

Example of Business Process Improvement

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Abstract: This project is an example of business process improvement, or re-engineering as it is sometimes called. The corporation was not radically re-structured; instead, one department achieved significant gains in efficiency and quality of service by re-designing several processes. A small team of front-line supervisors and managers did the design work and then carried out the implementation of the new process design. Two internal consultants supported the team. The project was characterized by a disciplined approach, strong executive support and quantified results.

The department had about 500 employees. Most were assigned to two work centers. 3.5 million bills were issued each month to business and residence customers.

Critical Business Issue: Reduce expenses by 8-10% in each of the next five years.

Intervention: Re-design the *CASH PROCESS*. This process involves receipt of the customer's payment, crediting the customer's account and depositing the amount in the company's account.

Exhibit 1. Relationship Map Specific to Cash Process

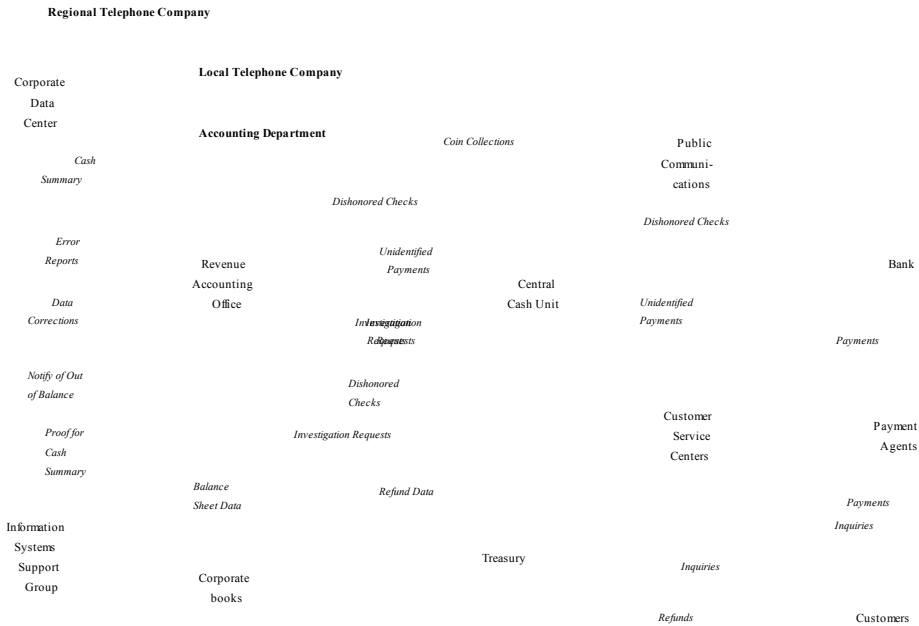


Exhibit 2. Schedule for Design Phase

Project Activity	Week																	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
1. Train the Team																		Start: Sept 17
2. Plan the Project																		
3. Prepare Relationship Map																		
4. Build IS Map																		
5. Identify Disconnects																		

