

Notes on Business Process Improvement

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NOTES ON BUSINESS PROCESS IMPROVEMENT

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WHAT IS BUSINESS PROCESS IMPROVEMENT?

Business process improvement (or development) involves the examination and improvement of how work and information flows throughout an organization, and how goals get accomplished. It includes measuring and acting upon the effectivity of all aspects of the business, in order to remain competitive and survive. Related terms include continuous process improvement, process redesign, and lean initiatives.

WHO NEEDS IT?

- **New companies or organizations**, and **organizations with rapid change** (growth, shrinkage, or merger), often benefit from **process development**. Process development can help clarify new roles, prevent serious omissions, and avoid reinventing solutions to recurring problems.
- **Mature enterprises** can benefit from **process improvement** because, in time, overall operating procedures may become inefficient, evolving from quick fixes and periodic responses to crisis situations.
- **Companies in rapidly changing industries** can also benefit from **process improvement**, because earlier processes may no longer be effective.
- **All organizations** can benefit from **continuous process improvement** because their internal and external environments are constantly changing.

WHAT ARE SOME OF THE BENEFITS?

- Increases productivity
- Improves time to market
- Reduces overall costs
- Prerequisite to automation or computerization
- Provides the means to take full advantage of new technologies, software, or tools
- Increases teamwork and helps everyone focus on overall company success
- Resolves conflicting needs between departments
- Develops structure for ISO 9000 certification
- Increases understanding of each others' roles
- Helps identify internal and external customers, and their needs
- Identifies bottlenecks, develops remedies
- Separates process problems from people or equipment problems
- Helps clarify and prioritize resource issues (people, equipment, facilities, funding)

HOW DO WE IMPROVE?

Process improvement is achieved by devoting time and resources to it, in an organized manner. Improvements are gained by increasing teamwork, enhancing communications, systematic problem solving, process mapping, and other techniques for assessing and reinventing the company's operating procedures, technologies, attitudes, and culture.

Appendix A contains an overview of some improvement techniques.

WHAT IS PROCESS MAPPING?

Process mapping is one of the key tools used to facilitate process improvement. It provides a highly effective and graphic means for understanding, discussing, and improving business processes. Process mapping works well in combination with other process improvement techniques (see Appendix A).

Process mapping involves the development of a model of business processes, including flow charts showing the sequence and connectivity of the process steps. See Appendix B for process map examples.

Examples of George Pomonik's experience with process mapping

Used process mapping as part of consulting work since 1983. Maps have included:

- Overall company operations and strategies
- Major interdisciplinary programs
- Sales and marketing processes
- New product development
- Design and engineering activities
- After-sales support
- Process improvement strategies
- Recruiting and staffing
- Proposals and estimating processes
- Sales/engineering/manufacturing interactions

Maps were researched and produced by:

- Working with process improvement teams
- Personal review, interviews, and analysis of activities
- Combinations of teams and analysis.

Tools have included the use of:

- Hands-on mapping by a team
- Individual hand-drawn diagrams
- Computer-generated charts

The techniques used for each assignment were tailored to the specific situation. Some process mapping notes and examples are included in Appendix B.

