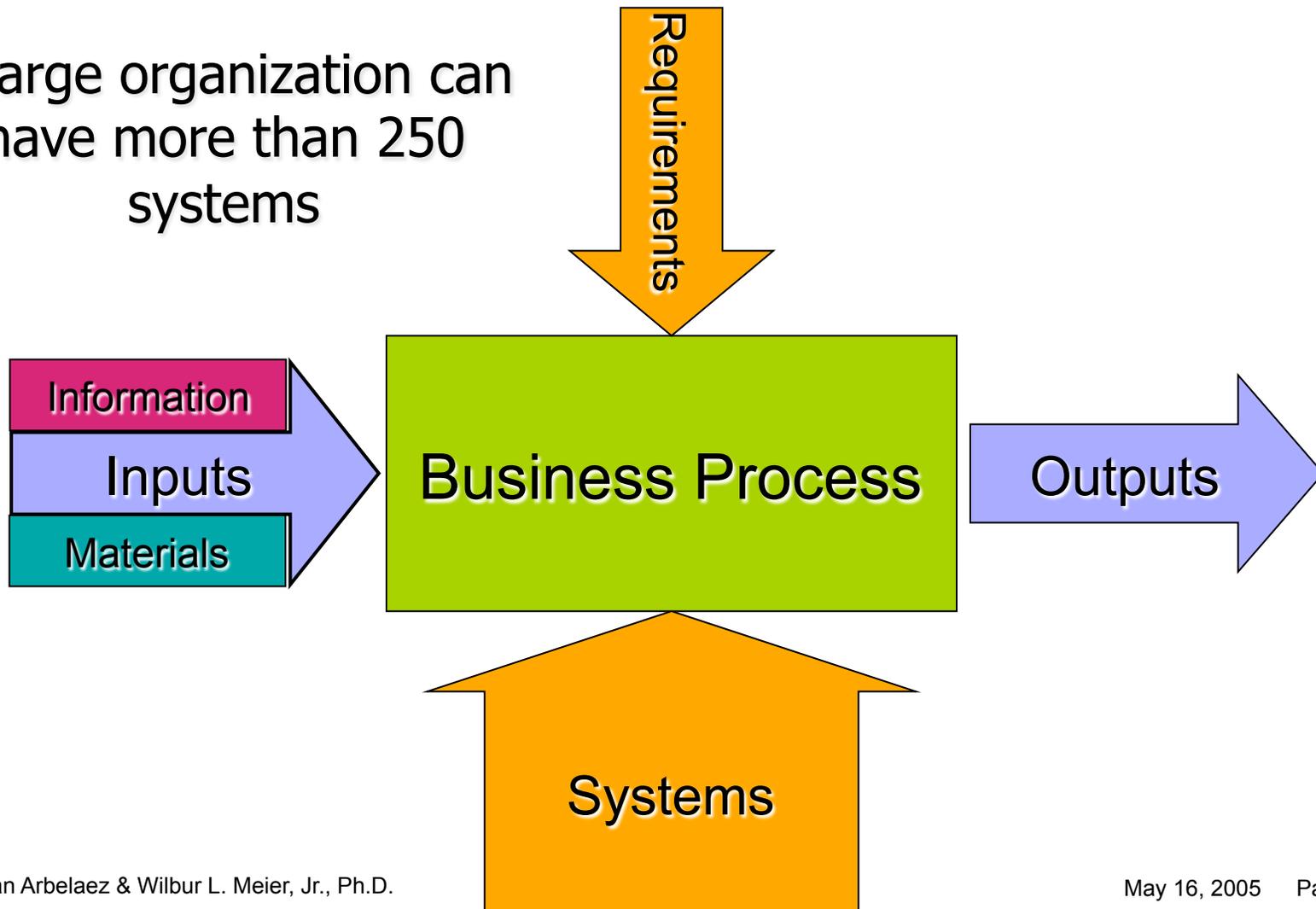
Process Inputs & Outputs

- While a product flow has a relatively small number of inputs and outputs, information flow has a large number of inputs and travels through multiple system structures such as:
 - Quoting
 - Available to promise
 - Master schedule
 - Engineering change
 - Accounts payable
 - Inventory control
 - Transportation & logistics
 - Others...

