

The Business Process Management Guide

**Practical Methodology and
Guidelines to Successful BPM**



The Business Process Management Guide:

Practical Methodology and Guidelines to Successful BPM

Implementation and Improvement

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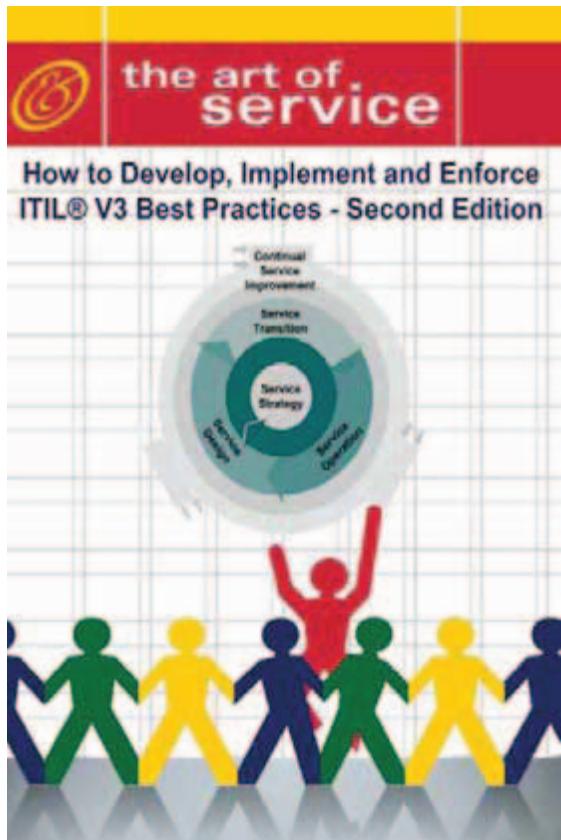
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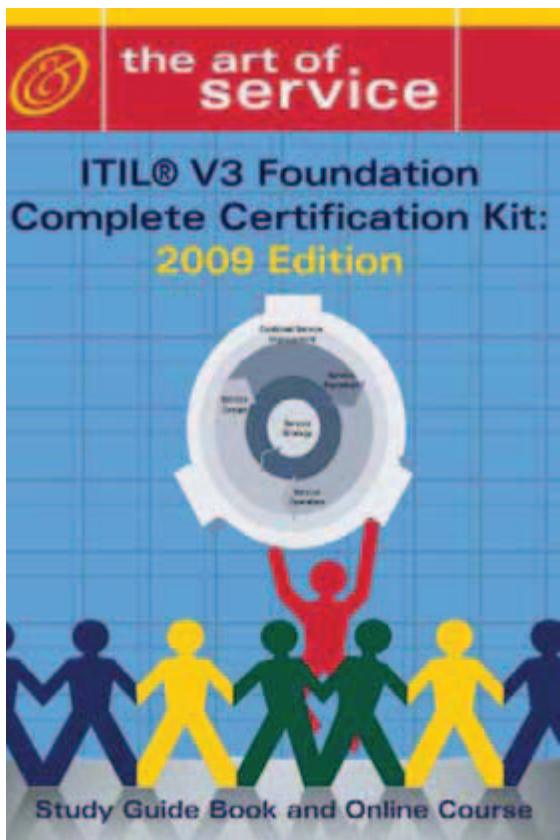


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TABLE OF CONTENTS

INTRODUCTION ROADMAP	7
INTRODUCTION – BUSINESS PROCESS MANAGEMENT	13
BPM AND WORKFLOW SOFTWARE	47
AVOIDING DISASTER - YOUR FIRST BPM PROJECT.....	57
VALUE AND BENEFITS – MAKE YOUR CASE FOR BPM	73
BPM AND ROI	95
BPM CONTINUAL IMPROVEMENT	113
SIX SIGMA.....	135
SUPPORTING DOCUMENTS	147
MEDICARE CASE STUDY EXAMPLE	149
BUSINESS PROCESS MODEL – MEDICARE AUSTRALIA.....	153
BPM DESIGN FOR WORKFLOW AND RULE MANAGEMENT SYSTEMS.....	155
THE BUSINESS PROCESS MODEL	171
BUSINESS PROCESS MODELLING OVERVIEW	175
BUSINESS PROCESS MODELLING NOTATION (BPMN)	185
THE INTEGRATION OF KNOWLEDGE MAPPING INTO EXISTING BUSINESS PROCESSES.....	191
BPM BENEFITS CHECKLIST.....	201
PERFORM BUSINESS CONTINUITY AND DISASTER RECOVERY VIA BUSINESS MANAGEMENT AND OTHER SOFTWARE TOOLS.....	203
RACI METHODOLOGY AND BPM.....	209
ALIGN ROLES AND RESPONSIBILITIES TO MAKE BPM WORK.....	215
PROJECT TO PROGRAMS	221
BPM ARCHITECTURE CONSIDERATIONS	231
EXAMPLE: COMMON BUSINESS OBJECTIVES	235
KPI'S.....	237
BUSINESS PROCESS MANAGEMENT – HOW TO SCALE YOUR PROCESS DOCUMENTATION INITIATIVE	247
SIX SIGMA FACTSHEET	257
SIX SIGMA STARTER KIT DOCUMENTS	261
SIX SIGMA SHORT OVERVIEW	277
SIX SIGMA DEFINING REQUIREMENTS.....	285
FURTHER INFORMATION	303

BUSINESS PROCESS MANAGEMENT



INTRODUCTION ROADMAP

Many organizations are looking to improve their understanding with regards to aligning their business processes, and as a result are looking to implement/improve the Business Process Management process, as an overall improvement to the structure and quality of the organization.

This document describes the contents of Business Process Management guide.

The guide is designed to answer many of the questions that Business Process Management raises and provides you with useful guides, templates and essential, but simple assessments.

There are a total of 28 documents in this guide:

The below chapters: can be used to educate or be used as the basis for management presentations or when making business cases for implementation.

- Introduction Business Process Management
- BPM & Workflow Software
- Avoiding Disaster – Your first BPM Project
- Value & Benefits – Make your Case for BPM
- BPM & ROI
- BPM Continual Improvement

These presentations provide detailed and comprehensive guides through different aspects of Business Process Management. Starting, with an introduction to the concept, and a closer look at the Governance involved with BPM, and then following your progression in the implementation of BPM, avoiding disasters and risks, how to make a good business case for BPM – using the benefits and ROI opportunities, and finally a focus on continual process improvement.

16 Supporting documents: These supporting documents and assessments will help you identify the areas within your organization that require the most activity in terms of change and improvement. They underpin concepts initially covered within the presentations, and go into lots more detail to guide you in your Business Process Management maturity.

We have itemized and categorized the supporting documents into a logical order of **Plan, Do Check and Act**, relating to the stages of planning, implementation, or improvement, where they will be most helpful to you. You can use these documents and resources within your own organization or as a template to help you in prepare your own bespoke documentation.