Examples of Pomonik's successes with process development and improvement

- Supported the implementation of Best Practices for a billion-dollar aerospace program, in response to a corporate-wide mandate to implement uniform policies and procedures across all subsidiaries. Helped develop program execution plans, strategic plans, Integrated Product Teams, and improvements in schedules and costs.
- Facilitated a strategic planning retreat for a government organization. Support included assessments, contribution to the agenda and content for the sessions, participation in the retreat, and follow-up material for the organization's strategic plan.
- Helped a small start-up company define their workflow, organizational structure, and individual roles and responsibilities. Improved internal communications and improved the speed and quality of task completion.
- Counseled teams that successfully addressed business process redesign, product improvements, and cultural change issues. Implemented active listening and other techniques to improve communications and cooperation; resulted in comments such as: "Best meeting I ever went to!"
- Conceived and formed "Crystal Ball Teams" to help a company imagine the nature of their business and operations 10 to 15 years in the future, and explore ideas on how to prepare for that future.
- Worked with executives and managers to help improve their cooperation and communications. We developed a strong mission statement and an increased focus on corporate image, and implemented a policy for conflict resolution.
- Supported company-wide continuous process improvement activities, including the review and critique of Integrated Product Development activities, coaching of internal consultants, and assisting with the implementation of improvements.
- Helped a company reduce new product release time from 18-24 months to less than 10 months. Also implemented effective teamwork, process mapping, and other techniques that resulted in permanent improvements in work flow, communications, and meetings.
- Applied techniques using information modules and storyboards to quickly organize and complete proposals, brochures, reports, and manuals. Benefits included timely delivery, comprehensive content, efficient development, and clear reflection of upper management's ideas.
- As part of a continuous improvement activity, facilitated a senior-level team addressing well-focused, early definition of program requirements. Reduced a one year cycle time by more than 4 months. The process has become a permanent way of doing business.
- Supported strategic planning and long-range planning for large and small organizations. Assisted with plan development, review, recommendations, market assessments, forecasts, growth strategies, business plans, staffing strategies, integrated planning, and business process improvement.

APPENDIX A

OVERVIEW OF SOME IMPROVEMENT TECHNIQUES

These techniques, and others, can be selectively applied to an organization's unique issues. The experienced change agent helps develop a tailored approach by working directly with key individuals in the company, and then supports and facilitates the development and implementation of improvements.

1. Focus on our vision, goals, core competencies, core values

- What do we perceive to be our:
 - Vision (who are we, where are we going, why should we be proud of it?)
 - Value in the marketplace
 - Core values and culture, strengths, key success factors
- What's needed to reach our vision
 - See Pomonik's "Vision flow down"

2. Business process modeling and reengineering

- Examine and alter our overall business process and its components
 - Process mapping (see examples in Appendix B)
 - Brainstorming to "get out of the box"
 - Structured development, planning & implementation (see, e.g., "Reengineering the Corporation," by M. Hammer & J. Champy)

3. Focus on effective communications

- Understand communications processes and styles
- Develop company ground rules for effective communications
- Train and coach people on active listening and other techniques

4. Team building

- Team sponsor focuses the issue and develops the team's charter
- Use effective methods for team formation and operation (See Pomonik's "How teams win—the success vector model")

5. Focus on rewards and motivation

- People do what they're rewarded to do—is our de facto reward system aligned with our company's goals and expressed values?
- Are effective motivation techniques being used? (See, e.g., Herzberg's "One more time: How do you motivate employees?")

6. Focus on the customer ("quality")

- Who are our customers (internally and externally)?
- What do they need?
- Get involved with them
- Improve our value and benefits to them
- Apply "total quality management"

APPENDIX A

OVERVIEW OF SOME IMPROVEMENT TECHNIQUES (continued)

7. Action research

- Interviews
- Summarize issues and data
- Review with management
- Strategy development
- Team involvement
 - Background and discussion
 - Problem solving
 - Plan
 - Implementation
- Re-interview

8. Accentuate the positive

- Accelerate change through a series of small wins and victories
- Look for and reward good news and success
- Improve our self image and our external image
- Benefits before concerns; concerns as opportunities for improvement

9. Use the science of problem solving

- Systems analysis
- Simulations and models
- Experiments
- Data acquisition and analysis
- Consult experts
- Benchmark best practices
- Teams as problem solvers
- Quality function deployment
- See Pomonik's "How to solve a problem."
- and other (see, e.g., "Patterns of Problem Solving," by Dr. M. F. Rubinstein)

10. Focus on success and winning

- What does winning mean to our company and to each of us individually?
- Focus on winning: for our customers, company, team, and each of us
- How do teams win? (see Pomonik's "How teams win—the success vector model")