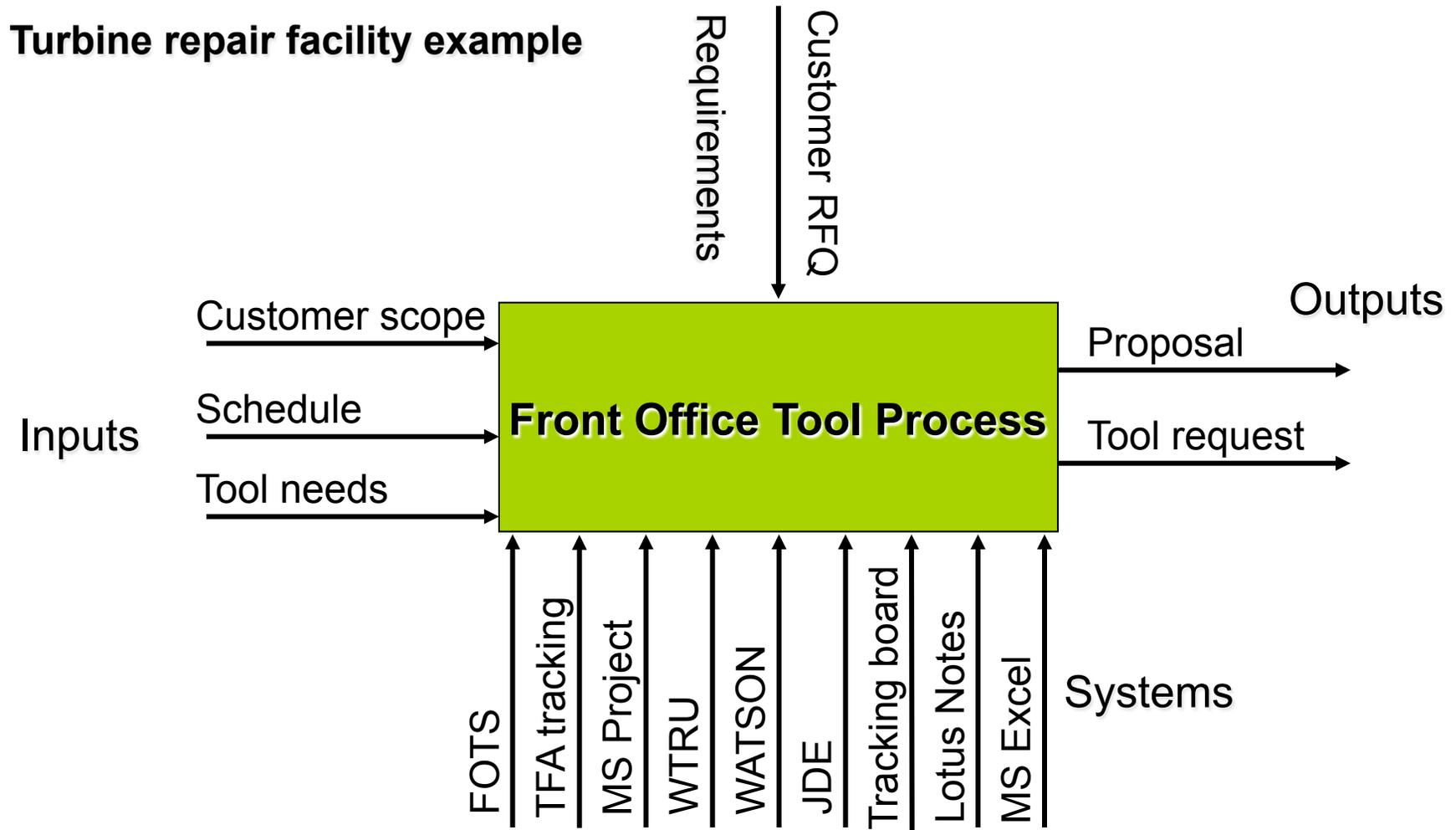


Typical Business Process Flow

A large organization can have more than 250 systems



Business Process Example



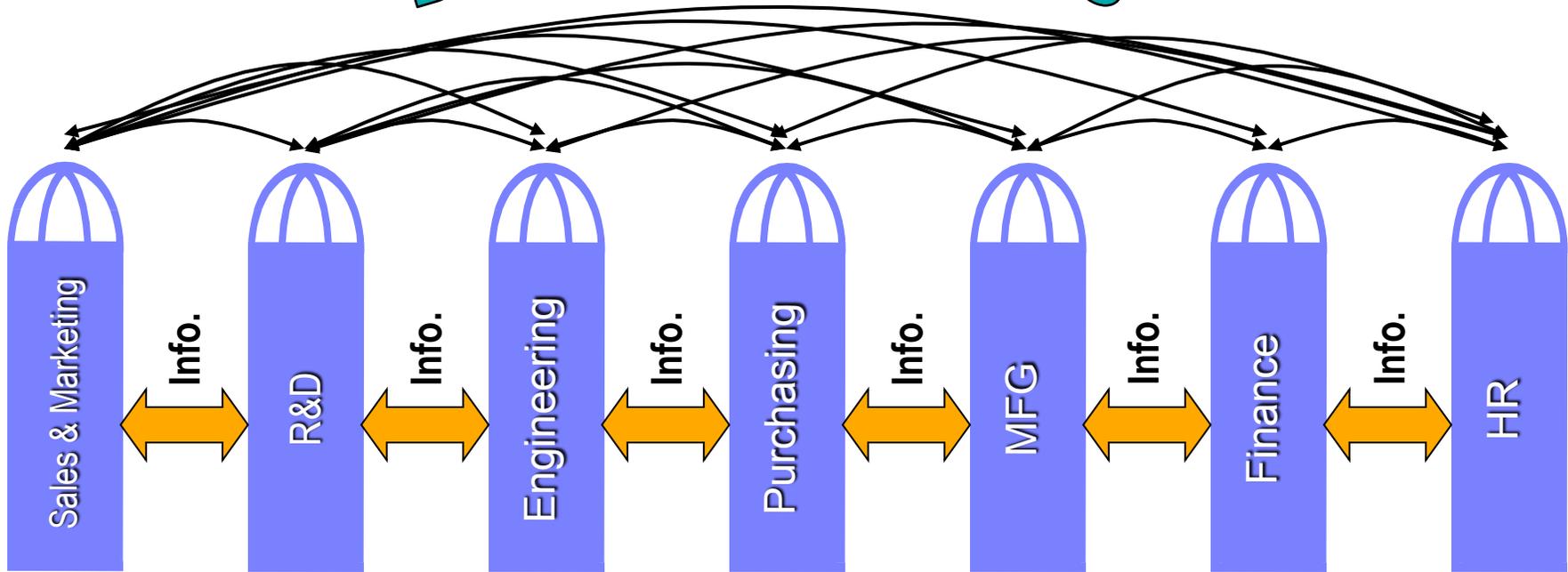
Understanding Business Processes

- Information flow is not clearly visible or easy to define
- Number of functional crossovers (white spaces)
- Number of decision points
- Number of process owners
- Duplication of information



