

Quick Reference Guide

Business Process Frameworks

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David and Roderick are passionate about helping organizations understand and document their own business processes, using frameworks such as APQC's Process Classification Framework and standards such as BPMN as well as applying simple approaches to improve and simplify these business processes.

One of the popular and “hot” topics in Enterprise Architecture today is Patterns. However, before Patterns became such a “hot” topic, the uses of Architecture Frameworks were seen as an important part of the Architect’s “Toolkit”.

This Quick Reference Guide will cover Business Process Frameworks, explaining:

- What are Business Process Frameworks;
- Why you should use a Business Process Framework; and
- The types of Business Process Frameworks available.

Process Frameworks provide an excellent means of assisting in scoping your business process initiatives, as they provide a ready-made framework that provide:

- The foundation structure for your business processes;
- A starting list of the processes to include; and
- A starting point for working out what to include and what is important to you.

We will start by providing some context and by outlining Process Frameworks to explain:

- Why a means of classifying Processes is important
- What is a Process Framework;
- How to use the Process Framework; and
- Examples of applying the Process Frameworks.

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Business Process Frameworks

What are Business Process Frameworks

A Process Framework is a means of grouping processes into appropriate related categories and most process frameworks use the concept of Value Chains as the basis for these categories.

The concept of Value Chains was originally defined in Michael Porter's well known book, "The Competitive Advantage: Creating and Sustaining Superior Performance", in which Michael Porter explains:

"Every firm is a collection of activities that are performed to design, produce, market, deliver, and support its product. All these activities can be presented using a value chain..." (shown in the figure below) *"A firm's value chain and the way it performs individual activities are a reflection of its history, its strategy, its approach to implementing its strategy, and the underlying economics of the activities themselves."*¹

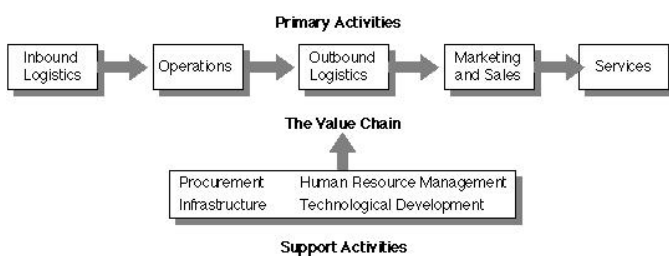


Figure 1: Michael Porter's Value Chain Concept²

The Institute of Manufacturing, part of the Department of Engineering at Cambridge University, further explains that Value Chains are:

*"... based on a process view of organisations, i.e. the idea of seeing a manufacturing (or service) organisation as a system, made up of subsystems each with inputs, transformation processes and outputs. Inputs, transformation processes, and outputs involve the acquisition and consumption of resources - money, labour, materials, equipment, buildings, land, administration and management. How value chain activities are carried out determines costs and affects profits."*³

The category of Primary Processes (or Activities) form the Value Chain of an Organization and is where

they derive their revenue and incur their operating expenses, hence the term Value Chain, which defines the chain of processes in which value is derived for an organization.

The category of Support Processes (or Activities) defines the indirect costs incurred in managing and supporting an Organization. In more recent times, it is now more common to split Support Processes into Management Processes and Support Processes, to separate the development, implementation and management of an Organization's strategy from the Processes related to supporting an Organization, such as managing Finances, Human Resources, Infrastructure and Information Technology.

Most organizations are usually able to easily identify and define the processes that make up their Value Chain, i.e. Operations Processes, however they often struggle to be able to identify the Management and Support Processes, i.e. Processes within the other parts of their business. This is one area that Process Frameworks can be very useful, as they provide a starting checklist to identify not only Operational Processes, but also Management and Supporting Processes.

Why do I need a Business Process Framework?

A process framework provides:

- A checklist for identifying candidate processes undertaken within your business or organization;
- A structure for classifying the processes you are identifying into a group of related processes;
- The basis for determining how process ownership could be assigned;
- A foundation for structuring a process repository; and
- Visibility of process to wider organization.