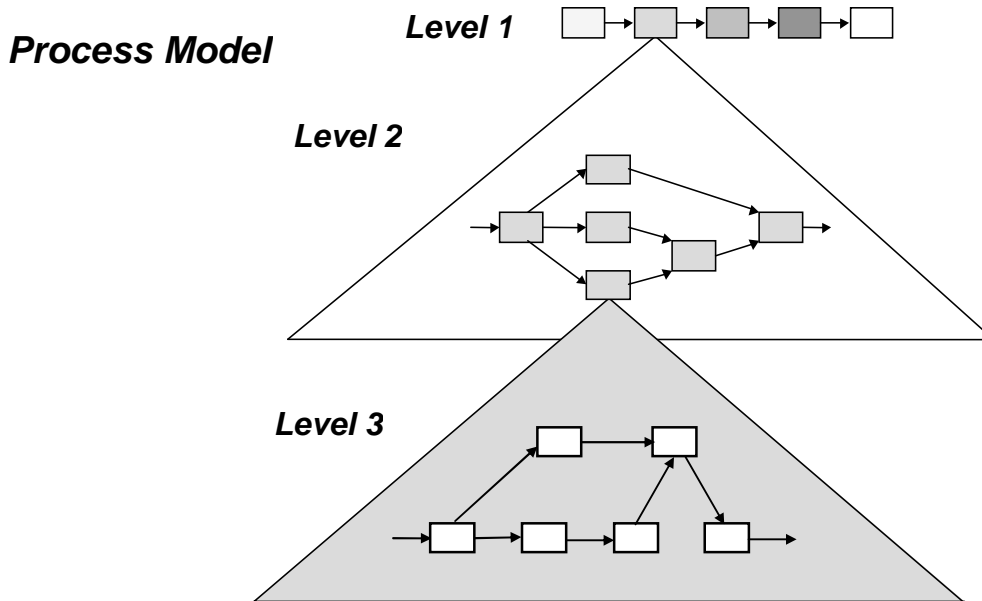
11. Lean initiatives

- Determine the customer's perception of value
- Incrementally eliminate all process steps that do not add value
- Once processes are understood, in control, and streamlined, the focus is on speed
- Get products and services moving to the customer in a faster, more direct way (see, e.g., "The Lean Company: Making the Right Choices," by J. A. Jordan, Jr. & F. J. Michel)