Organization's Information Flow

Business Systems

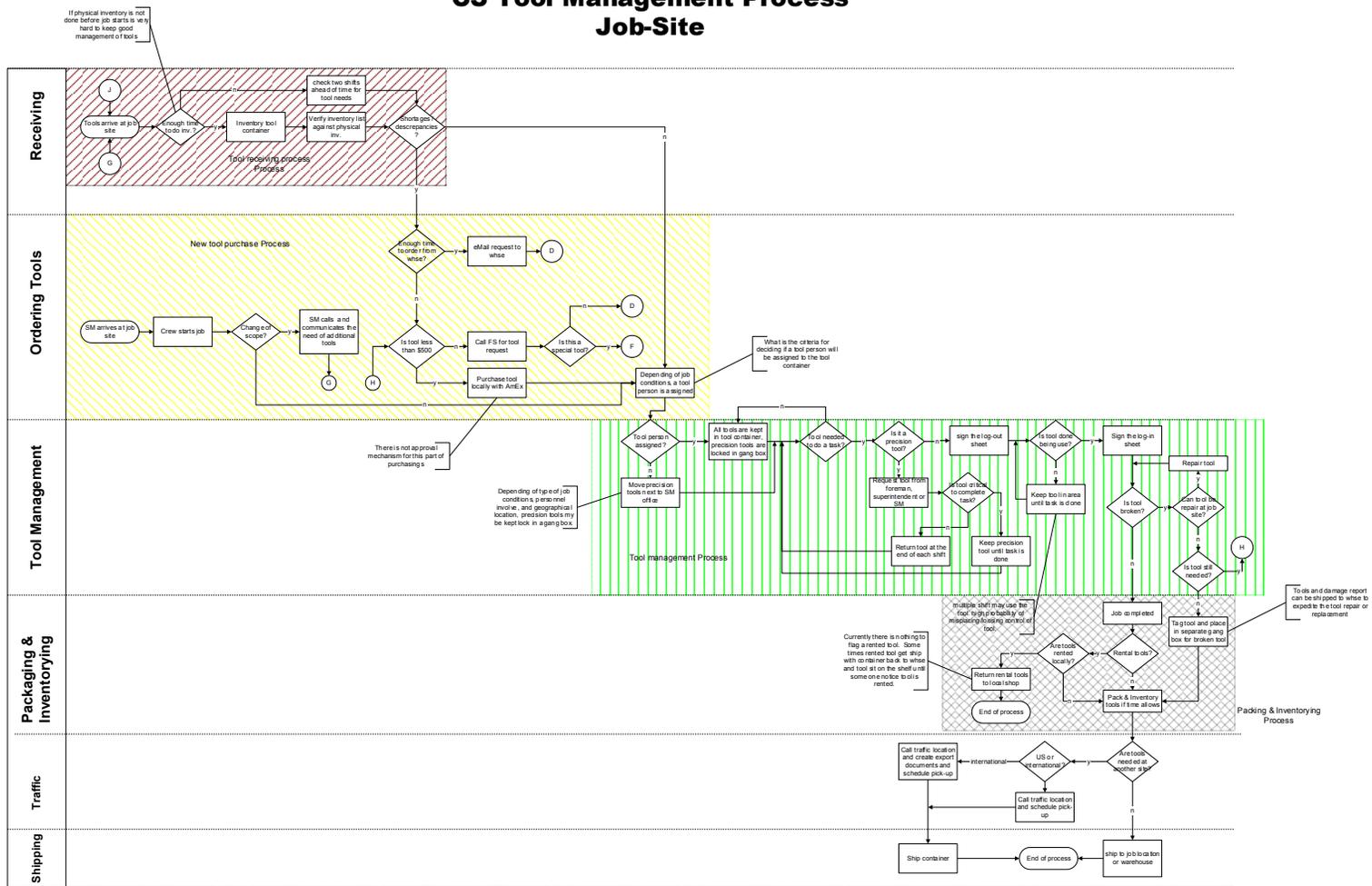


Information Flow Boundaries

- Information flow crosses over many functional boundaries
- Typical of functional areas:
 - Work is in isolation
 - Have different performance measures
 - May have conflicting objectives
 - Standards may differ
 - Decision loops causes delays
- Information can get trapped in these loops. Here is where we lose our speed.

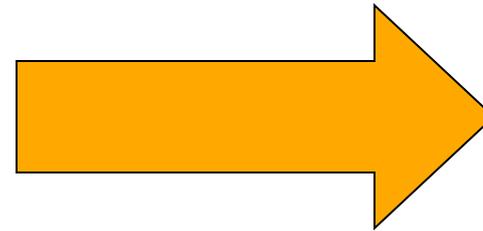
Information Boundaries

CS Tool Management Process Job-Site



Process Complexity Creates Waste

- Complexity translates into:
 - Errors
 - High costs
 - Work shortcuts
 - Delays
 - Aggravation
 - Poor customer service
 - Lost opportunity
 - Business risks
 - Inability to effectively deploy strategic plans



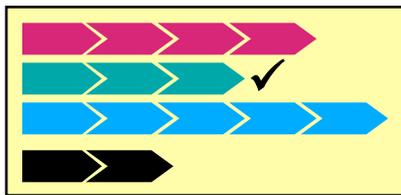
Loss of Speed

Steps in Creating Lean Business Processes

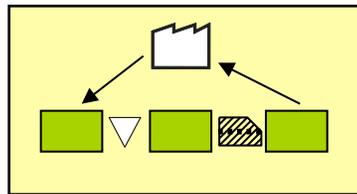
1. Work stream identification & prioritization
2. Value stream creation
3. Workflow segmentation & ranking
4. Workflow scope model
5. Detail mapping
6. Gap identification
7. Future state map
8. Improvement prioritization & deployment plan
9. Key performance indicators measurement



Creating a Lean Business Flow



1. Work Stream ID & Prioritization



2. Value Stream Mapping

Workflow Segmentation					
1.	x	x	x	x	x
2.	x	x	x	x	x
3.	x	x	x		x

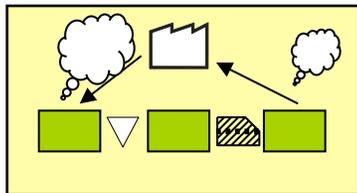
3. Workflow Segmentation

S	I	P	O	C

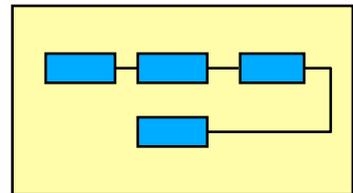
4. Scope model

Dept.	Functional Mapping

5. Detail Mapping



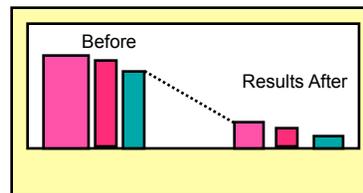
6. Gap Analysis



7. Future State

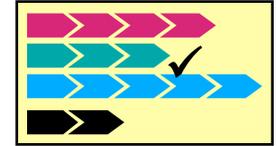
Improvement Plan			
	What	When	Who
1.			
2.			

8. Deployment Plan



9. Performance Measures

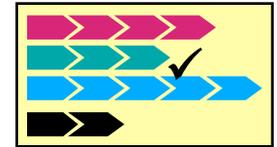
Business Processes



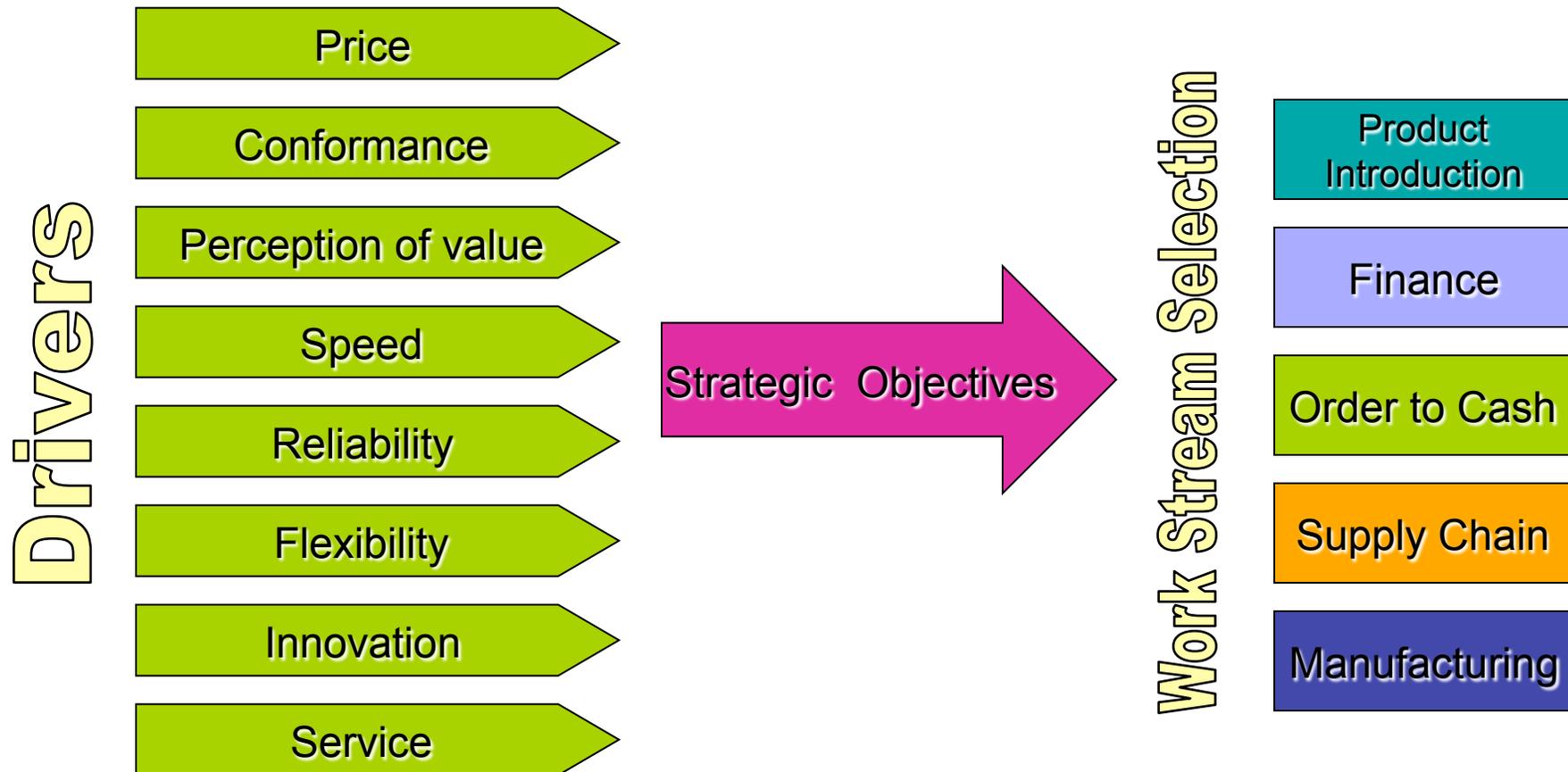
- Identification of work streams
 - A work stream contains multiple value streams
 - A work stream touches many functional areas
 - A work stream has hundreds of inputs and outputs