PLAN

- BPM - The Business Process Model - An introduction to the terminology and icons used in the Business Process Model.
- Business Process Modelling Overview - overview of what Business Process Modelling is all about, and where it fits in an organisation.
- Business Process Modelling Notation – this document explores BPMN and explains how BPMN defines a Business Process Diagram (BPD), which is based on a flowcharting technique tailored for creating graphical models of business process operations.
- Medicare Case Study – A glimpse into a large organization who has successfully implemented BPM.
- BPM Benefits Checklist - A checklist that you can review for each of your processes or to get a general sense of the types of benefits you can expect from BPM – great for building a Business Case.

BUSINESS PROCESS MANAGEMENT

- Example Common Business Objectives – A supporting document from the BRM & ROI presentation, looking at the common business objectives for all organizations.

DO

- The Integration of Knowledge Mapping into Existing Business Processes - The creation, renewal and sharing of knowledge are clearly critical to the delivery of innovative, and cost effective, products and services, this document looks at how Knowledge Management and BPM can work together, to ensure organizational objectives and success.
- Business Process Management-How to Scale your Process Documentation Initiative – This extensive document gives a clear, step by step pathway to a successful documentation initiative – a crucial element of BPM.
- RACI Methodology and BPM - A simple yet powerful methodology that focuses on the “human-side” of BPM is the RACI Methodology – used to identifying roles and responsibilities during a BPM implementation process.
- BPM - Design for Workflow & Rules Management Systems – Definitions and insight into Workflow and Rules Management systems, including characteristics, design considerations and interfaces.
- BPM Architecture Considerations - This document outlines three sets of key architecture considerations required for a successful configuration of an enterprise Business Process Management (BPM) implementation and deployment. These considerations are:
 - Deployment Environments
 - Architecture Options
 - Hardware and Database Sizing

CHECK

- KPI's - Key Performance Indicators (KPIs) are quantitative and qualitative measures used to review an organisation's progress against its goals. This document explains the concept and application of KPI's.
- Align Roles and Responsibilities to Make BPM Work - Business units and the IT organization are both responsible for ensuring that business process management initiatives are successfully executed. The more roles and responsibilities for each side that are defined at the onset of a BPM project, the more quickly an organization can reap the benefits. This document identifies the roles and responsibilities required for successful BPM.

ACT

- Project to Program - This document describes how the movement toward broad BPM Programs has changed what companies need in terms of BPM technology and "know how". It describes 3 steps for establishing a solid foundation for a BPM Program that will enable your organization to scale its process improvement capability in a way that will deliver maximum value to the business.
- Perform Business Continuity and Disaster Recovery via Business Process Management and Other Software Tools – This document is a great aid for organizations wishing to improve their Enterprise Architecture and their Business Continuity and Disaster Recovery capabilities, and explains the way to implement an approach using BPM tools for planning their business processes.

6 Bonus Documents: In addition, to the supporting documents, we have also provided some 'bonus documents' as part of this toolkit. This additional information will enable you to improve your organizations Business Process Management understanding and knowledge base.

BUSINESS PROCESS MANAGEMENT

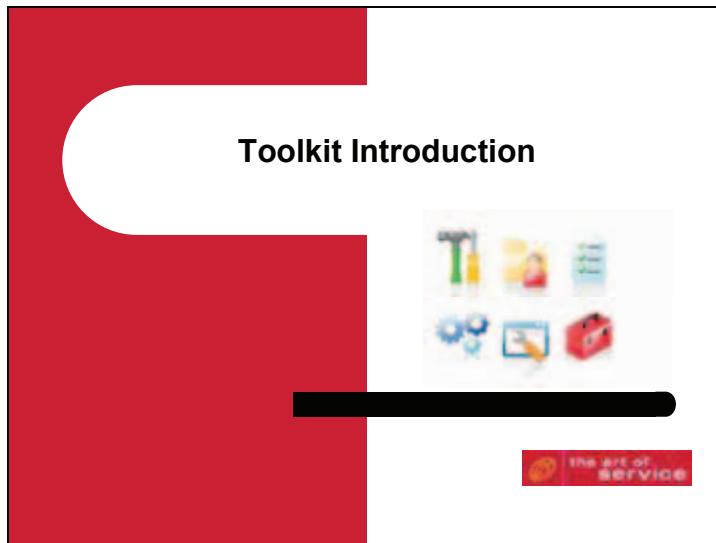
These bonus documents are focused on the Six Sigma Methodology. As part of this file, you will find:

- Six Sigma Presentation – an introduction to the methodology, including –what it is, history and how and when to use it.
- Six Sigma – Short Overview – a detailed overview including statistics and the ‘six themes’ of Six Sigma.
- Six Sigma – Factsheet – A perfect tool for education –use this to update your own knowledge and understanding of Six Sigma, or as a development tool for your staff.
- Six Sigma Starter Kit – An extensive document, designed to easily guide you through the scary initial stages of Six Sigma.
- Six Sigma Defining Requirements - The objective of this document is to be a standard/template for the development of Service Level Requirements. The development of Service Level Requirements is the first step to quantify the desired service delivery.
- Simple Sigma Calculator – a fantastic tool to aid your Six Sigma understanding and implementation.

BUSINESS PROCESS MANAGEMENT



INTRODUCTION – BUSINESS PROCESS MANAGEMENT



Aim of this guide

- Provide an introduction to the general principles with regards to Business Process Management;
- Provide user-friendly documents.
- Improve your knowledge and understanding.
- Provide educational and awareness tools for staff within your organization.

BUSINESS PROCESS MANAGEMENT



The importance of having an efficient system of business processes to drive an organization may seem like basic principle. If a business isn't running efficiently, it may not be realizing or maximizing its financial, market coverage or other strategic goals. In a recent survey of 1,400 CIOs by Gartner Executive Programs, the top business priority identified by CIOs was business process improvement.

Business Process Management

For individuals or organizations that are being asked to investigate process improvement, Business Process Management or BPM is a term that frequently associated with the processimprovement. Unfortunately, BPM sometimes seems to have as many different meanings.



There are many sources of information about BPM and how it can be applied in organizations. These articles span all industries and address many different business processes. Finding, understanding and applying this knowledge are an evolutionary process. In this presentation, we will summarize the key BPM concepts relevant to early discovery and point readers to more in-depth concepts that build on BPM basics.



Business Process Management

Initial discovery topics include:

- A history of business process management, both as a discipline and as a technology offering
- How BPM is being positioned by market analysts
- Where BPM fits in today's dynamic organizations
- How organizations can start to apply BPM to improve their processes
- Success stories an organization can use to understand how BPM can be applied to deliver business value



BPM Distilled

Business Process Management (BPM) is the understanding, visibility and control of business processes. A business processes represents a discrete series of activity or task steps that can span people, applications, business events and organizations.

