

Process Classification Framework

DEVELOPED BY

APQC'S INTERNATIONAL BENCHMARKING CLEARINGHOUSE

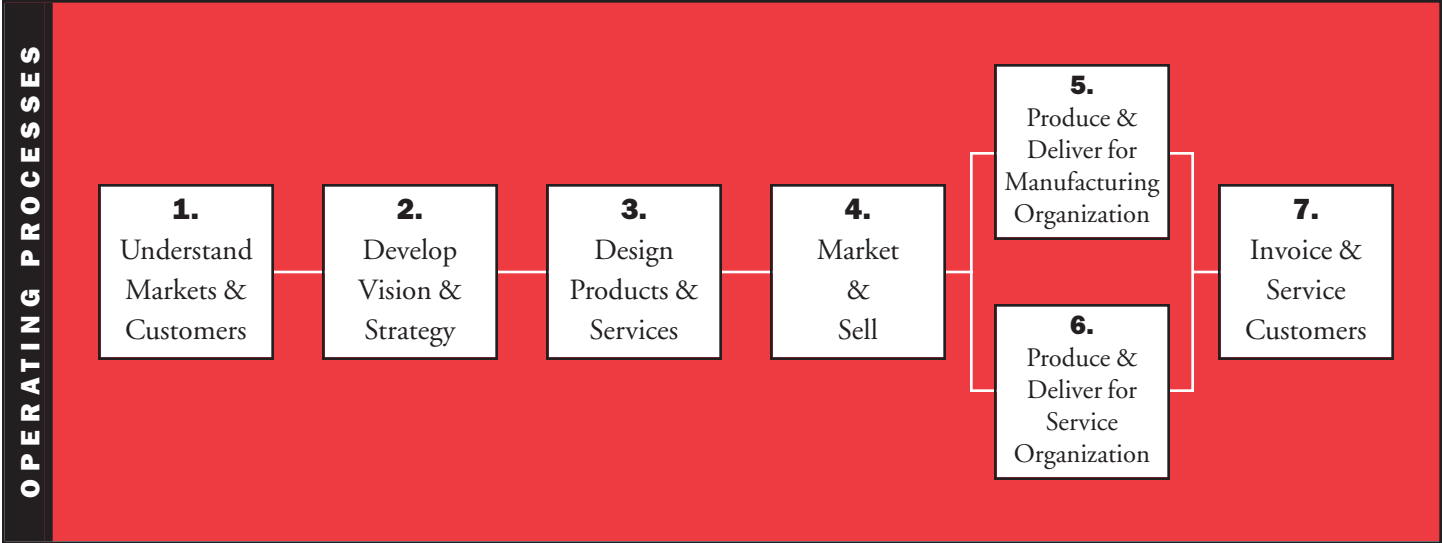
IN PARTNERSHIP WITH

ARTHUR ANDERSEN & CO., SC



AMERICAN PRODUCTIVITY
& QUALITY CENTER

Process Classification Framework: Overview



About the Framework

The Process Classification Framework has been developed over the past three years by the APQC International Benchmarking Clearinghouse, with the assistance of several major international corporations, and in close partnership with Arthur Andersen & Co.

The intent has been to create a high-level, generic enterprise model that will encourage businesses and other

organizations to see their activities from a cross-industry process viewpoint instead of a narrow functional viewpoint. Many organizations now have used the Process Classification Framework in practical ways to better understand their processes, to reach out across industry boundaries to communicate and share information, and to classify information in various forms.

Process Classification Framework

PURPOSE

The Process Classification Framework serves as a high-level, generic enterprise model that encourages businesses and other organizations to see their activities from a cross-industry process viewpoint instead of from a narrow functional viewpoint.

All too often, organizations become bogged down by the fear of making mistakes in “apples to oranges” benchmark comparisons. Convinced that they have unique characteristics and constraints, they have difficulty understanding how to compare their processes meaningfully to those of other, different organizations.