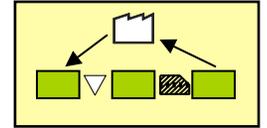
Selecting A Work Stream



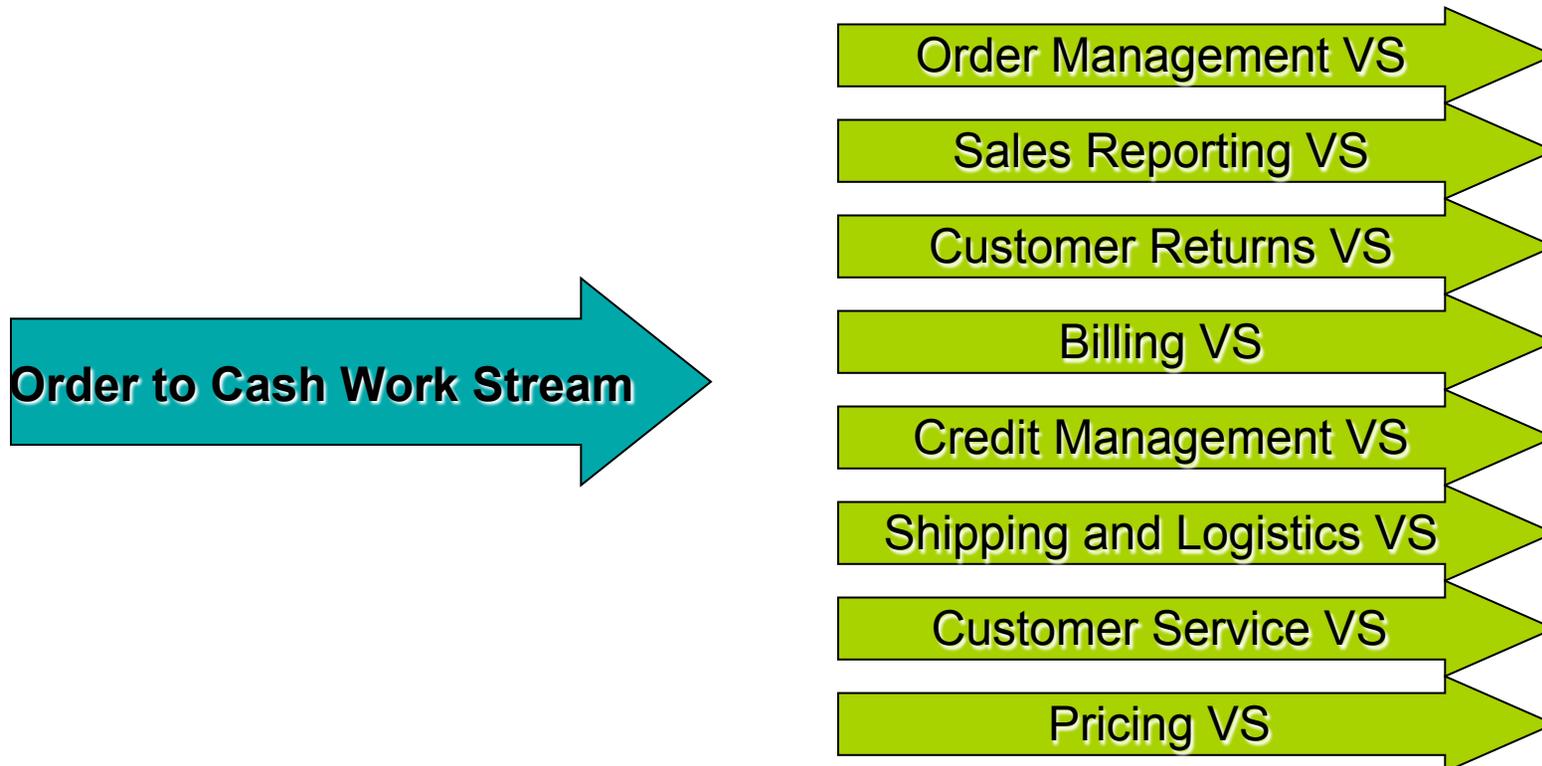
- Market drivers forcing strategic direction



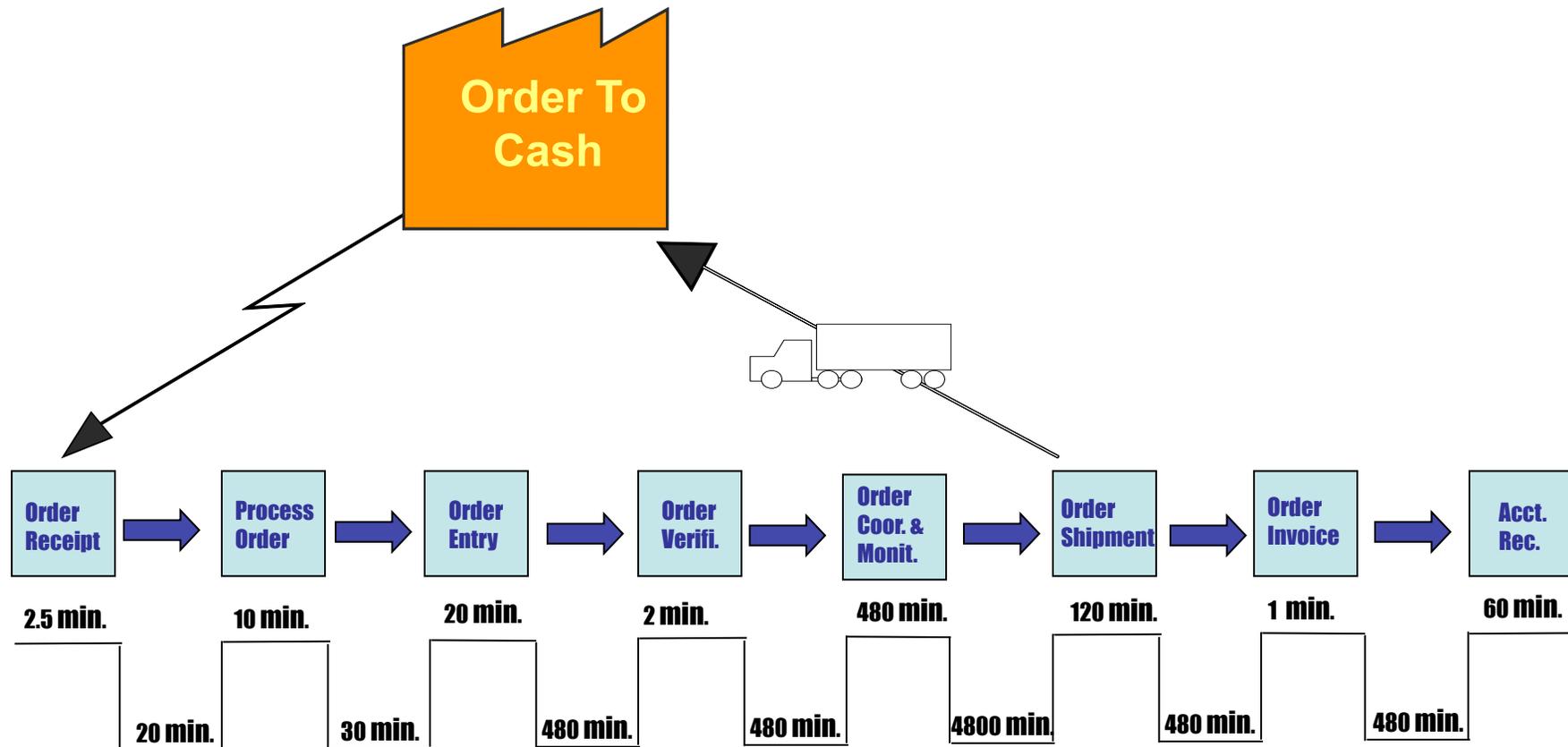
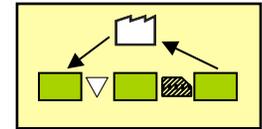
Creating Lean Business Processes