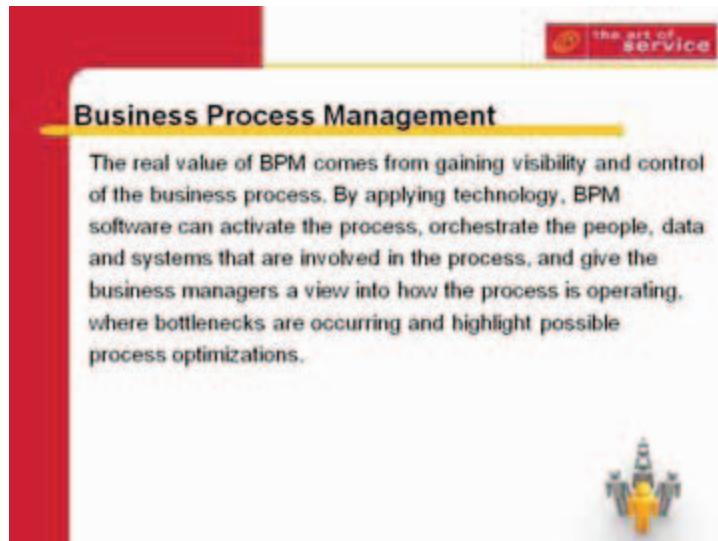
Based on this definition, the reader could logically relate BPM with other process improvement disciplines.

Business Process Management

That assumption is valid – there is certainly a described process (or methodology) that should be followed to help an organization document their business processes and understand where they are being used throughout their business. During discovery, everyone agrees on how the current process is defined. The 'as-is' process' is then used as a basis for determining where the process can be improved.



However, simply documenting what the process look like does not give the business managers (those responsible for the actual results) control over the process.



Business Process Management

The real value of BPM comes from gaining visibility and control of the business process. By applying technology, BPM software can activate the process, orchestrate the people, data and systems that are involved in the process, and give the business managers a view into how the process is operating, where bottlenecks are occurring and highlight possible process optimizations.



Process operational metrics are automatically collected by the BPM software. Business metrics or key performance indicators (KPIs) can also be measured to add specific process or organizational context to the data.

Business Process Management

Armed with data on how the process is currently operating, business managers can use any process improvement technique to optimize the process. The next generation process will drive maximum performance and efficiency.



Process operational metrics are automatically collected by the BPM software. Business metrics or key performance indicators (KPIs) can also be measured to add specific process or organizational context to the data.



Business Process Management

The description above represents the promise of BPM process 'nirvana'. Most companies are far from achieving this level of process capability. Business managers have limited visibility, especially for processes that may cross outside the borders of their department or outside the organization. Individual work activities may be processed in a first in – first out fashion, rather than being based on an optimized global prioritization.



For organizations that have expanded or grown by acquisition, each business unit may perform similar processes, but each completing the work using specialized processes that don't allow sharing of human and technology resources. Not knowing the current status of work paralyzes the business because managers cannot predict when work will be completed, who will complete it, if there are problems and how much the work is costing the company.



Business Process Management

The term Process-Driven means that a person or organization has a passion for superior business performance through process innovation. Process-Driven organizations are those that understand how their work is getting done and focus on finding opportunities to make it better.

They focus on the business and the results. They leverage technology, process improvement methodologies and best practices while embracing change to drive the processes that support their business.

BPM is a business-oriented architecture that allows process owners to set improvement goals and orchestrate actions across the company to achieve those goals.

The slide has a red header bar with the 'the art of service' logo. The main title 'Business Process Management' is in bold black font. Below it is a section titled 'The Evolution of Process Technology' with a detailed paragraph. At the bottom right is a small icon of three stylized human figures.

Business Process Management

The Evolution of Process Technology

The term BPM has evolved from a history of usage in related business process fields such as business process improvement, business process reengineering, and business process innovations. Just as these process disciplines have changed, BPM systems or suites have evolved similarly to other management systems.

These advances can be mapped at the lowest level to the technology itself. Understanding these relationships is important to help 'place' a BPMS in the hierarchy of an organizations systems.

BUSINESS PROCESS MANAGEMENT



Business Process Management

The operating system of the computer is an example of the very lowest level of a management system. Database management systems (DBMS) are the primary controller of data. Widespread use of computers in business heralded business applications that managed functional areas. At this point, organizations found that the data that supported their business was organized in silos, driven by the functional applications adopted by the company.



Examples of these types of application include Enterprise Resource Planning (ERP) Systems, Customer Relationship Management (CRM) systems and Order Management (OM) systems.



Business Process Management

Organizations found themselves with a 'four wall' scope. It was difficult to share data and work between different departments because the applications enforced a department-level scope.

Unfortunately, most business processes spanned systems, departments and sometimes external business partners. In addition, businesses were forced to operate the way the application was developed, rather than by the way they defined their own processes.



These applications were frequently and sometimes impossible to modify and it was typically a lengthy and costly undertaking. Technology came to the rescue again, and tools like workflow management systems and enterprise application integration (EAI) suites were introduced. These tools allowed work and data to be routed and synchronized across an organization, but they simply served as conduits. It was difficult to tie the activities back to a higher level business process. However, they did serve as an enabler of BPM because they provided cross-system accessibility.



Business Process Management

BPM evolved because of this increase in process focus. Organizations realized that they could set themselves apart from their competition by optimizing their business processes.

BPM suites are integrated software facilities that enable organizations to adopt and implement business process management. They foster process characteristics like efficiency, effectiveness, and agility.



In order to accomplish this, they must contain features that support the following:

- A graphical modeling capability that can be used by both business owners and process analysts to create both workflow components and higher-level business processes. The processes must support human, business event and system activity steps.
- The ability to simulate one or many business processes, using test, historical and in-flight process data
- A facility to create user interface forms and reports
- A facility to create business process rules and allow their use to drive process flow and decisions
- The ability or framework to integrate with external systems, including many of the standard technologies or systems
- The ability to send and receive business and system event messages
- An embedded capability to capture and manage process performance and business indicators as they correlate to the business processes being executed
- The ability to create graphical scoreboards for reporting business process metrics in real-time (also referred to as Business Activity Monitoring or BAM)
- A shared business process repository to house all process and process-related artifacts
- Tools for the administration of the business process engine or server.

Like the BPM technology itself, vendors from complimentary technology markets also migrated into the BPM space. Because of this, many software vendors today market themselves as BPM providers.

However, the analysts do not consider these vendors true BPMS providers because of the significant gaps in their offerings.