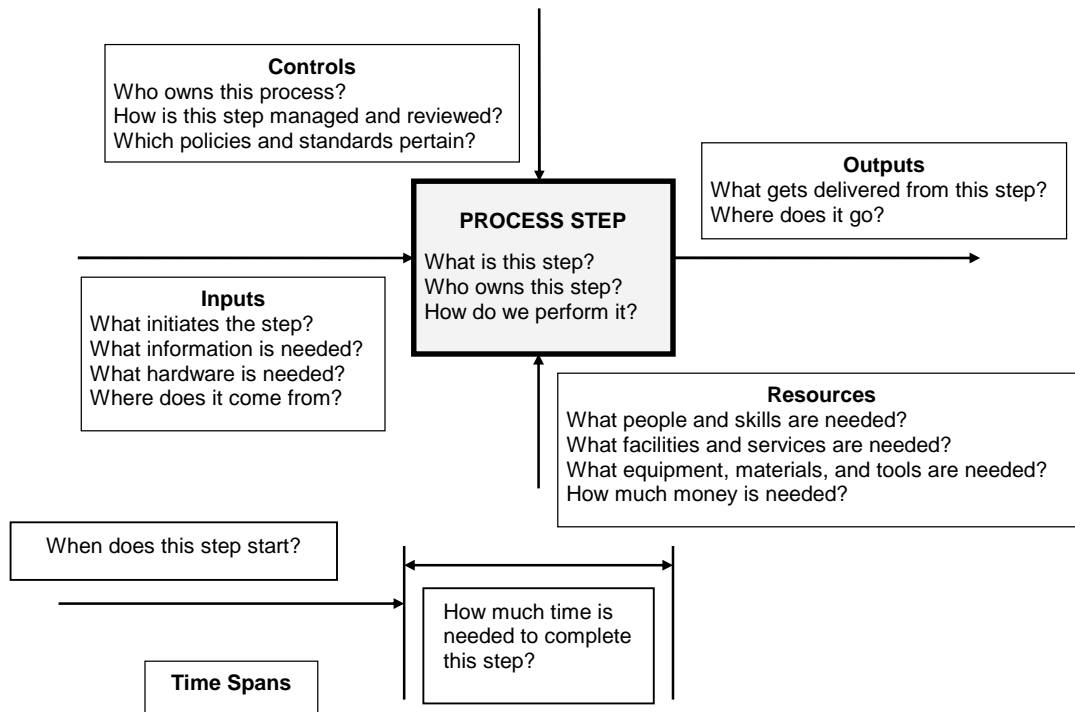
APPENDIX B – PROCESS MAPPING – Overview

Business Process Definition and Improvement

How do we deliver our end results? How does our work and information start, flow, and end?
 How can we achieve this rapidly, economically and with high quality?