- Creating a current state value stream map



Creating Lean Business Processes



VA = 695.5 min. =
 NVA = 6530 min.
 TT = 7225.5 min.

$$\frac{7225.5 - 695.5}{7225.5} = 9.62\%$$

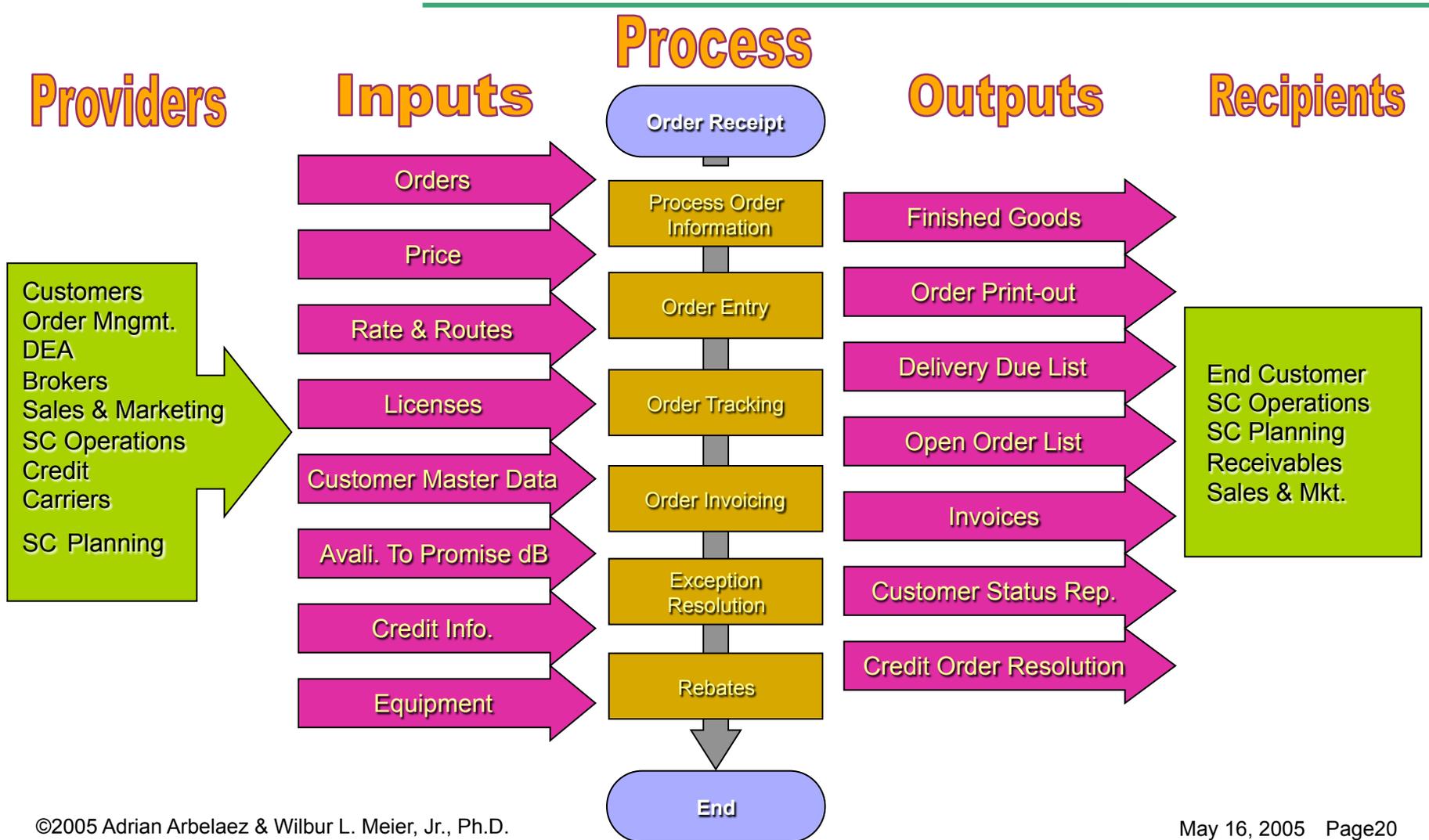
Workflow Segmentation

Workflow Segmentation							
1.	x	x		x	x		x
2.		x	x	x	x	x	x
3.	x	x	x				x

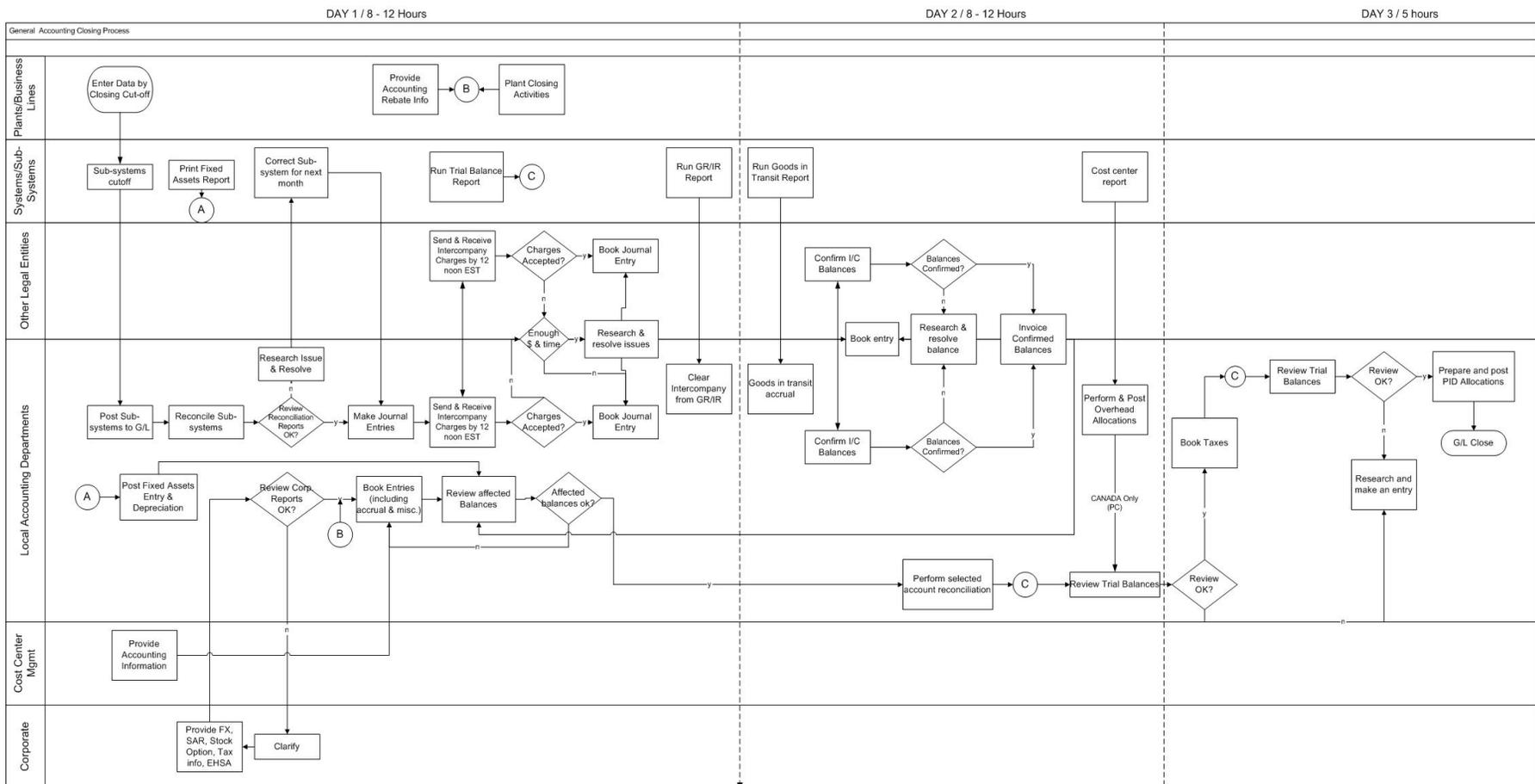
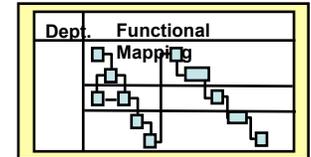