The most common reasons why people use Process frameworks are as the means of classifying processes into a classification structure that enable better understanding of how processes relate to each other and are part of getting things done.

Types of Business Process Frameworks

Overview

There are three basic types of Business Process Frameworks:

- Generic Business Process Frameworks;
- Industry Business Process Frameworks; and
- Domain Specific Business Process Frameworks.

Generic Business Process Frameworks

A Generic Business Process Framework provides a classification or taxonomy for Business Processes of any organization, regardless of the specific nature or purpose for which the organisation exists. For example, the Framework can be applied to virtually any type of organization, whether be a government, commercial or community organization.

Examples of Generic Business Process Frameworks include:

- APQC Cross Industry Process Classification; and
- Value Chain Group's Value Reference Model.

Industry Business Process Frameworks

An Industry Business Process Framework provides a classification or taxonomy for Business Processes of specific industries or industry segments.

Many of these frameworks have been developed and supported by industry organizations. These frameworks tend to have high level of adoption. A number of Industry Business Process Frameworks have been developed by IT Companies to support their Software, such as IBM and SAP.

Examples of Industry Business Process Frameworks include:

- Industry specific versions of the APQC PCF, such as Aerospace and Defense, Automotive, Banks, Broadcasting, Education, Retailing, Utilities etc;
- TM Forum's Enhanced Telecom Operations Map (eTOM) Business Process Framework;

- Supply Chain Council's Supply-Chain Operations Reference (SCOR) Model; and
- The US Government's Federal Enterprise Architecture Framework.

Domain Specific Business Process Frameworks

A Specific Domain (or subject area) Business Process Framework provides a classification or taxonomy for Business Processes within a specific subject area (or domain) within an organization. Typically, these types of frameworks relate to the Management or Supporting related Business Processes, rather than core Value Creation Processes. For example, two of the most well-known of these frameworks are Information Technology related:

- ISACA's COBIT Business Framework for governance and management of Enterprise IT; and
- UK's Information Technology Infrastructure Library (ITIL) for IT Service Management.

Examples Business Process Frameworks

Generic Business Process Frameworks

APQC Cross-Industry Process Classification Framework

The APQC involvement in Benchmarking lead to the development of the business taxonomy called the Process Classification Framework (PCF). The APQC Cross-Industry PCF is probably the best known of all Process Frameworks and is now used by many companies for many different reasons, such as⁴:

- Organizing improvement efforts;
- Defining the processes that need to be improved;
- Benchmarking internally and with other organizations;
- Aligning IT roll-outs and updates for similar processes across the organization;

- Discussing organizational performance using the same terminology across business units and departments;
- Better understanding how their business works; and
- Organizing enterprise content and knowledge.

The PCF consists of a set of 12 process categories, 5 process categories covering operational areas and 7 process categories covering support areas.

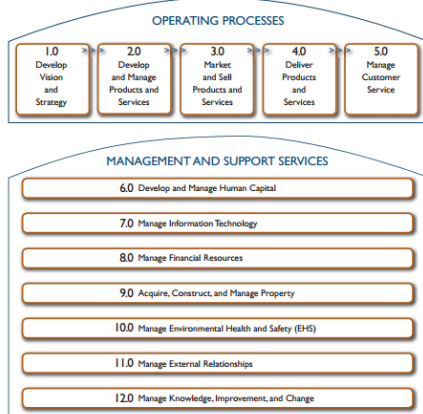
When considered as a whole, they collectively represent the operation of any business or organization.

PROCESS CLASSIFICATION FRAMEWORKSM

OVERVIEW

In 1992, more than 80 organizations from around the world came together to create the Process Classification FrameworkSM (PCF). Since then, thousands of organizations have downloaded and reviewed it, and hundreds of organizations have participated in its continued development. At its simplest level, APQC's PCF is a list. It is hierarchically organized and functionally decomposed. Its elements are mutually exclusive and collectively exhaustive business processes. Thus, organizations can leverage the PCF to define work processes comprehensively and without redundancies. Organizations also use the PCF to support benchmarking, manage content, and perform other important performance management activities.