Process Step Assessment

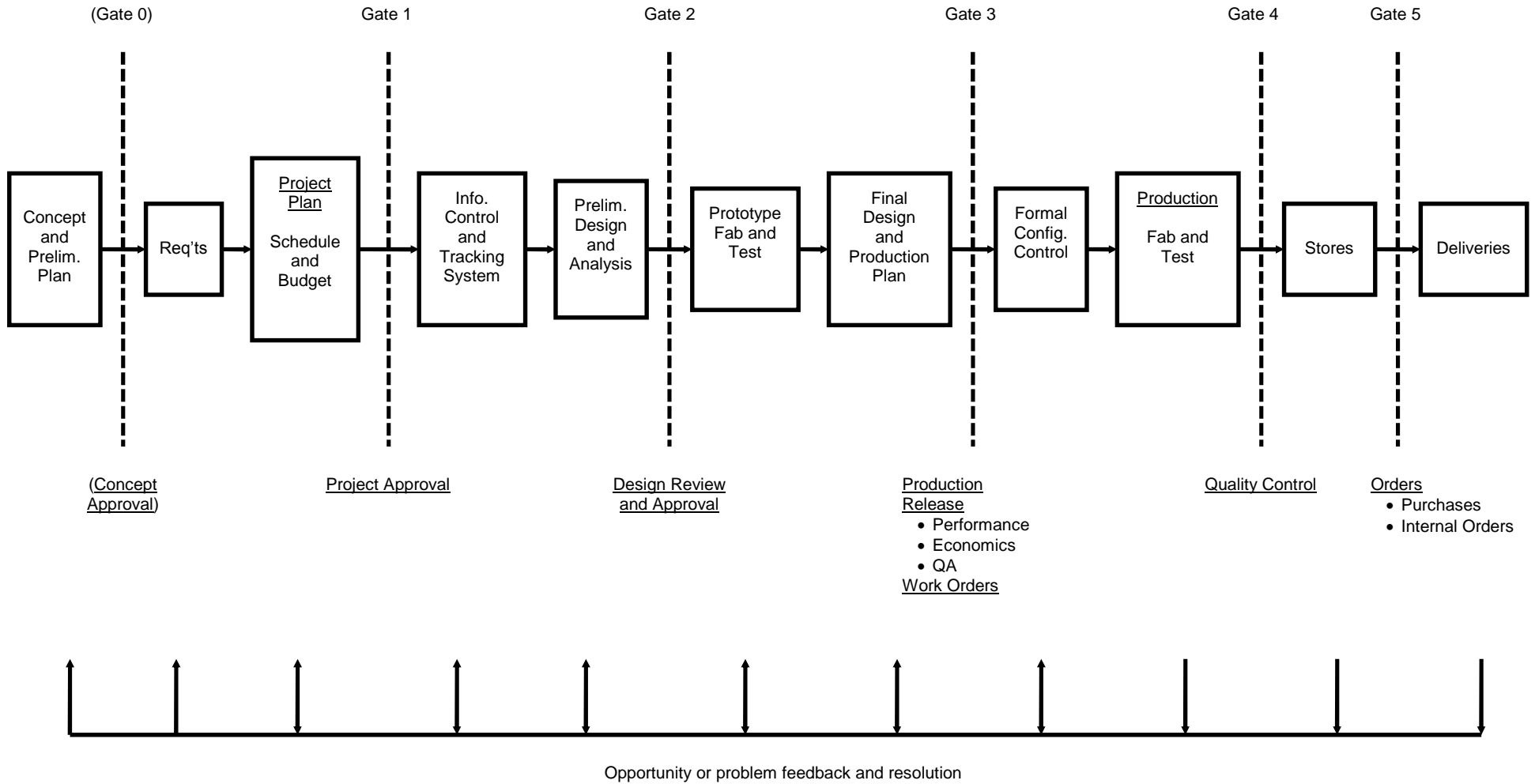


APPENDIX B – PROCESS MAPPING

Process Map Example

Example of a Product Delivery Process - Level 1

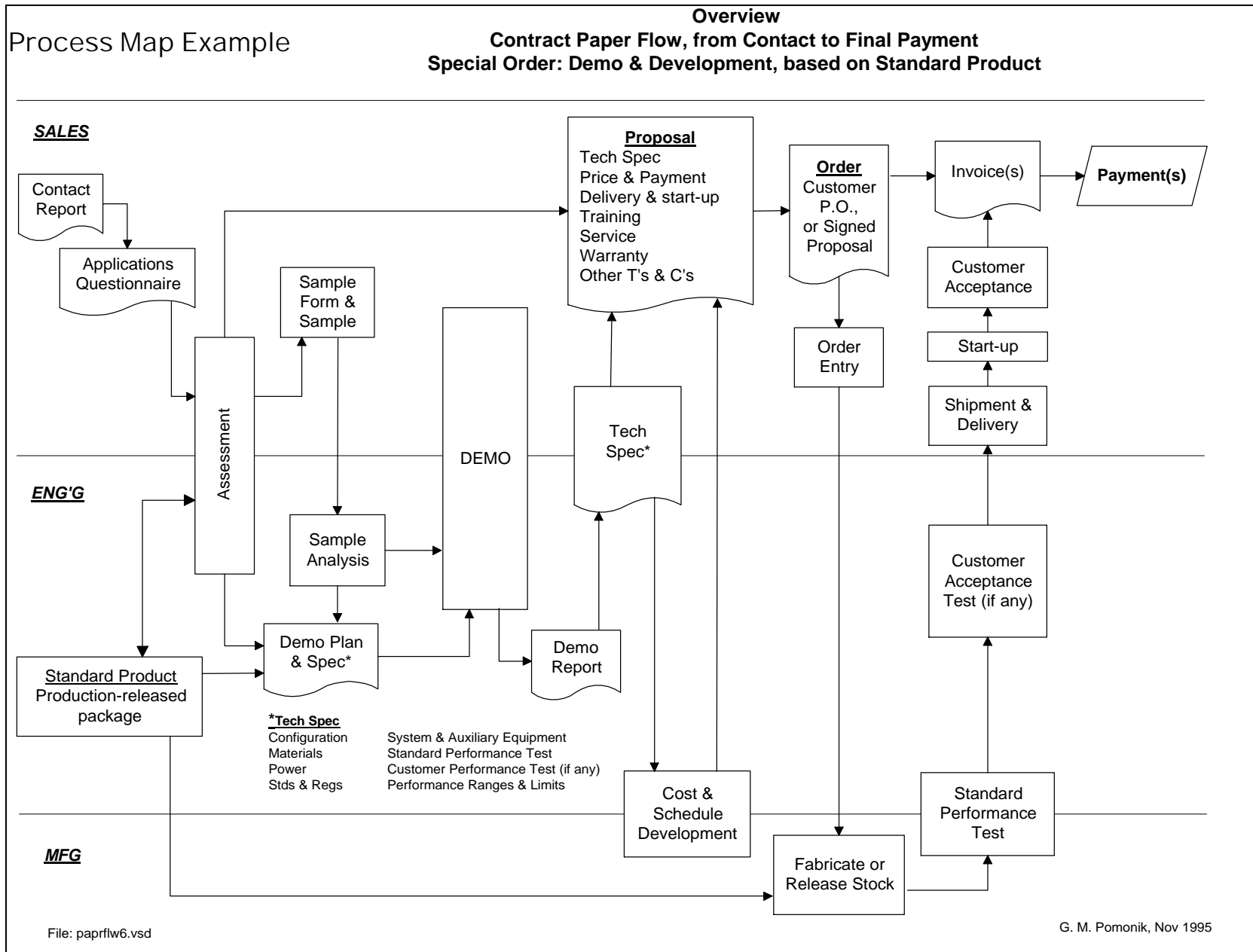
“Gates” are used to manage products, control costs, and manage risks