BUSINESS PROCESS MANAGEMENT



Vendor Class	Strengths	Gaps
Enterprise Application Integration (EAI) vendors	<ul style="list-style-type: none">• Able to handle large transaction volume• Effectively handles system-centric processes	<ul style="list-style-type: none">• Costly to implement• Time consuming• Not suitable for use by the business users
Workflow vendors	<ul style="list-style-type: none">• Able to provide a modeling tool suitable for the business user	<ul style="list-style-type: none">• Missing process analysis and optimization• Difficult to customize, making processes that change frequently difficult to maintain
Business Process Analysis (BPA) vendors	<ul style="list-style-type: none">• Provided a easy to use interface for modeling business processes	<ul style="list-style-type: none">• Does not generate an executable process• Does not provide many capabilities for system integration, user interfaces, the object model or data persistence
Business Rules Engine (BRE) vendors	<ul style="list-style-type: none">• Sophisticated rules design and execution• Supports straight-through processing (STP)	<ul style="list-style-type: none">• Extraordinarily complex to design and maintain• Used today only in specialized industries
Business Intelligence (BI) vendors	<ul style="list-style-type: none">• Provides graphical reporting interface to report process behavior and performance	<ul style="list-style-type: none">• Depends on other technologies to collect and store process metrics• Cannot affect the running process to implement optimization changes

This table lists the leading software vendor categories that are adjacent to BPM and identifies the gaps in their offerings that preclude them from delivering on the full promise of BPM.

Vendor Class	Strength	Gaps
Enterprise Application vendors	• Provide some embedded workflow	• Workflow has limited capability to integrate with external systems • Full featured BPM is many years away from release
Application Development Environment vendors	• Includes basic workflow for web services	• Poor tools for business teams to express requirements • Missing analytical and optimization capabilities • Code-based applications are difficult to customize and maintain

What Do the Analysts Say About BPM

BPM market analyst firms like Gartner and Forrester Research are uniquely positioned to have visibility in all phases BPM adoption. They work with BPM consumers as advisors during the BPM selection process. In order to facilitate this role, they work directly with the vendors to understand product individual BPM offerings. BPM consumers also share their successes with the analysts, so they get a varied view of BPM applications across industries and vendor products that they can share with the market as a whole.



Business Process Management

Analyst firms disagree on how exactly to divide the BPM market. Gartner uses a list of functional criteria to determine if a vendor should be included as a viable BPM vendor and where they are ranked in comparison with other vendors.

Forrester Research uses functional criteria as well, but further divides the market into two major segments: human-centric or integration-centric business processes. Integrationcentric



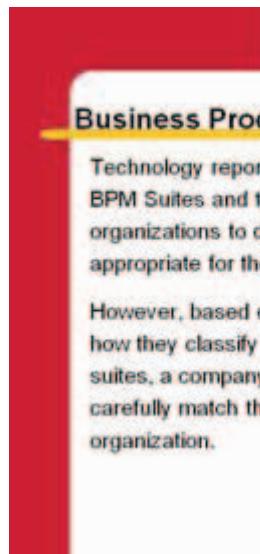
BPMS focuses on the coordination and orchestration of data at the system-level, rarely involving human participants. An example of this type of business process would be automating high volume trade reconciliation at a financial brokerage, creating a straight-through process.



Business Process Management

Human-centric BPM, on the other hand, attempts to automate people-intensive tasks in order to create a streamlined, efficient process. Viable BPM vendors in this category provide considerable integration frameworks to leverage existing systems from within the business process. These vendors also provide extended reporting and optimization capabilities with their BPM suites.

These features consider organizational nuances like resource constraints, costing models, bottleneck prediction, and process optimization recommendations. Integration-centric BPM suites can only focus on through-put type metrics that can be used to tune systems, not people and business processes. Sample processes in category include new employee on-boarding, exception handling from a supply chain management system or claims processing.



Business Process Management

Technology reports like The Forrester Wave: Human-Centric BPM Suites and the Gartner Magic Quadrant can be used by organizations to determine which vendors are most appropriate for their process improvement opportunity.

However, based on the differences between the two firms in how they classify the BPM market and providers of BPM suites, a company investigating BPM should be sure they carefully match the analyst criteria to the needs of their organization.



In 2005, the approximate size of the BPM market was \$1.2 billion dollars. "Forrester expects the BPMS market to reach \$2.7 billion by 2009"⁴, with the primary driver being the need for tools to enable process improvement. The demand will come from both the business and IT side of the organization. This type of financial commitment echoes the commitment organizations are making to becoming process-driven entities. Analysts also feel that BPM will be a key enabler for IT organizations that want to provide reusable process, application or infrastructure 'services' that provide efficiency and flexibility to business process managers.



Business Process Management

Where Does BPM Fit

The adoption of BPM involves a major shift in the way an organization will operate. BPM technology along with the associated best practices and methodology cannot be assigned solely to the IT staff. The organization's leadership team must demonstrate a commitment to BPM and its benefits in order to effect change and adoption throughout the organization.



Change is never easy, but with BPM, the benefits can be easily demonstrated to build momentum across the organization.



Business Process Management

First and foremost, organizational leadership and business managers must take ownership of the business processes that support the company and their specific organizational groups. These organizational groups are responsible for the performance of the company. BPM enables them to start small, achieve outstanding process results and optimizations, and then apply the technology to other projects. In fact, deploying a process "as is" in a BPMS can – without making any other changes – lead to a 12% productivity improvement.

This significant gain just sets the stage for further improvement. The ease in which an organization can deploy a new process or update an existing process is a key differentiator in a BPM suite.



Business Process Management

A BPM suite that offers a shared process repository will enable all groups within an organization to leverage the process successes that have already paved the way for BPM adoption. In addition, it is essential that organizations adopting BPM adopt a more iterative approach to the development and delivery of process applications.

Because processes change so frequently and because requirements are difficult to define for cross-organization processes, an iterative development approach has proven to be the most successful model for delivering process applications.

Business Process Management

Of course, the IT department must be willing and able to integrate and support the BPM technology. This is simplified by the fact that most leading BPMS are themselves service-oriented and fit into a Service-Oriented Architecture (SOA) seamlessly. In fact, BPMS are often the leading "consumers" of the services made available by SOA initiatives – providing concrete business value and impact. Furthermore, Object Management Group (OMG) is actively driving the definition and adoption of industry accepted standards for all aspects of BPM functions.

This eases the IT adoption of the technology by increasing the interoperability of your processes as well as the portability of technology assets. For companies already using process improvement methodologies like Six Sigma or LEAN, a BPM suite adds new measurement and control capabilities helps scale the application of process improvement methodologies across the whole organization.

Business Process Management

Organizations that have been successful with making BPM an integral part of their way of doing business have often decided to create BPM Centers of Excellence (COE). At inception, the COE may have been part of the IT organization, but as the enterprise evolved into a more process-driven entity, the COE became a more structured group of individuals that could contribute on BPM projects for the entire organization.



Gartner reports common themes of COE charters to include:

- Streamline internal and external business processes
- Maintain control and accountability
- Increase automation
- Provide end-to-end visibility BPM-related services that the COE can provide to the organization include:
 - Coach and facilitate
 - Provide best practices
 - Deliver process training and education
 - Maintain a business process knowledge base.