However, experience shows that the potential of benchmarking to drive dramatic improvement often lies squarely in making “out of the box” comparisons and a search for insights not found within typical intra-industry paradigms.

How can organizations communicate effectively across industry boundaries and overcome the vocabularies that obscure the underlying commonality of their business processes?

The Process Classification Framework supplies a generic view of business processes often found in multiple industries and sectors—manufacturing and service, healthcare, government, education, and others.

Additionally, many organizations now seek to understand their inner workings from a horizontal process viewpoint, rather than from a vertical functional viewpoint. How can they, for example, differentiate the sales *process* from the existing sales *department*?

The Process Classification Framework seeks to represent major processes and subprocesses, not functions, through its structure and vocabulary. The Framework does not list all processes within any specific organization. Likewise, not every process listed in the Framework is present in every organization.

HISTORY

The Process Classification Framework was originally envisioned as a “taxonomy” of business processes during the 1991 design of the American Productivity & Quality Center’s International Benchmarking Clearinghouse.

That design process involved more than 80 organizations with a strong interest in advancing the use of benchmarking in the U.S. and around the world. A primary issue was, and continues to be, how to nurture and enable process benchmarking across industry boundaries.

The founding members of the Clearinghouse were convinced that a common vocabulary, not tied to any specific industry, was necessary to classify information by process and to help companies transcend the limitations of “insider” terminology.

A small team, representing both industry and APQC, held the initial design meetings in early 1992. APQC published the first version of the Framework later that year.

COLLABORATION

APQC and Arthur Andersen & Co. have collaborated closely to bring the Process Classification Framework to life and enhance it over the past three years. The Center would like to acknowledge the staff of Arthur Andersen for their research and numerous insights during this effort.

Many other Clearinghouse member companies from diverse industries have also contributed to the ongoing development of the Framework.

LOOKING FORWARD

Continuing dialogue with Clearinghouse members has shown that the Processes Classification Framework can be a useful tool in understanding and mapping business processes. In particular, a number of organizations have used the Framework to classify both internal and external information for the purpose of cross-functional and cross-divisional communication.

The Process Classification Framework is an evolving document. The Center will continue to enhance and improve it on a regular basis. To that end, we welcome your comments, suggestions for improvement, and any insights you gain from applying it within your organization.

Additionally, other process models exist in various forms; these models might enhance the effectiveness of the Framework. We would like to learn from anyone with such information to share.

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Please direct your comments, suggestions, and questions to:

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O P E R A T I N G P R O C E S S E S

1. UNDERSTAND MARKETS AND CUSTOMERS

- 1.1 Determine customer needs and wants
 - 1.1.1 Conduct qualitative assessments
 - 1.1.1.1 Conduct customer interviews
 - 1.1.1.2 Conduct focus groups
 - 1.1.2 Conduct quantitative assessments
 - 1.1.2.1 Develop and implement surveys
 - 1.1.3 Predict customer purchasing behavior
- 1.2 Measure customer satisfaction
 - 1.2.1 Monitor satisfaction with products and services
 - 1.2.2 Monitor satisfaction with complaint resolution
 - 1.2.3 Monitor satisfaction with communication
- 1.3 Monitor changes in market or customer expectations
 - 1.3.1 Determine weaknesses of product/service offerings
 - 1.3.2 Identify new innovations that meet customer needs
 - 1.3.3 Determine customer reactions to competitive offerings

2. DEVELOP VISION AND STRATEGY

- 2.1 Monitor the external environment
 - 2.1.1 Analyze and understand competition
 - 2.1.2 Identify economic trends
 - 2.1.3 Identify political and regulatory issues
 - 2.1.4 Assess new technology innovations
 - 2.1.5 Understand demographics
 - 2.1.6 Identify social and cultural changes
 - 2.1.7 Understand ecological concerns
- 2.2 Define the business concept and organizational strategy
 - 2.2.1 Select relevant markets
 - 2.2.2 Develop long-term vision
 - 2.2.3 Formulate business unit strategy
 - 2.2.4 Develop overall mission statement
- 2.3 Design the organizational structure and relationships between organizational units
- 2.4 Develop and set organizational goals