- Defining work flows that follow the same path
- Identification of similar work flows by volume will:
 - Help categorize / set priorities
 - Provide the highest impact to the organization
 - Provide highest impact to external customer
 - Achieve strategic objectives faster

Workflow Scope Model

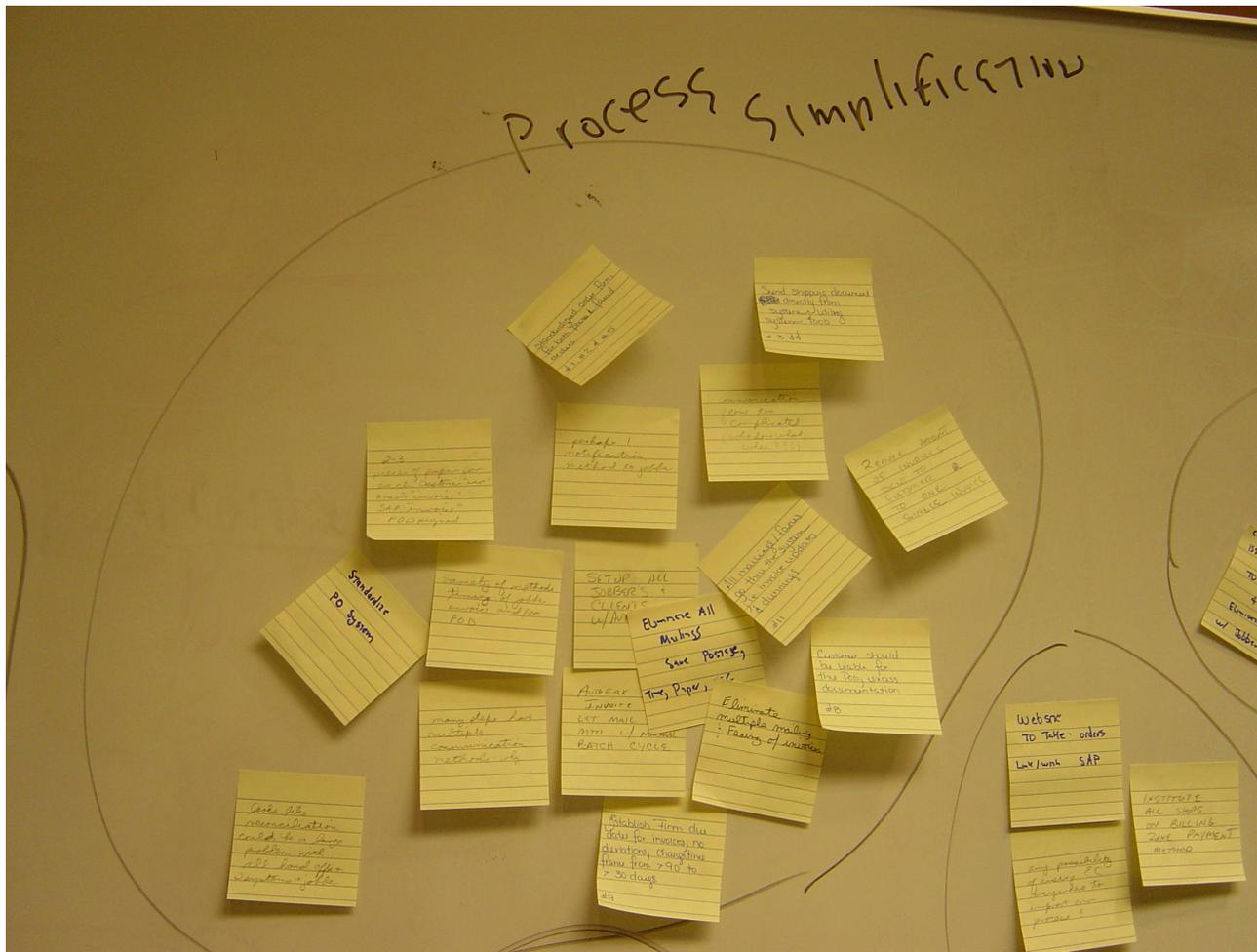
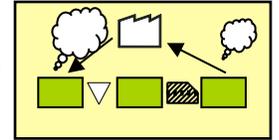
S	I	P	O	C