Business Process Management

Regardless of how an organization decides to implement BPM, it is important to build momentum by making process successes visible to all levels of the organization.

Groups and individuals in the organization will become aware of contributions they can make to the organization by leveraging BPM to optimize their business processes.



Where Do You Start

Organizations may recognize that the value of utilizing BPM for process improvement. The next question is inevitably “Where do I start” or “What process should I tackle first”? From a business perspective, some of the symptoms that could identify a process improvement opportunity include:

- High labor costs to execute the process
- Inconsistent work quality
- Inaccurate forecasting of work completion
- Difficulty in providing status reports
- Employee and customer satisfaction

The slide has a red header bar with the GSA logo and the word "BUSINESS PROCESS MANAGEMENT". The main content area has a yellow header "Business Process Management". Below it is a text block about symptoms of unmanaged processes, followed by a list of IT department symptoms and a bulleted list of four items.

These symptoms indicate that the process cannot be effectively managed and that there is most likely a lack of visibility into how the process is performing. It is not only the business that can identify potential BPM candidate process.

Quite frequently, the IT department cannot keep up with the pace of business. Symptoms to look for in the IT departments include:

- There are frequent changes requests to handle process exceptions
- There is frustration because of the constant changes to business requirements
- Pressure for shorter development cycles
- Requests for reports that span multiple systems.

Regardless of what process is chosen, a clear understanding of who the process owner is and what objectives the process owner wants to achieve is paramount. Good project management is also key in getting a sometimes complicated, cross-functional process improvement project rolling smoothly.



Business Process Management

Success Stories

Regardless of the BPMS used for process improvement, there are many success stories that support the value of taking the first step in becoming process driven. From a pure deployment and return perspective, a survey completed by Gartner reported:

- Successful project has an internal rate of return of no less than 10%; 78% reported a return of greater than 15%
- 67% of the BPM projects were implemented in less than months; 50% were implemented in less than 4 months.
- 77% had returns greater than \$100K per project; 55% achieved returns between \$100K and \$500K

Specific process examples also stand out:

- A large computer manufacturer used BPM to manage resolution of all North American distressed shipments. The process is currently saving them \$2M on average per quarter. First time delivery rates increased from 60% to 90%.
- SpectraSite, a cellular tower operator, launched a BPM initiative that reduced process cycle time by 65% and increased process throughput by 60% (without increasing staffing), all driving customer requests up by 46% in the first year¹⁰.
- A large insurance provider deployed a process to optimize invoice reconciliation and was able to reduce the error rate of handle the paper invoice by 30 percent.
- Lee Memorial Health Systems deployed their first BPM process in less than ninety days. It managed the new hire on-boarding process. They were able to cut recruiting time in half (from 16to 8 hours) and reduce new employee record creation time from 9 hours to 10 minutes. They were also able to deploy additional enhancements to the process six weeks later.

Continued...

Business Process Management

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- Sprint, a global integrated communications provider used BPM to manage billing disputes and adjustments. They were able to reduce the time to resolve a dispute from 12 to 2.5 days, realized a 10 percent decrease in invalid and incorrectly processed adjustments and increased customer call centre productivity by 9 percent.
- American National Insurance Company streamlined a customer service processes that spanned four business groups, increasing workload capacity by 192 percent.

See Medicare Case Study Example on page 149 and Business Process Model – Medicare Australia, found on page 153 within this guide.



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Business Process Management

BPM Governance Body

A successful business process must provide the functionality that the organisation's business department require in a way that is manageable and sustainable by the organisation's IT department. It therefore requires an ongoing dialog and partnership between business managers, IT professionals and end-users.



Definition

- Governance is a set of policies, roles, responsibilities and processes that set the way a corporation is directed, administrated and controlled.
- BPM Governance is a set of policies and processes that set the way that the organisation's business processes are run. Key elements of good BPM governance includes transparency, responsibility and accountability, and commitment to the organisation's business goals.



Business Process Management

- **Financial stakeholders** – The BPM governance practices should help increase the return on the organisation's investment in the implemented business process. To ensure this, financial managers should participate in the governance body.
- **Legal stakeholders** – to ensure that the process meets its regulatory and legal requirements.
- **End-User stakeholders** – The organisation participants in the process that do the day-to-day process task should help ensure that the process meets their needs.
- Cont...

- **Compliance officer** - There needs to be one person that ensures that brings the process performance information to the knowledge of compliance body and ensure the governance body's decisions are implemented correctly. The compliance officer should not be a member of the groups above and should be as independant and impartial as possible.



Business Process Management

BPM Governance Implementation - Checklist

- Define policies and responsibilities
- ✓ Define roles and accountabilities, including a clear assignment of process roles and responsibilities. Each process needs an appointment of a process manager for each process.
- ✓ Define the process policies and standards.
- ✓ Define business targets for each process. Ensure that the process has a compelling business case and achievable targets.
- ✓ Ensure that the process has a set of business-level requirements and that they are agreed by all the process stakeholders.

BPM Governance Implementation - Checklist

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Business Process Management

BPM Governance Implementation - Checklist

- Define policies and responsibilities cont...
- ✓ Set up a change request mechanism. Any change needs to meet business targets, business requirements and fit the scope of the process.
- ✓ Define proper flow of information of the business process



BPM Governance Implementation - Checklist

- **Ongoing actions**
- ✓ Monitor the process progress and KPIs
- ✓ Monitor risks
- ✓ Locate process obstacles and bottlenecks
- ✓ Control resource allocation for the process tasks
- ✓ Train process participants
- ✓ Get feedback from end-users

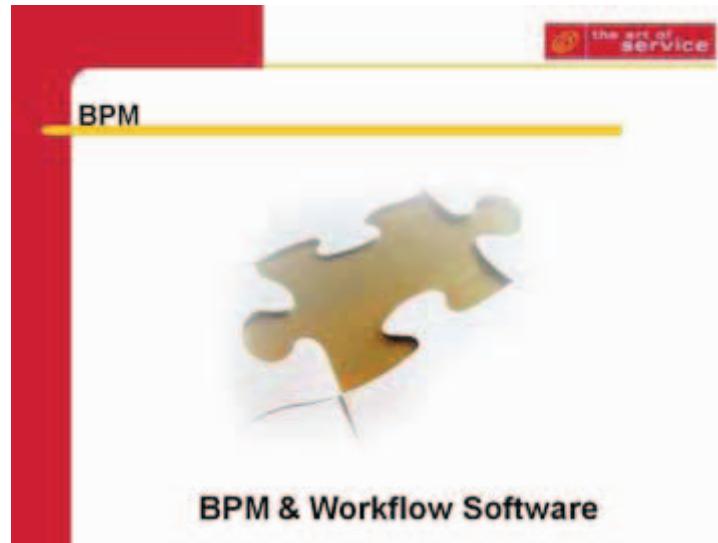


Business Process Management

BPM Governance embeds the methodology of Corporate governance and project governance with an emphasis on business process performance.