6. Patch or Re-design?

7. Define Attributes

8. Build SHOULD Map

9. Specify Measures

10. Stakeholder Review

12. Revise

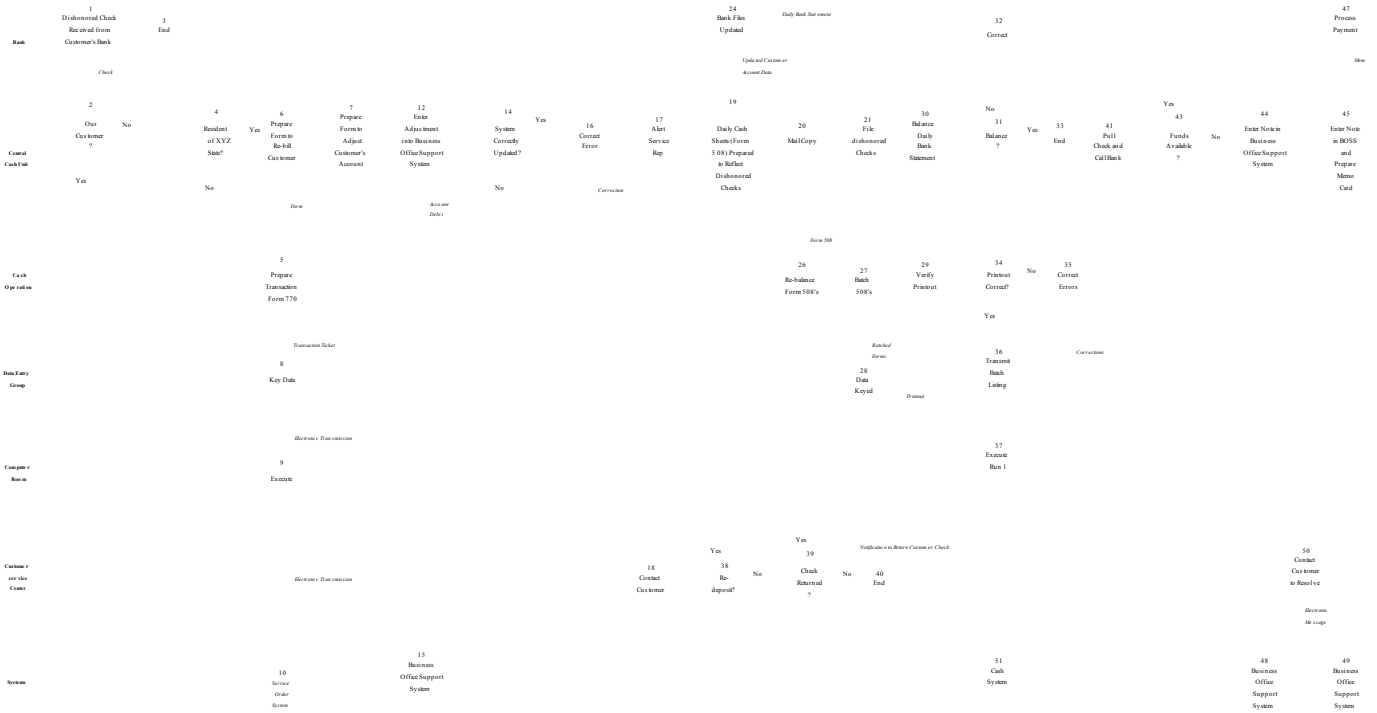
13. Formulate Recommendations

14. Decide What to Implement

End: Dec 15

NOTE: The Project Team worked full time for 4 weeks and part time for 10 weeks.

Exhibit 3. Flowchart for Sub-Process, *Dishonored Checks*, BEFORE the Re-design



NOTE. Do not try to read the content of the process steps but rather understand the diagramming conventions. Rows represent work groups or computer systems. Boxes indicate steps where work is performed. Diamonds are decision points. Lines crossing the boundaries between rows represent hand-offs from one function to another. Compare Exhibit 7 to Exhibit 3. The old design had 50 steps compared to the 24 steps in the new design.