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APPENDIX B – PROCESS MAPPING

Process Mapping Example



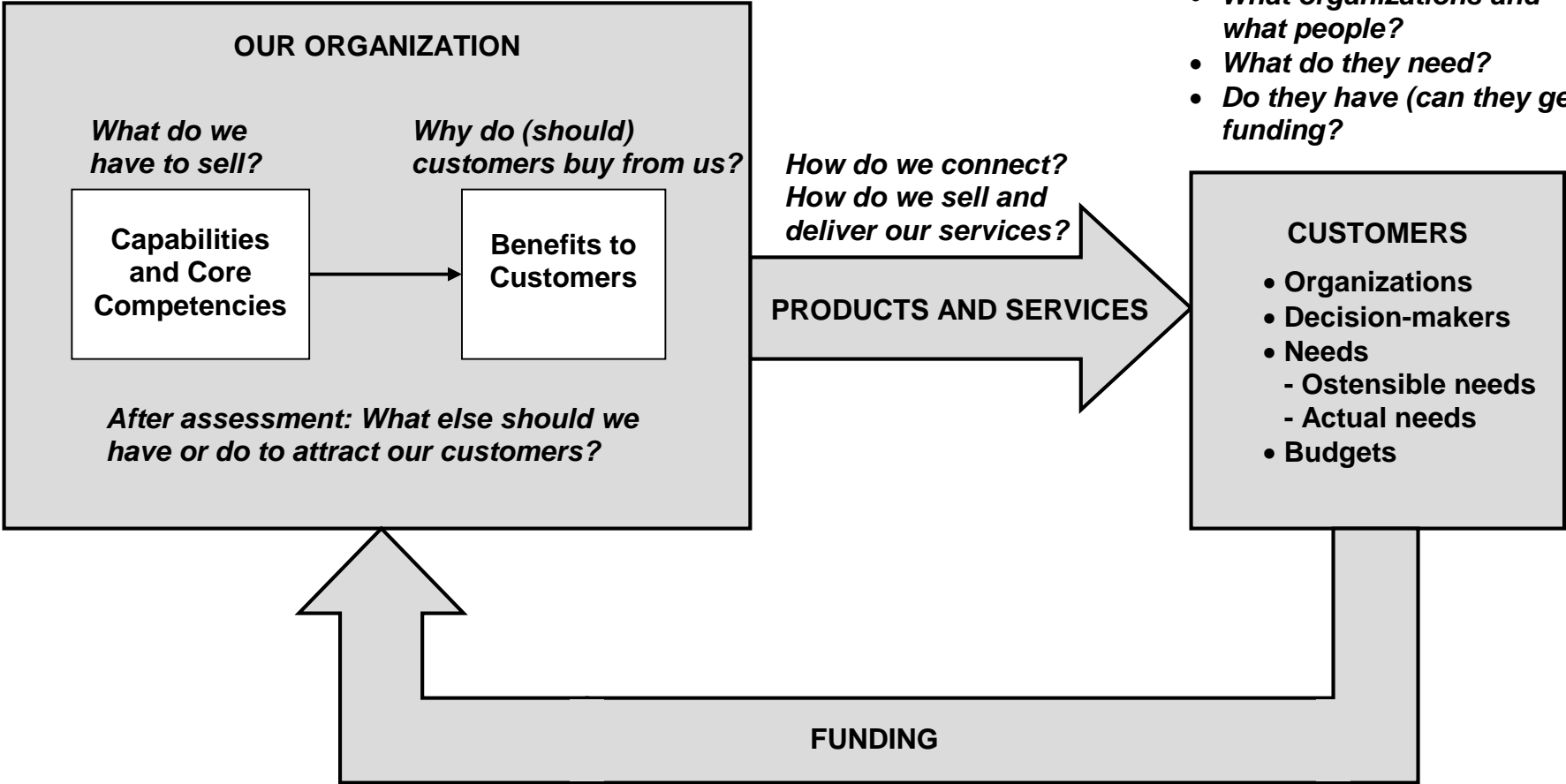
APPENDIX B – PROCESS MAPPING
Example – Assessment and Improvement of Overall Strategies and Processes