3. DESIGN PRODUCTS AND SERVICES

- 3.1 Develop new product/service concept and plans
 - 3.1.1 Translate customer wants and needs into product and/or service requirements
 - 3.1.2 Plan and deploy quality targets
 - 3.1.3 Plan and deploy cost targets
 - 3.1.4 Develop product life cycle and development timing targets
 - 3.1.5 Develop and integrate leading technology into product/service concept
- 3.2 Design, build, and evaluate prototype products and services
 - 3.2.1 Develop product/service specifications
 - 3.2.2 Conduct concurrent engineering
 - 3.2.3 Implement value engineering
 - 3.2.4 Document design specifications
 - 3.2.5 Develop prototypes
 - 3.2.6 Apply for patents
- 3.3 Refine existing products/services
 - 3.3.1 Develop product/service enhancements

- 3.3.2 Eliminate quality/reliability problems
- 3.3.3 Eliminate outdated products/services
- 3.4 Test effectiveness of new or revised products or services
- 3.5 Prepare for production
 - 3.5.1 Develop and test prototype production process
 - 3.5.2 Design and obtain necessary materials and equipment
 - 3.5.3 Install and verify process or methodology
- 3.6 Manage the product/service development process

4. MARKET AND SELL

- 4.1 Market products or services to relevant customer segments
 - 4.1.1 Develop pricing strategy
 - 4.1.2 Develop advertising strategy
 - 4.1.3 Develop marketing messages to communicate benefits
 - 4.1.4 Estimate advertising resource and capital requirements
 - 4.1.5 Identify specific target customers and their needs
 - 4.1.6 Develop sales forecast
 - 4.1.7 Sell products and services
 - 4.1.8 Negotiate terms
- 4.2 Process customer orders
 - 4.2.1 Accept orders from customers
 - 4.2.2 Enter orders into production and delivery process

5. PRODUCE AND DELIVER FOR MANUFACTURING-ORIENTED ORGANIZATIONS

- 5.1 Plan for and acquire necessary resources
 - 5.1.1 Select and certify suppliers
 - 5.1.2 Purchase capital goods
 - 5.1.3 Purchase materials and supplies
 - 5.1.4 Acquire appropriate technology
- 5.2 Convert resources or inputs into products
 - 5.2.1 Develop and adjust production delivery process (for existing process)
 - 5.2.2 Schedule production
 - 5.2.3 Move materials and resources
 - 5.2.4 Make product
 - 5.2.5 Package product
 - 5.2.6 Warehouse or store product
 - 5.2.7 Stage products for delivery
- 5.3 Deliver products
 - 5.3.1 Arrange product shipment
 - 5.3.2 Deliver products to customers
 - 5.3.3 Install product
 - 5.3.4 Confirm specific service requirements for individual customers
 - 5.3.5 Identify and schedule resources to meet service requirements
 - 5.3.6 Provide the service to specific customers
- 5.4 Manage production and delivery process
 - 5.4.1 Document and monitor order status
 - 5.4.2 Manage inventories
 - 5.4.3 Ensure product quality
 - 5.4.4 Schedule and perform maintenance
 - 5.4.5 Monitor environmental constraints

6. PRODUCE AND DELIVER FOR SERVICE-ORIENTED ORGANIZATIONS

- 6.1 Plan for and acquire necessary resources
 - 6.1.1 Select and certify suppliers
 - 6.1.2 Purchase materials and supplies
 - 6.1.3 Acquire appropriate technology
- 6.2 Develop human resource skills
 - 6.2.1 Define skill requirements
 - 6.2.2 Identify and implement training
 - 6.2.3 Monitor and manage skill development
- 6.3 Deliver service to the customer
 - 6.3.1 Confirm specific service requirements for individual customer
 - 6.3.2 Identify and schedule resources to meet service requirements
 - 6.3.3 Provide the service to specific customers
- 6.4 Ensure quality of service