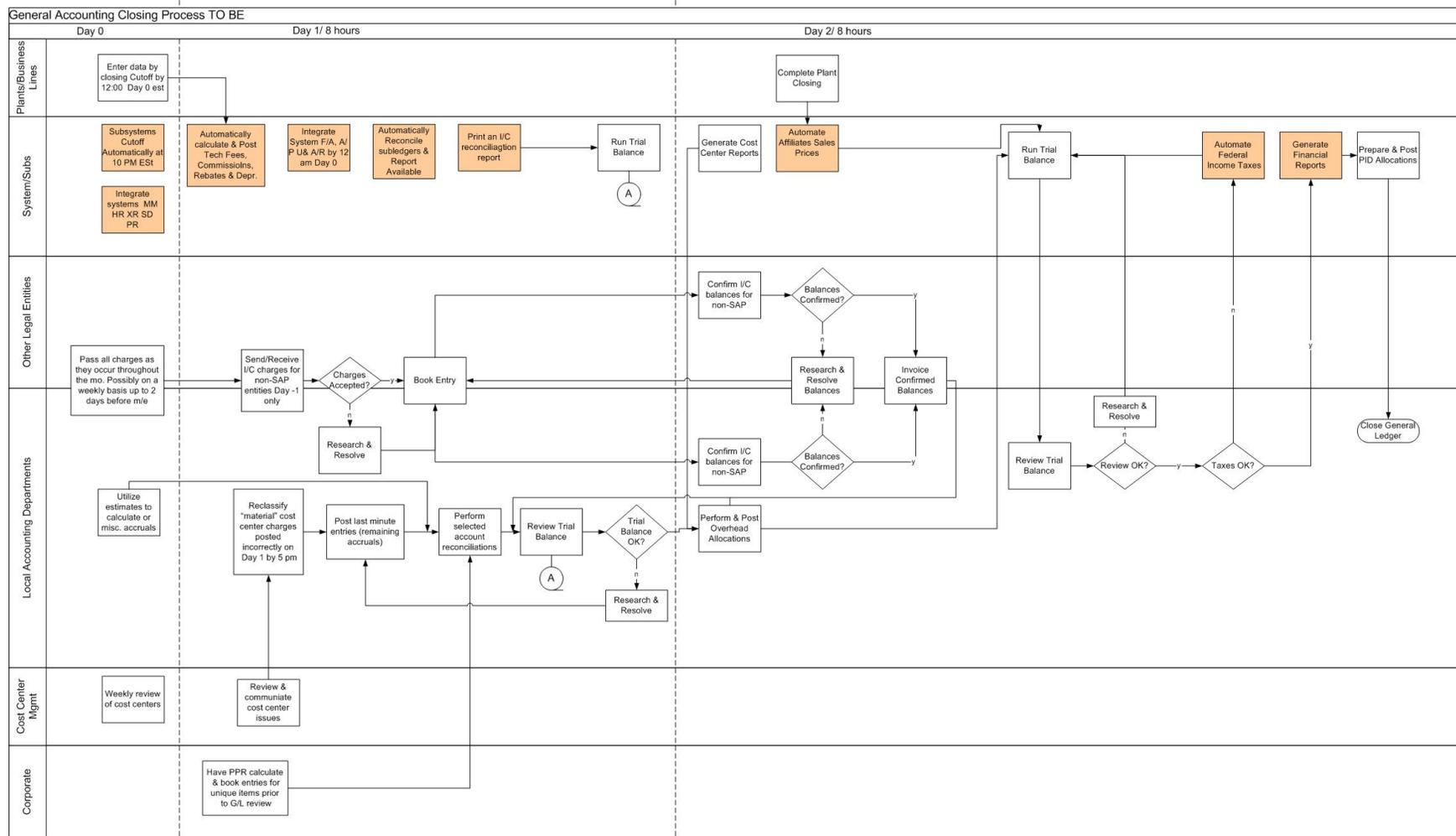
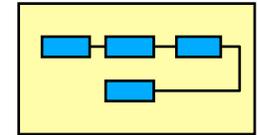
Multi-Functional Map



Gap Identification – Affinity Process



Future State Map



Improvement Prioritization

Improvement Plan			
	What	When	Who
1.			
2.			

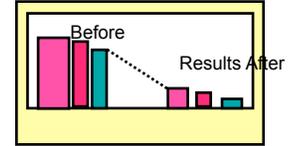
Prioritization Matrix		Criteria					100%
		35%	23%	15%	7%	20%	
No	Opportunity Description	SAP Transition	Customer Impact	Efficiency	Easy of Implementation	Benefit	Ranking
1	Invoice time frame	9	9	9	1	9	8
2	Eliminating Oracle	9	3	9	3	9	7
3	Credit	9	3	9	9	3	6
4	Invoice Follow up	1	3	9	3	1	6
5	Training	1	9	3	9	9	5
6	Jobber process ownership	3	3	9	1	9	5
7	Back orders	3	3	9	9	3	4
8	POD	3	3	3	3	9	4
9	Standard forms	1	1	9	1	3	3
10	E-commerce	3	1	3	1	3	2

Implementation Plan

Improvement Plan			
	What	When	Who
1.			
2.			

	Opportunity (What)	Benefit (Why)	Metrics	Division	When Start	When Finish	% Complete
	Sales/Marketing Forecast Every 6 Weeks	Decreased inventory levels & obsolete material, increase cash flow , better service to customer	Forecast Accuracy - ADC (75%), Valvoline (85%), ASC (60%)	DSC, ATU			
Item	Actions (How)	PPR (Who)					
1	Train Sales on 3 month report and forecast needed - ASC & ADC use ADC's form. Valvoline use current system.	Jay		DSC	1/25	3/26	
2	Obtain ADC Forecast Form and document into process procedure. Valvoline use current system.	Frank		DSC	2/6	5/8	
3	Hold Forecasting Event including Sales, Manufacturing, Customer Service.	Andrea		DSC	1/31	6/24	
4	Develop performance metric to measure forecast accuracy. - Valvoline & ADC has one. ASC to model existing.	Antonio		DSC	5/14	7/25	
5	ASC needs a system for forecasting. (Outcome of Kaizen Event)	Pat		ATU	8/10	9/24	