Exhibit 7. Flowchart for Sub-Process, *Dishonored Checks*, AFTER the Re-design

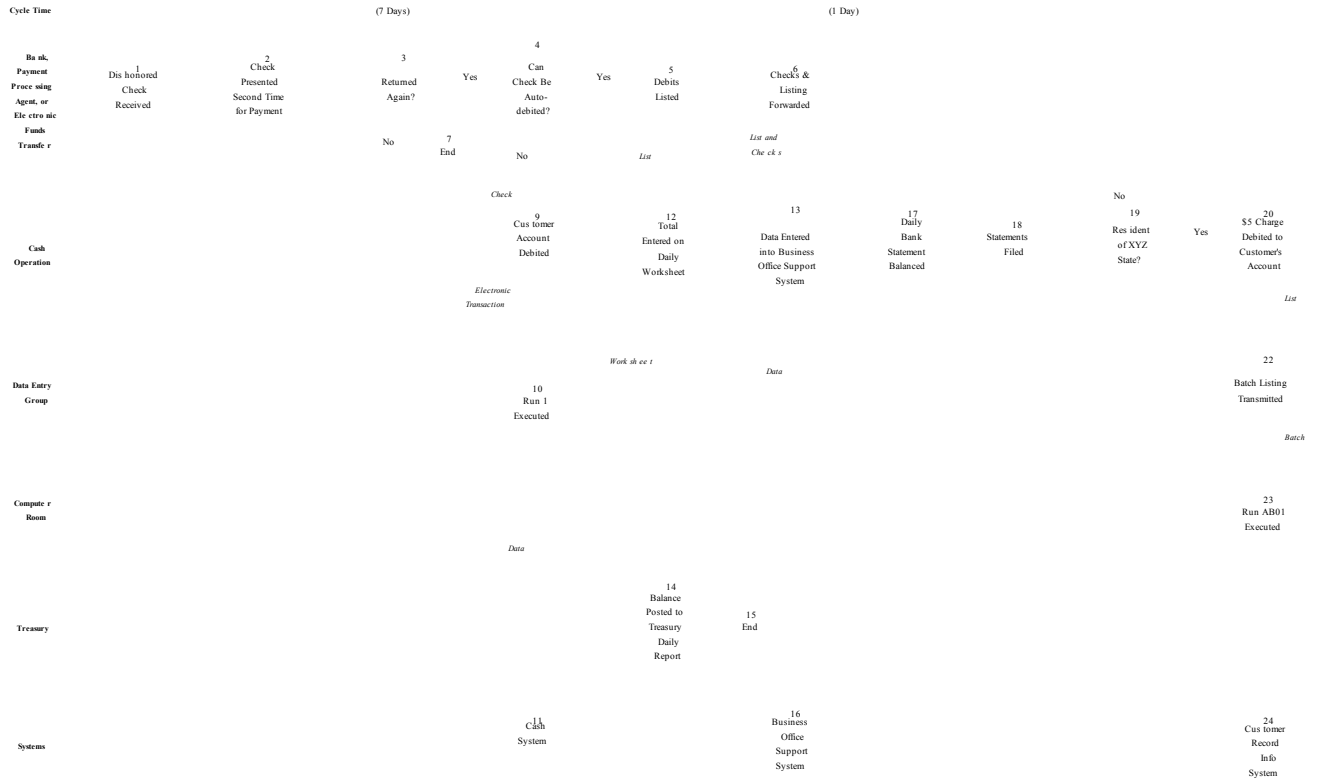


Exhibit 4. Categories of Disconnects (total of 62)

- Duplication of effort
- Steps that should be performed by other departments
- Discrepancies between the two processing centers
- Unnecessary steps
- Cycle time delays
- Opportunities for automation.

Exhibit 5. Categories of Recommendations (total of 32)

- Automation of manual activities
- Work elimination
- Transfer of responsibilities and personnel from one department to another
- Job redesign
- Measurement plan for tracking process performance
- Documentation of work procedures
- Training to cover the new procedures
- Re-arrangement of the work force

Exhibit 6. Design Attributes for “Dishonored Checks” Sub-process

Element	Attributes
Inputs	<ul style="list-style-type: none"> • Automatic check debiting • All checks processed twice by the bank • Non-company check volume reduced
Processing	<ul style="list-style-type: none"> • No re-depositing of checks • Fewer hand-offs • Manual forms eliminated
Outputs	<ul style="list-style-type: none"> • Debit reflected ASAP • “Uncollectables” reduced

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Implementation: 29 of the 32 recommendations were implemented within 12 months of the executive decision to proceed. A year-to-year comparison yielded the following results.

Exhibit 8. Results

Measure	Result
Process Steps	• 44% Reduction from 422 to 237 steps
Manually Processed Payments	• 90% reduction from 42,000 to 4,000 per month
Unplaced cash (payment cannot be credited to an account)	• 43% reduction
Customer Queries about processing of payment	• 44% reduction
Force	• 45% fewer employees assigned to Cash process
Operating Expense	• \$930,000 reduction in annual expense

Postscript: the General Manager commissioned another project at the time this project entered the implementation phase. Over the next two years, two additional projects were undertaken. Together, these projects encompassed about 75% of the

department's work activity.

Exhibit 9. Lessons According to the Project Team

- **Start with a small process**, something that can be done in a short timeframe.
- **Set clear time lines**. Keep them firm. Keep short intervals between target dates.
This policy reinforces accountabilities and maintains momentum of the project.
- **Don't dissipate resources over too many projects**. Limit the organization to two projects at one time, one in design and the other in implementation.
- **Include key stakeholders on the project team**. Work units responsible for the process must be represented on the team. The staff who maintain the supporting computer systems should also be represented.
- **Focus on short term pay-offs**. Pay-offs should be quantified in terms of financial, cycle time and customer service results.
- **Use a PC for all flowcharting and documentation**. Capture entries on the PC while the team is working out the design on the easel. Edit the draft off-line.
- **Manage the on-going process immediately**. Don't wait for all the changes to be implemented. Collect measurement data as soon as practical. Schedule process reviews as part of the GM's staff meeting at least once a month.

Exhibit 10. Lessons According to the Author

- **The support of the General Manager and the senior management team was essential**. They enforced strict adherence to the project schedule. They attended the same training as the team. They met at decision points with the project team. The GM initiated quarterly sessions with all management and representative non-management personnel to review the status of each of several processes. Measurement trends and improvement plans were reviewed for each process.
- **Any given change effort requires coordination with other change efforts** to ensure adequate resources.
- Another alignment issue was the **coordination of the process change with departmental strategy on one hand, and job-level design on the other hand**.

Further Information:

Bisson, B., Folk, V. and Smith, M.E. (2000). Case study: How to do a business process improvement. *Quality and Participation*, 23 (1), pp. 58-63.

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