7. INVOICE AND SERVICE CUSTOMERS

- 7.1 Bill the customer
 - 7.1.1 Develop, deliver, and maintain customer billing
 - 7.1.2 Invoice the customer
 - 7.1.3 Respond to billing inquiries
- 7.2 Provide after-sales service
 - 7.2.1 Provide post-sales service
 - 7.2.2 Handle warranties and claims
- 7.3 Respond to customer inquiries
 - 7.3.1 Respond to information requests
 - 7.3.2 Manage customer complaints

MANAGEMENT & SUPPORT PROCESSES

8. DEVELOP AND MANAGE HUMAN RESOURCES

- 8.1 Create and manage human resource strategies
 - 8.1.1 Identify organizational strategic demands
 - 8.1.2 Determine human resource costs
 - 8.1.3 Define human resource requirements
 - 8.1.4 Define human resource's organizational role
- 8.2 Cascade strategy to work level
 - 8.2.1 Analyze, design, or redesign work
 - 8.2.2 Define and align work outputs and metrics
 - 8.2.3 Define work competencies
- 8.3 Manage deployment of personnel
 - 8.3.1 Plan and forecast workforce requirements
 - 8.3.2 Develop succession and career plans
 - 8.3.3 Recruit, select and hire employees
 - 8.3.4 Create and deploy teams
 - 8.3.5 Relocate employees
 - 8.3.6 Restructure and rightsize workforce
 - 8.3.7 Manage employee retirement
 - 8.3.8 Provide outplacement support
- 8.4 Develop and train employees
 - 8.4.1 Align employee and organization development needs
 - 8.4.2 Develop and manage training programs
 - 8.4.3 Develop and manage employee orientation programs
 - 8.4.4 Develop functional/process competencies
 - 8.4.5 Develop management/leadership competencies
 - 8.4.6 Develop team competencies
- 8.5 Manage employee performance, reward and recognition
 - 8.5.1 Define performance measures
 - 8.5.2 Develop performance management approaches/feedback
 - 8.5.3 Manage team performance
 - 8.5.4 Evaluate work for market value and internal equity
 - 8.5.5 Develop and manage base and variable compensation
 - 8.5.6 Manage reward and recognition programs

- 8.6 Ensure employee well-being and satisfaction
 - 8.6.1 Manage employee satisfaction
 - 8.6.2 Develop work and family support systems
 - 8.6.3 Manage and administer employee benefits
 - 8.6.4 Manage workplace health and safety
 - 8.6.5 Manage internal communications
 - 8.6.6 Manage and support workforce diversity
- 8.7 Ensure employee involvement
- 8.8 Manage labor-management relationships
 - 8.8.1 Manage collective bargaining process
 - 8.8.2 Manage labor-management partnerships
- 8.9 Develop Human Resource Information Systems (HRIS)

9. MANAGE INFORMATION RESOURCES

- 9.1 Plan for information resource management
 - 9.1.1 Derive requirements from business strategies
 - 9.1.2 Define enterprise system architectures
 - 9.1.3 Plan and forecast information technologies/methodologies
 - 9.1.4 Establish enterprise data standards
 - 9.1.5 Establish quality standards and controls
- 9.2 Develop and deploy enterprise support systems
 - 9.2.1 Conduct specific needs assessments
 - 9.2.2 Select information technologies
 - 9.2.3 Define data life cycles
 - 9.2.4 Develop enterprise support systems
 - 9.2.5 Test, evaluate, and deploy enterprise support systems
- 9.3 Implement systems security and controls
 - 9.3.1 Establish systems security strategies and levels
 - 9.3.2 Test, evaluate, and deploy systems security and controls
- 9.4 Manage information storage & retrieval
 - 9.4.1 Establish information repositories (data bases)
 - 9.4.2 Acquire & collect information
 - 9.4.3 Store information