BPM AND WORKFLOW SOFTWARE



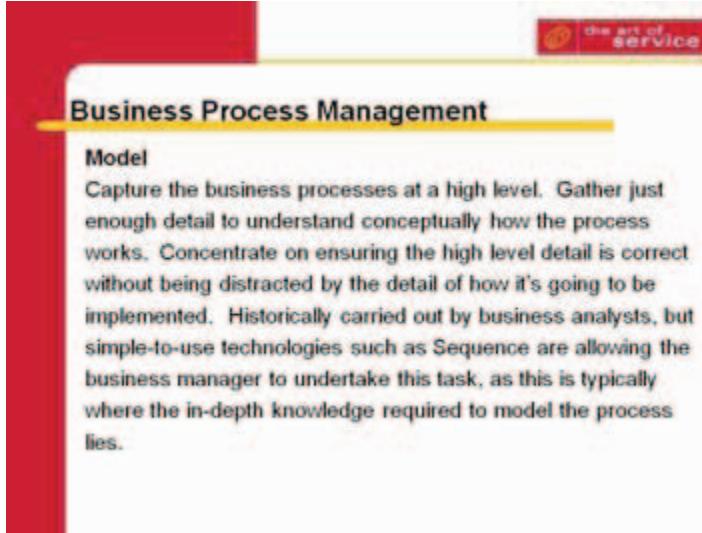
Traditionally, automation of business processes using workflow has implemented the automated process and then finished. BPM takes this to the next level BPM is about continuous business process improvement. As well as automating the process, we are capturing the process in a structured way, the monitoring and optimising the process. The process repeats continuously for the life of the process.

See BPM Design for Workflow & Rules Management Systems, found on page 155 within this guide.



The steps in a BPM Life Cycle are:

- Model
- Implement
- Execute
- Monitor
- Optimise



The graphic features a red vertical bar on the left and a yellow horizontal bar on the right. In the top right corner of the yellow bar is a small logo consisting of a stylized orange and white icon followed by the text "the art of service".

Business Process Management

Model

Capture the business processes at a high level. Gather just enough detail to understand conceptually how the process works. Concentrate on ensuring the high level detail is correct without being distracted by the detail of how it's going to be implemented. Historically carried out by business analysts, but simple-to-use technologies such as Sequence are allowing the business manager to undertake this task, as this is typically where the in-depth knowledge required to model the process lies.

See BPM - The Business Process Model on page 171, Business Process Modelling Overview on page 175 & Business Process Modelling Notation (BPMN), found on page 185 within this guide.

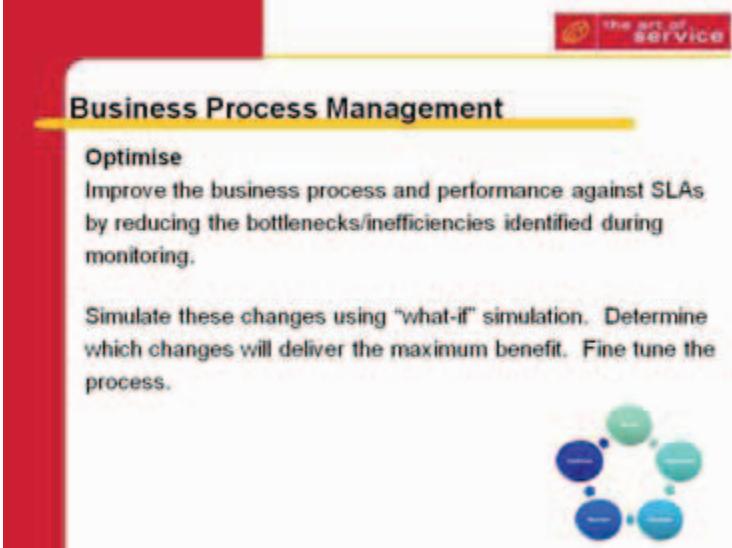
The diagram shows a red vertical bar on the left and a white panel on the right. At the top of the panel is a logo for 'the art of service' featuring a stylized orange square with a white circle and the text 'the art of service'. Below the logo, the title 'Business Process Management' is displayed in bold black font. Underneath the title, the word 'Implement' is bolded. A descriptive text follows: 'Extend the model to capture more detail required to execute the process e.g.' Below this, a bulleted list provides examples: '- Recipients', '- Form controls and layout', '- Email message content', and '- System integrations'. At the bottom of the panel, the text 'CONTINUE >' is visible. To the right of the panel is a graphic of four interconnected circles in blue, teal, and green.

Execute

- Instances of the process are launched and interacted with by the end users
- **Monitor**

Measure key performance indicators and process Performance. View these vs. SLAs via graphical dashboards and textual reports to monitor how the process is performing.

Understand where the bottlenecks/inefficiencies in the process are.



The diagram shows a slide titled "Business Process Management". At the top right is the "the art of service" logo. Below the title is a section titled "Optimise" with a description: "Improve the business process and performance against SLAs by reducing the bottlenecks/inefficiencies identified during monitoring." Below this is another section: "Simulate these changes using 'what-if' simulation. Determine which changes will deliver the maximum benefit. Fine tune the process." To the right of the text is a circular graphic composed of four colored circles (blue, green, red, yellow) connected by arrows, representing a cycle or process flow.

See The Integration of Knowledge Mapping into Existing Business Processes, found on page 191 within this guide.

The slide has a red header bar. In the top right corner of the header bar is the 'the art of service' logo, which consists of a small orange square with a white gear icon followed by the company name in white text.

Business Process Management

Continuous Business Process Improvement

Incorporate these changes into the model and repeat the cycle for continuous business process improvement. Changes in the business that result in a need to change the process can be quickly introduced into the process at the Optimise stage.

For automating an existing process, we would typically start at the Model stage, as we already have a good idea of the process and how it is performing, good or bad. For a new process, we don't often know what is required, such as what resources we need at each stage. So we would typically start at the Optimise stage and try out some ideas, capturing these in the Model stage as our thoughts are formulated into a process.



Business Process Management

The current "credit crunch" is causing organisations to seek ways to save money, improve business results and withhold governance and regulatory compliance standards.

The Challenge - Optimising the Business

If we drilldown into "Organisation Optimisation" we will find 3 main areas that the organisation needs to improve:

- Cost Reduction.
- Risk Management.
- Financial Planning.



See BPM Benefits Checklist, found on page 201 within this guide.

The slide has a red header bar with the 'the art of service' logo. The main title 'Business Process Management' is in bold black text. Below it is a sub-section title 'How does this relate to Business Process Management?'. A bulleted list follows, with the first item partially visible. To the right is a circular diagram composed of four colored circles (blue, teal, light blue, dark blue) connected by arrows.