How can we do this better?

Where do we get our funding?

- *Who are (could be) our customers?*
- *What organizations and what people?*
- *What do they need?*
- *Do they have (can they get) funding?*

Who are we?



George M. Pomonik

Mr. Pomonik has extensive experience in business consulting, management, marketing, and engineering. His background includes roles as VP of Engineering, VP of R&D, and Program Manager. He is a veteran in solving diverse and difficult challenges, and has worked on systems that have successfully operated in a range of arenas from the moon (Surveyor lunar lander) to the bottom of the ocean (Hughes Glomar Explorer).

Since 1983, Mr. Pomonik has been providing consulting services in management, team building, technology, and marketing. He helps organizations increase their competitiveness, teamwork, profitability, productivity, and survivability. Benefits to clients include improvements in products, services, time-to-market, strategic planning, process definition, and the speed and quality of decisions and results.

His technical experience includes systems engineering, instrumentation and test, ocean engineering, offshore petroleum technology, industrial products, missiles, spacecraft, structural dynamics, proposals and cost estimates, and the design, development and evaluation of new products. Mr. Pomonik has five patents related to this work. He has a degree in Mechanical Engineering, as well as postgraduate training in management, systems engineering, marketing, finance, and communications.

Mr. Pomonik's capabilities and experience include business process improvement, covering the examination and improvement of how work and information flows throughout a company, and how closure is accomplished.

He works with his clients to "remove chaos" and increase their focus on defining and achieving key goals. Support is tailored to the company's needs, from assessment of the situation through hands-on implementation of change. Examples of some successful assignments:

- Reduced new product release time from 18-24 months to less than 10 months. Also implemented effective teamwork, process mapping, and other techniques that resulted in permanent improvements in work flow, communications, and meetings.
- Resolved ambiguities in manufacturing and production test specifications, suggested modifications to meet the same needs at lower costs, and supported the implementation of the changes. Program saved over \$8 million.
- Helped a small start-up company define their workflow, structure, and individual roles and responsibilities. Improved internal communications and increased the speed of task completion.
- Supported a billion-dollar aerospace program, including integration with the procedures of a new parent company, best practices assessment, cycle time improvement efforts, improvements in communications, teamwork and alignment, and other means for achieving fast, high quality decisions and results.