The PCF identifies 12 high-level functional categories and contains over 1,000 process elements. The process elements identified in the PCF are relevant to all organizations regardless of industry, region, or size. Although the structure of the PCF is well suited to a manufacturing organization, it can easily be adopted and adapted to suit any organization. The cross-industry nature of the PCF is one of its most valuable features. When an organization adopts the PCF, it adopts a common language, a benchmarking mechanism, and a worldwide community of PCF users.



THE FRAMEWORK FOR PROCESS IMPROVEMENT

The PCF serves as the basis for APQC's Open Standards Benchmarking research. Accurately benchmarking performance across industries and disparate organizations is difficult, but the PCF makes it significantly easier and, in many cases, economically feasible. Breakthrough performance is possible when organizations look beyond their traditional paradigms and compare themselves to organizations outside typical peer groups. The PCF enables these comparisons with its clear, easy-to-understand decomposition into discrete process elements.

In conjunction with the processes identified in the PCF, APQC defines a number of related measures and key performance indicators. The PCF, its associated measures, and definitions of the various process elements are available for download at no charge at www.apqc.org/ost.

Version 5.2.0-en-10 • January 2012



Figure 2: Front Page of APQC PCF Document

The PCF is structured into 4 Levels:

- Category: Is the highest level of process, e.g. Manage Supply Chain, Manage Customer Service.
- Process Group: Indicates the next level of processes, a group of processes, e.g. Perform After-Sales Repairs, Develop Sales Strategy.

- Process: A series of activities converting inputs into outcomes, e.g. Develop sales forecast, Create materials plan.
- Activity: Indicates key events performed when executing a process, e.g. Receive Customer Requests, Resolve Customer Complaints.

Value Chain Group's Value Reference Model

Another example of a generic Business Process Framework is the Value Chain Group's Value Reference Model⁵ (VRM). Although originally derived from a Supply Chain basis, the VRM has developed into a comprehensive cross-industry Business Process Framework that is underpinned with an extensive set of supporting documentation, methods and approaches.

Figure 3: Value Reference Model

Although at first glance the VRM (following page) seems quite complicated, it is based around a series of simple structures that are easily explained and understood. For example, it is:

Comprehensive



Figure 4: VRM coverage of an Enterprise

Value Chain based and Multi-levelled

Value Chain

The horizontal chain with interdependent processes that generates benefits and value to the end user.



Strategic Processes

The Top Level of the model encompasses all the high level processes in Value Chains are applied for gaining competitive advantages.

Tactical Processes

The Second level of the model contains processes decomposed from the Strategy Level supporting the implementation of strategic goals through tactical decisions and configurations

Operational Processes

The third level of the model represents decomposed Tactical Level processes establishing links between enterprise specific activities in the value chain.

Activities

A decomposition of VCOR operational processes, each activity is specific to an enterprise that may or may not be shared among partners.

Actions

Individual work instruction items. Cannot be decomposed

Figure 5: Hierarchical Structure of VRM

Logically structured around Lifecycles



On the Strategic Level Plan is a overarching process aligning strategic objectives with tactical and execution abilities in the value chain working in a close relationship with the Strategic Level Govern and Execution Processes in the model



On the Strategic Level Govern is a overarching process supporting Strategic objectives and enabling the value chain to operate through rules, policies and procedures in a close relationship with the Strategic Level Plan and Execute Processes in the model.



The Strategic Level Execute Process overarches all the execution processes in the model in a strategic context to support the value-adding processes related to a product or service to customer requirements. The Execute Process operates within the limits of the Management criteria from Govern and to the parameters defined by the Plan Processes Process.