- The ability to automate daily employee tasks using a workflow engine, enables the organisation to relocate employee resources from their current jobs to jobs and tasks that need manual intervention, thus releasing workloads and making the employee's contribution to the company more efficient.

- The ability to automate operational processes, making the business run smoother without wasting time and human resources on internal operations.
- The ability to automate the organisation's supply chain and run money transactions, thus removing human mistakes, "red tape" and errors.
- The ability to have visibility and transparency over the organisation's processes thus enabling manager's to make informed decisions.

See Perform Business Continuity and Disaster Recovery via Business Process Management and Other Software Tools, found on page 203 within this guide.



Business Process Management

The Benefits of using BPM to optimise the business:

- **Control and visibility, and timely accurate information.** BPM provides visibility into the real-time status of an entire end to end process and any related activities for employees and managers. This visibility proves highly beneficial when deadlines are approaching or work items are overdue.
- **The automation of business processes,** which in turn results in a structured and governable way of working.



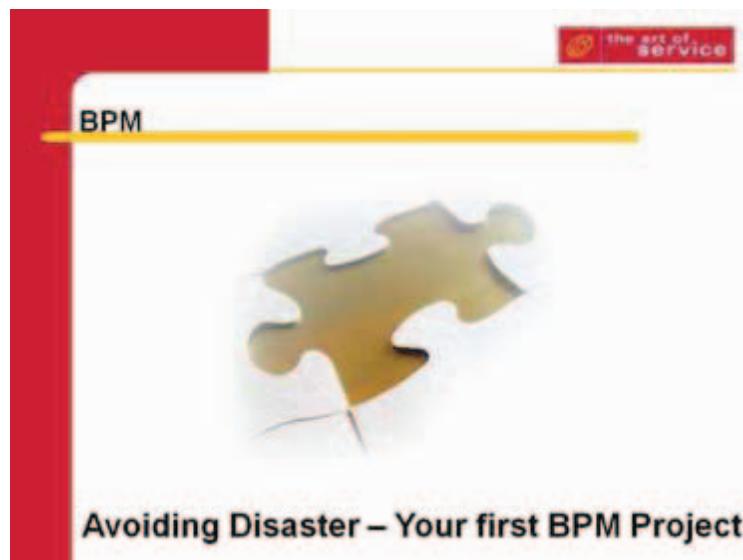
- **Accountability**, BPM creates a culture of organisational and personal accountability by tracking and auditing individual's turnaround time and quality of work.
- **Improved Productivity**
BPM drives employee productivity by capturing and interpreting the business context of each task and proactively providing the worker with the content required to complete it.

See RACI Methodology and BPM on page 209 & Align Roles and Responsibilities to Make BPM Work, found on page 215 within this guide.

BUSINESS PROCESS MANAGEMENT



AVOIDING DISASTER - YOUR FIRST BPM PORJECT



See Perform Business Continuity and Disaster Recovery via Business Process Management and Other Software Tools on page 203 & Project to Program found on page 221 within this toolkit.

Business Process Management

There is often a lot of pressure from within the business to "just do it" and start solving process problems as soon as possible. Some organizations have very specific "burning" process problems that cause a lot of day-to-day pain. Other organizations feel the pressure from large corporate-wide initiatives with aggressive timetables to improve processes across the organization.

BPM can clearly help. But, like any non-trivial endeavor, if you don't take the time and effort to properly set up your BPM project for successful implementation and ongoing improvement, you might just end up with a failure that leaves you in worse condition than when you started.



Business Process Management

It is extremely important to understand the following within each BPM project:

- Pick The Right Process – and Avoid the Wrong Ones
- Field the Right Team – and Include a “BPM Analyst”
- Pace Yourself – Plan for a 4x100m Race, not a 100m Sprint or a 400m Run
- Demand Business Involvement – At the Right Times



Of course, one should expect that after word spreads about the success of the first project, other projects will soon follow. So, in the same way that you will structure your BPM projects for success, you'll also want to build the foundation for a strong cross-project *BPM program* that serves as the vehicle for prioritizing and governing multiple concurrent projects and aligning them to your corporate goals and strategies.

The slide has a red vertical bar on the left. At the top right is a logo for 'THE ART OF SERVICE' with a stylized orange 'A'. The main title 'Business Process Management' is in bold black font. Below it is a section titled 'Pick The Right Process – and Avoid the Wrong Ones'. The text discusses the challenge of identifying the right processes for BPM. It then states: 'There are a lot of suggestions out there that identify characteristics of processes that are a good fit for BPM deployments.' To the right of the text is a small illustration of a yellow person standing on a path made of red blocks.

Business Process Management

Pick The Right Process – and Avoid the Wrong Ones

Organizations often times recognize the value of utilizing BPM for process improvement. The next question is inevitably "Where do I start" or "What process should I tackle first"?

There are a lot of suggestions out there that identify characteristics of processes that are a good fit for BPM deployments.

Some of the symptoms that could help you identify a process

Improvement opportunities include:

- High labor costs to execute the process
- Inconsistent work quality
- Inaccurate forecasting of work completion
- Difficulty in providing status reports
- Employee and customer satisfaction

Business Process Management

Be careful!

You can leverage the best BPMS technology out there. You can have the most highly skilled resources dedicated to your process initiative. But if you pick the wrong process for your first project, you will greatly increase your risk of failure.



Avoid business processes with the following characteristics:

- **A completely undiscovered process.** You have no doubt heard about 90 day deployments, continuous iterations, and business involvement in BPM projects. If you pick an area of the business that is not well understood, delivering value back to the business will be challenging. This is not to say that you need binders and binders of process documentation and business requirements, but pick an area where the high-level milestones are defined, many of the “Level Two” activities are understood, and the business owners are identified. If you don’t, you might be spending the next 90 days doing process analysis instead of process implementation.



Business Process Management

- **No defined owner for decision-making.** Processes that span the organization and touch many departments are normally great candidates for BPM projects. But trying to run a project by a committee of the affected shareholders won't work – you should pick a process that has a defined owner that can make any decisions that are required to move forward. You can spend hours upon hours in a meeting debating the positives and negatives of any business condition. But in the end, you need to make decisions – right or wrong – to move forward. Don't pick a process if you don't have a defined owner for decision-making, or if you know the defined decision maker can't.

"Let's just implement as-is" with no desire to "make it better". BPM is all about continuous process improvement delivering real value to the business. Watch out for business areas that just want to implement as-is and don't want to make it better. The good news is that you don't have to do it all in the first 90 days – most people love the fact that you don't have to implement everything in Version One. Many organizations start with implementing 90% of the as-is with very few improvements. These organizations understand continuous process improvement and will capture more value in further iterations.