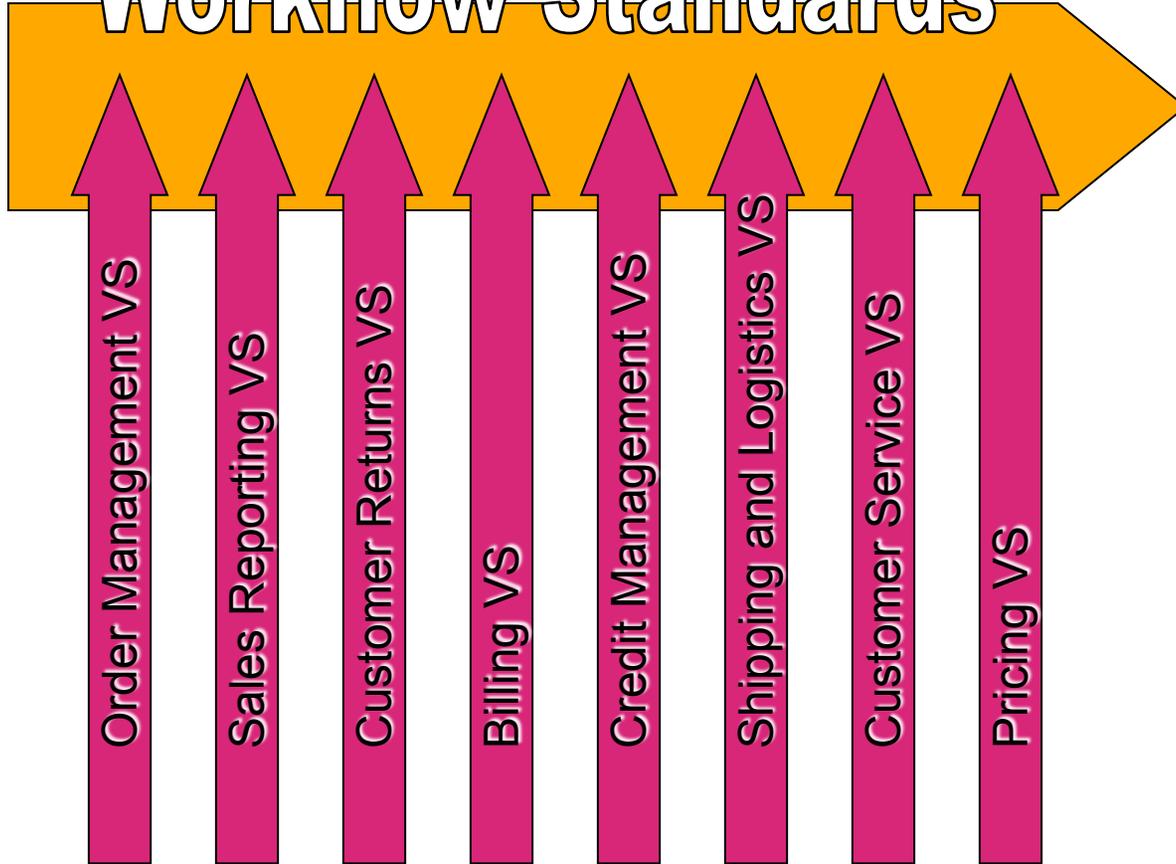
Key Performance Indicators



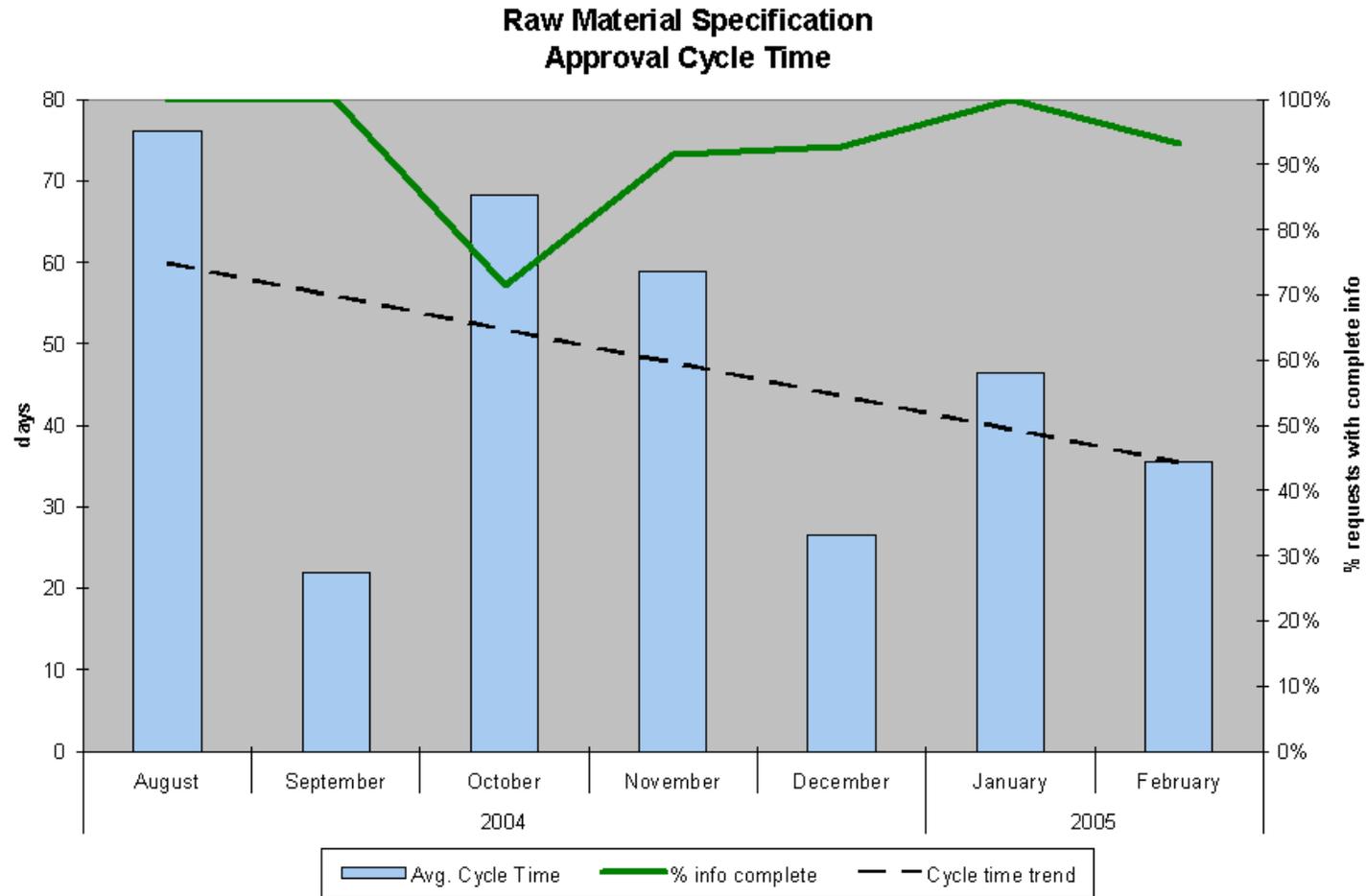
Performance



Workflow Standards



8 Months After Improvement



Success Factors

- Developing lean business processes is an increasingly important component of developing a lean enterprise.
- Due to complexity, organizations must follow a structure and systematic approach to learning the business process
- The great white elephant can only be eaten a bite at a time.
 - Aligning strategic objectives with lean activities is crucial. Prioritize based on it!

Success Factors

- From order entry to receipt of cash the majority of the time is consumed in transactional processes and not in operational processes.
- Difficulties in lean applications associated with such issues as defining information flows and accounting for business structural influences are described and highlighted.
- A proposed methodology is presented for dealing with these difficulties and overcoming them.
- Examples of the application of this approach are presented and used to illustrate its use.
- Elements for ensuring the success of the application are presented.

Conclusions

- Business processes are responsible for most of the total time (waste) taken to move from order entry to receipt of cash from the customer.
- In these processes, defining quantities and flows for products (usually information) present significant difficulties. Why?
- However, the tools useful in lean production applications on the production floor are also useful and capable of being applied to business processes.

Appendix

- Contact Information
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