Figure 6: Strategic Level Lifecycle Processes



Figure 7: Tactical Level Lifecycle Processes

Underpinned with Rules, Metrics and supporting Information requirements



Figure 8: Value System Management Approach

Industry Business Process Frameworks

TM Forum's eTOM

The Enhanced Telecommunications Operations Map (eTOM) is a framework for the analysis and improvement of telecommunications processes, with a focus on customer support and customer satisfaction.

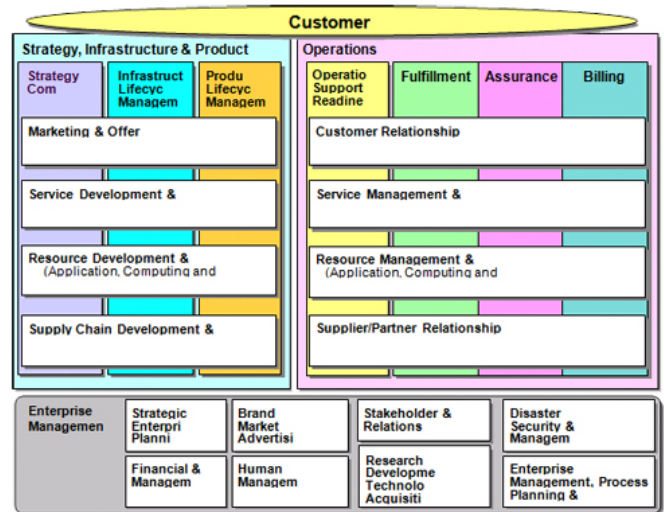


Figure 9: TM Forum's eTOM

In the TM Forum's "High-Level Guide for Managers"⁶, it is explained that the eTOM Business Process Framework is used by different industry players for varying purposes:

- Refine and implement process flow
There is the need to move to an end-to-end process management approach developed from the customer's point of view. Service providers use the Framework to refine and implement process flows, as it allows for building re-useable, consistent, complete and robust end-to-end process flows.
- Identify clear software boundaries
It is necessary for system integrators and vendors to identify the potential boundaries of the software. The framework will provide the insight on required functions, and help analyze the inputs and outputs to be supported by the products.

- Draw a future-proof master plan
The Framework is used by service providers and system integrators to draw master plans, as it provides a stable and proven plan for process direction, and it is also used as a reference for internal process engineering needs. This will be future-proof and will help for Integrating with current technology (e.g. SDH/SONET and ATM) and new technologies (e.g., DWDM).
- Facilitate and lower the risk for outsourcing and partnership
In order to identify the needs and lower the risk, service providers, system integrators and vendors reference the framework for partnership, alliances, outsourcing and general working agreements with other enterprises.
- Reduce integration time and costs of COTS
Emphasizing more of a “buy” rather than “build” approach to integrate systems from multiple suppliers. Service providers can integrate commercial off-the-shelf (COTS) systems in a very efficient manner, and at a lower cost when using the Business Process Framework.

COBIT 5 is built around:
 5 Principles:

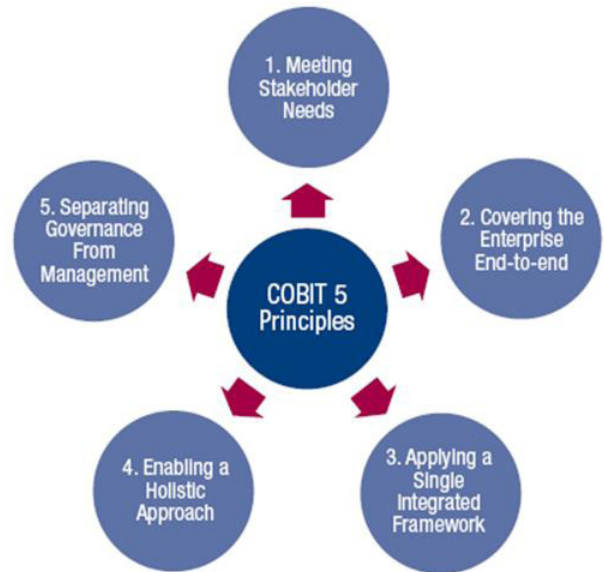


Figure 10: COBIT 5 Principles

7 Enablers:

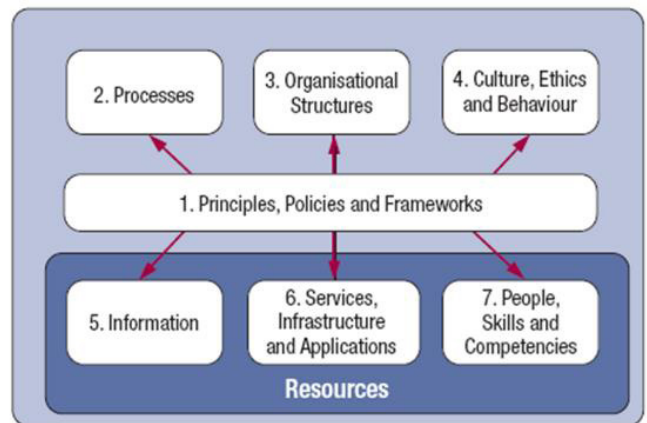


Figure 11: COBIT 7 Enablers

Enablers supported by common dimensions:

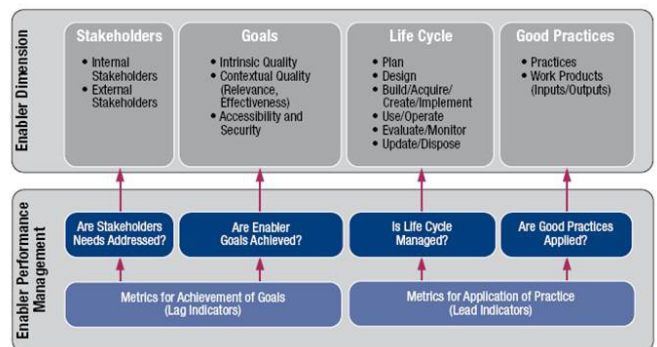


Figure 12: COBIT Enabler Dimensions

Domain Business Process Frameworks

ISACA's COBIT

Although it is probably not as well-known as ITIL outside North America, COBIT has actually been around since 1996, the latest version, COBIT 5 being published in 2012.

Wikipedia defines COBIT as⁷:

“..., initially an acronym for ‘Control objectives for information and related technology’, defines a set of generic processes to manage IT. Each process is defined together with process inputs and outputs, key process activities, process objectives, performance measures and an elementary maturity model. The framework supports governance of IT by defining and aligning business goals with IT goals and IT processes.”

A Business Process Framework and Reference Model as a core component:

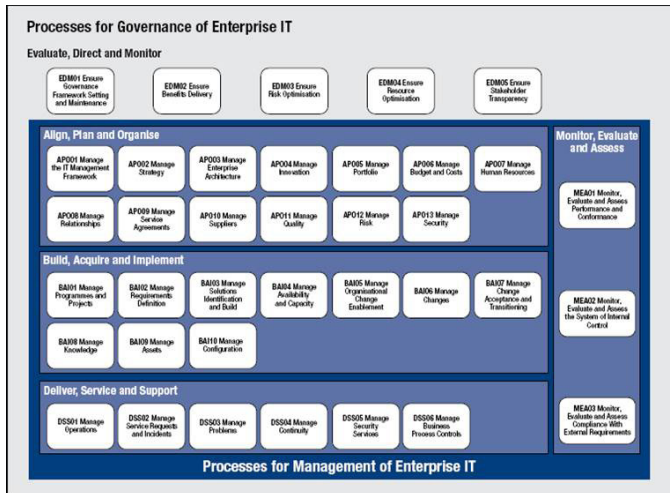


Figure 13: COBIT 5 Process Framework

Using Business Process Frameworks

Overview

There are many practical ways of utilizing APQC's PCF, for example a Business Process Framework can provide:

- The framework and checklist of processes to use when you are scoping Process related projects;
- The basis for structuring your process repository, whether you use a tool such as Orbus Software's iServer, SharePoint, or a simple set of folders on a shared network drive; and
- The starting point for a Process Documentation Project by giving a detailed list of processes.