- 9.4.4 Modify and update information
- 9.4.5 Enable retrieval of information
- 9.4.6 Delete information
- 9.5 Manage facilities and network operations
 - 9.5.1 Manage centralized facilities
 - 9.5.2 Manage distributed facilities
 - 9.5.3 Manage network operations
- 9.6 Manage information services
 - 9.6.1 Manage libraries and information centers
 - 9.6.2 Manage business records and documents
- 9.7 Facilitate information sharing and communication
 - 9.7.1 Manage external communications systems
 - 9.7.2 Manage internal communications systems
 - 9.7.3 Prepare and distribute publications
- 9.8 Evaluate and audit information quality

10. MANAGE FINANCIAL AND PHYSICAL RESOURCES

- 10.1 Manage financial resources
 - 10.1.1 Develop budgets
 - 10.1.2 Manage resource allocation
 - 10.1.3 Design capital structure
 - 10.1.4 Manage cash flow
 - 10.1.5 Manage financial risk
- 10.2 Process finance and accounting transactions
 - 10.2.1 Process accounts payable
 - 10.2.2 Process payroll
 - 10.2.3 Process accounts receivable, credit, and collections
 - 10.2.4 Close the books
 - 10.2.5 Process benefits and retiree information
 - 10.2.6 Manage travel and entertainment expenses
- 10.3 Report information
 - 10.3.1 Provide external financial information
 - 10.3.2 Provide internal financial information
- 10.4 Conduct internal audits
- 10.5 Manage the tax function
 - 10.5.1 Ensure tax compliance
 - 10.5.2 Plan tax strategy
 - 10.5.3 Employ effective technology
 - 10.5.4 Manage tax controversies
 - 10.5.5 Communicate tax issues to management
 - 10.5.6 Manage tax administration
- 10.6 Manage physical resources
 - 10.6.1 Manage capital planning
 - 10.6.2 Acquire and redeploy fixed assets
 - 10.6.3 Manage facilities
 - 10.6.4 Manage physical risk

11. EXECUTE ENVIRONMENTAL MANAGEMENT PROGRAM

- 11.1 Formulate environmental management strategy
- 11.2 Ensure compliance with regulations
- 11.3 Train and educate employees
- 11.4 Implement pollution prevention program
- 11.5 Manage remediation efforts
- 11.6 Implement emergency response programs
- 11.7 Manage government agency and public relations
- 11.8 Manage acquisition/divestiture environmental issues
- 11.9 Develop and manage environmental information system
- 11.10 Monitor environmental management program

12. MANAGE EXTERNAL RELATIONSHIPS

- 12.1 Communicate with shareholders
- 12.2 Manage government relationships
- 12.3 Build lender relationships
- 12.4 Develop public relations program
- 12.5 Interface with board of directors
- 12.6 Develop community relations
- 12.7 Manage legal and ethical issues

13. MANAGE IMPROVEMENT AND CHANGE

- 13.1 Measure organizational performance
 - 13.1.1 Create measurement systems
 - 13.1.2 Measure product and service quality
 - 13.1.3 Measure cost of quality
 - 13.1.4 Measure costs
 - 13.1.5 Measure cycle time
 - 13.1.6 Measure productivity
- 13.2 Conduct quality assessments
 - 13.2.1 Conduct quality assessments based on external criteria
 - 13.2.2 Conduct quality assessments based on internal criteria
- 13.3 Benchmark performance
 - 13.3.1 Develop benchmarking capabilities
 - 13.3.2 Conduct process benchmarking
 - 13.3.3 Conduct competitive benchmarking
- 13.4 Improve processes and systems
 - 13.4.1 Create commitment for improvement
 - 13.4.2 Implement continuous process improvement
 - 13.4.3 Reengineer business processes and systems
 - 13.4.4 Manage transition to change
- 13.5 Implement TQM
 - 13.5.1 Create commitment for TQM
 - 13.5.2 Design and implement TQM systems
 - 13.5.3 Manage TQM life cycle