For the purposes of demonstrating how to use a Business Process Framework, we will use the APQC Cross-Industry Process Classification Framework.

Case Study 1: Scoping of Process Project Background

The comprehensive coverage of the APQC's PCF makes scoping of process projects quick and easy. Simply step through the processes identifying processes either in or out of scope (or maybe unclear).

Approach

In our example, we are scoping a project to review how well a Human Resource Management System supports our existing business processes. The following diagrams were created with Microsoft Visio using iServer.

Step 1:

Identify which of the categories (i.e. Level 1 items) that are going to be of interest to the Project.

You may wish to use colour to show the categories within the project's scope, as shown.

APQC: Cross Industry

Process Classification Framework

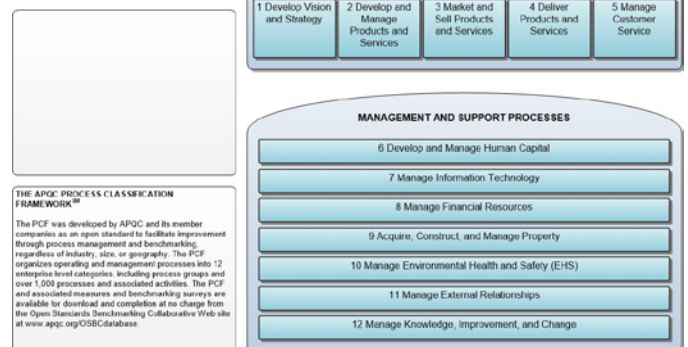


Figure 14: Example of Step 1

Step 2:

For each of the Process Groups (i.e. the Level 2 items) within the categories identified as being in scope, review each of the Processes to determine whether or not it is within scope of the project. It is useful to visually show the results of your analysis, as shown. Depending on the purpose of your project, it may also be appropriate to indicate whether there is a gap in meeting requirements of the current processes.

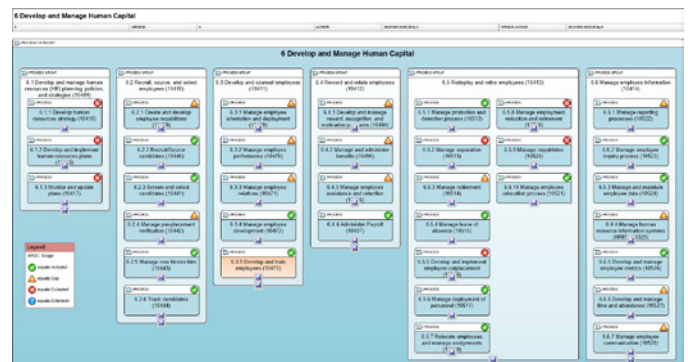


Figure 15: Example of Step 2

Step 3:

This last step is an optional one, particularly if speed is of the essence, but it is of great benefit to provide details for additional planning.

In the example shown, the strategic importance of the Activities that are contained within the Processes shown to be in scope.

An alternate approach would be to show an assessment of their current fit for purpose.

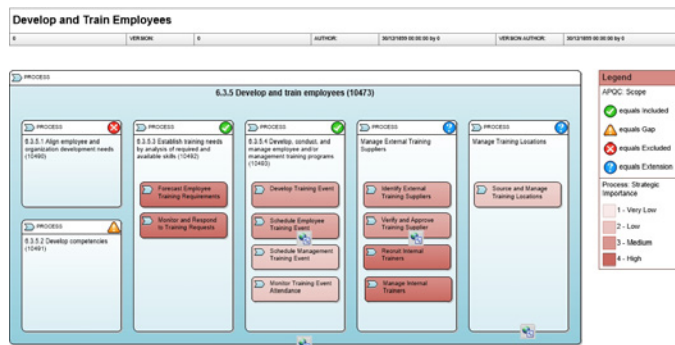


Figure 16: Example of Step 3

yourself, what is missing as the PCF may have processes you may have not even considered.

For example, Recruitment Processes are covered in 6. Develop and Manage, Human Capital.

Define the scope of each of your processes, in terms of:

- What is the purpose of the Process?
- How do they start and how do they end?
- What Activities / Tasks do they include?
- What happens next?
- You can now map each of the processes, starting with the important ones. Whether you are using Orbus Software's iServer or just Visio, you can link each Process Map to the list of Processes customized from the PCF.

We recommend that you consider adopting:

- The Business Process Modelling and Notation (BPMN); and
- A “Verb Qualifier Object” approach to naming your processes, and activities.

Case Study 2: Process Documentation Project Background

When your organization decides to document its process, the PCF is a useful starting point, as it assists in:

- Defining the scope for your Project;
- Providing a foundation for defining each of the processes being documented; and
- Providing an anchor structure for all processes within an organization.

Approach

The following steps are a guide to documenting your processes using the PCF:

- Select the PCF version that best fits your business, use the Cross Industry PCF if nothing else fits.
- Prepare a list of processes to be covered. Match your processes against those in the PCF by comparing the processes in the PCF against what happens in your business. Continually ask

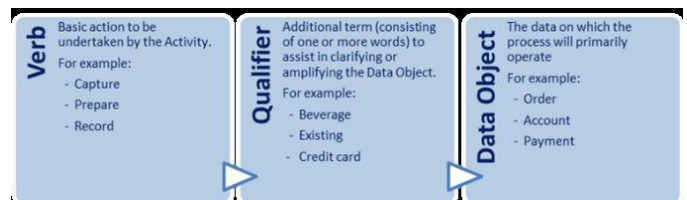


Figure 17: Recommended Process Name Approach

Orbus Software has available for download:

- Introduction to BPMN 2.0 - Free Presentation;
- BPMN 2.0 - Visio Stencil Starter Pack; and
- 10 Key Lessons for Business Process Modelling.

Case Study 3: Process Repository Structure Background

The APQC PCF can provide a useful reference for deciding the structure of your Process Repository.

As previously shown, the PCF is structured into 12 Categories and each of these Categories are further

divided into Process Groups. These Categories and Process Groups can be used to structure your Process Repository. Create a folder for each of the Categories that are within the scope of your Processes Repository and then additional folders for each Process Group in scope inside the folder of the Categories.

Approach

Below are two examples of how to set up folders for an APQC PCF Process Repository.

The first example is using a structure stored using a set of folders. These folders could be stored simply on a shared Network Drive, which could be also replicated in SharePoint or a Document Management System:

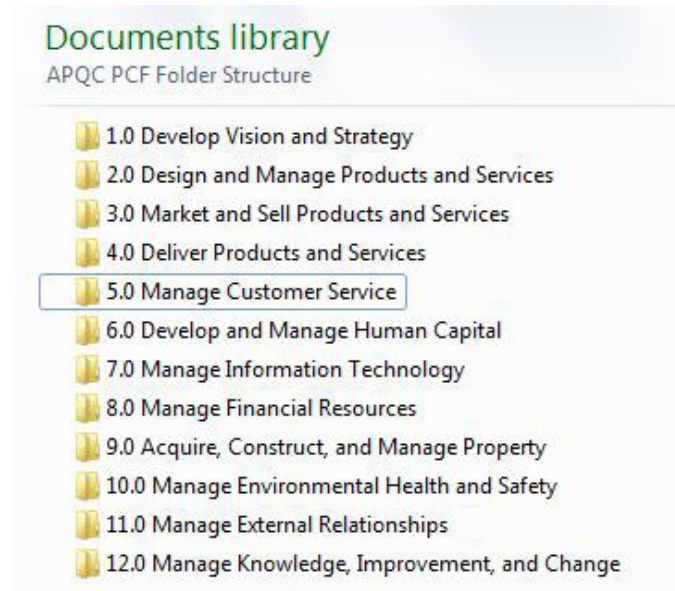


Figure 18: Example using a Folder Structure

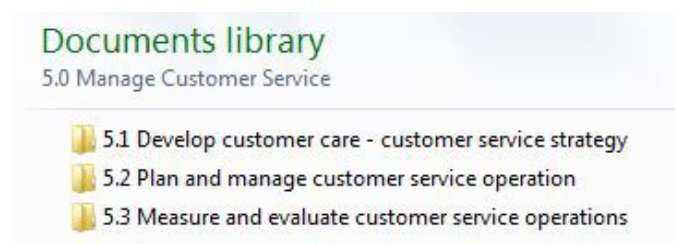


Figure 19: Example drill-down Folder Structure

The second example shows how you can set up a set of Folders using Orbus Software's iServer Repository:

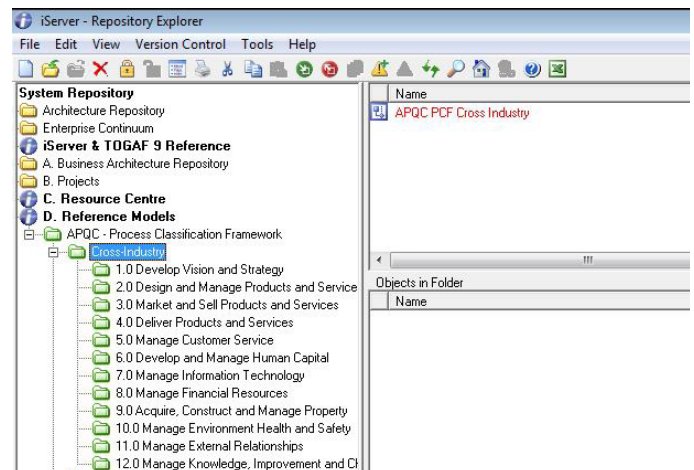


Figure 20: Example APQC Reference Model Folders in iServer

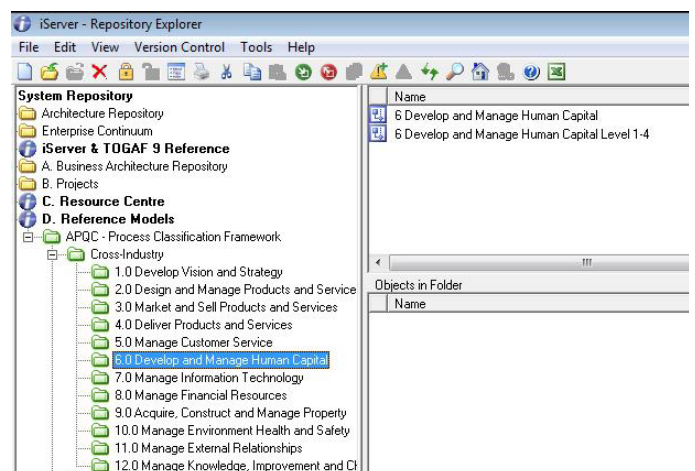


Figure 21: Example APQC PCF Models in iServer

Conclusion

As we have seen, Business Process Frameworks provides a useful starting point for many types of process related projects within your business, such as:

- Assisting you to scope the processes in your project;
- Helping you to identify and define the processes covered by your project;
- Structuring the repository for your process documentation; and
- Benchmarking the performance of your processes inside and outside your business.

So, if you're unsure where to start your process related project or unfamiliar with documenting processes, then remember the selecting and applying a Business Process Frameworks are a good place to start!

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- ⁶ TM Forum, High-Level Guide for Managers - The Business Process Framework, March 2010
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