- **Proof point deployments**, are often dead ends. You want to prove that BPM technology can fit in your infrastructure and that your organization can handle implementing processes. You need a quick and demonstrable win. You may choose to limit the scope of your deployment to a "proof point" that limits your time and risk. But in fact, thinking this way can reduce the impact of your first BPM effort, causing it to fall short of any significant value. A result that provides no value is often viewed as a failure. Implementing something in 90 days is not enough. Can you clearly state the value the project delivered?

Is the value meaningful to the business? Will the business appreciate a simple “IT trouble ticket” example process? You will have challenges in getting your organization to adopt BPM if your only answer is, “It was just a proof point”. Avoiding these process characteristics will minimize the risks of your BPM project failing, and maximize the potential for BPM to be adopted in the organization.

Business Process Management

Field the Right Team – and Include a “BPM Analyst”

In order to deliver success for your BPM project, picking the right team is critical. Your team needs a good mix of business and functional process knowledge, with an understanding of the underlying BPM technology. You will see recommendations from many vendors about the skill sets required for every BPM project.



See Align Roles and Responsibilities to Make BPM Work on page 215 & RACI Methodology & BPM, found on page 209 within this guide.

Business Process Management

Those recommendations more than likely will include:

- BPM Analysts to assist with process analysis and requirements definition.
- BPM Consultants for process design, implementation, and deployment.
- Technical Consultants to provide assistance with overall solution architecture, and integration into your enterprise infrastructure.
- BPM Program Manager, usually provided by Lombardi or a certified partner, who is responsible for guiding the deployment effort to success.
- Process Owner who is empowered to quickly make decisions regarding process delivery, scope, and budget.

Most of these roles are similar to those needed by traditional software implementations and application development projects. You will undoubtedly have people (or partners) that can be trained to use the BPM software technology as BPM consultants. Getting a resource from IT for the Technical Consultant role may be challenging, but at least the skill set of the role is well known. The toughest question that many organizations may have is “who is our BPM Analyst, to assist with process analysis and requirements definition?”.

the art of
service

Business Process Management

Here are some criteria to consider when filling this role:

- *Not just a Subject Matter Expert from the business. This person will lead process improvement effort.* There are people in the business that do a great job day in and day out, and probably understand the project's business process better than anyone in the organization. But can they champion the effort in decomposing the process, scoping process improvements and optimizing the process after initial deployments? They need to have a passion for change for improvement and the capability to architect the solution.

Not too technical - Yes, you need a great problem solver that understands requirements and can articulate a vision of the solution. But they also need to understand the metrics of the business process, the Key Performance Indicators (KPIs) and Service Level Agreements (SLAs). "Technical People" sometimes show they build and deliver really great features, but do they deliver value and impact process improvement?

Business Process Management

The BPM Analyst is heavily involved in the beginning of the project in process understanding and design, but also plays a key role in the implementation “playbacks” to ensure that what is being built is going to deliver the value to the business. They keep the project implementation “on track” when it drifts away from the original goals, objectives, and strategy.

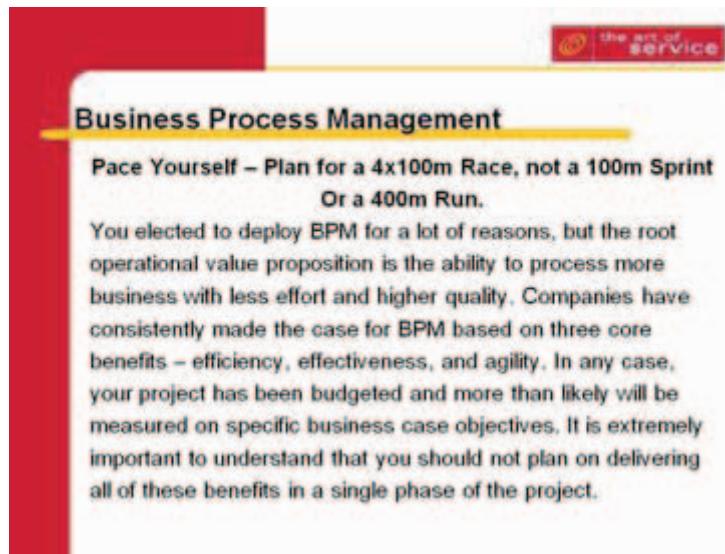


In the initial stages of the project, the BPM Analyst:

- leads process improvement efforts
- provides expertise in process decomposition, scoping, and optimization
- identifies key opportunities, develops business cases, and calculates ROI

During the Build and UAT stages of the project, the BPM Analyst:

- Enforces the delivery of KPIs, SLAs, and scoreboards



The slide has a red header bar with the text "the art of service" and a yellow footer bar with the text "Business Process Management". The main content area is white with black text.

Business Process Management

**Pace Yourself – Plan for a 4x100m Race, not a 100m Sprint
Or a 400m Run.**

You elected to deploy BPM for a lot of reasons, but the root operational value proposition is the ability to process more business with less effort and higher quality. Companies have consistently made the case for BPM based on three core benefits – efficiency, effectiveness, and agility. In any case, your project has been budgeted and more than likely will be measured on specific business case objectives. It is extremely important to understand that you should not plan on delivering all of these benefits in a single phase of the project.

In the initial stages of the project, the BPM Analyst:

- leads process improvement efforts
- provides expertise in process decomposition, scoping, and optimization
- identifies key opportunities, develops business cases, and calculates ROI

During the Build and UAT stages of the project, the BPM Analyst:

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Business Process Management

Iterative Approach..... Continuous Process Improvement –

By far the most common Software Development Lifecycle method in practice today is still the “waterfall” approach. However, BPM implementations demand an iterative development approach to achieve maximum benefit. An iterative approach is defined as “a development method where a solution is created through discreet development sections and is repeated until it reaches maturity.” The transition for many companies from a single Requirements → Design → Development → Test approach to repeating this work over several shorter iterations requires new tool capabilities and new methods for teams to work together. Enabling organizations to achieve repeatable success with BPM deployments is the focus of iterative development.

Prioritize and Trade Off (but don't always trade-off the reports!) What happens to the work that does not get completed within each iteration? You can't always push that remaining work to Iteration. The business has to prioritize the future work and requirements during each planned iteration. Typically, companies will prioritize in favor of the highest Return on Investment (ROI) items. The areas of lesser value that are still perhaps quite important to the overall process should be placed on the Process Roadmap. Note that one of the key values of BPM is monitoring and visibility but it is often one of the last things to be done in a project. Don't let you're reporting be the first thing chopped!

Business Process Management

Demand Business Involvement – At the Right Times

Driving closer business and IT collaboration has been an area of focus for most companies for some time now. Getting a closer match between requirements and delivery is a challenge – and one that is only exacerbated by the frequency of change found in deploying BPM.



A project organization that allows for business and IT co-dependent on each other for success is a key for BPM project deployments. The willingness and ability of these two groups to collaborate is, in the end, critical to success at every stage of the implementation. Making sure to include the “right” business resources during the right times in your project is critical for success. But how much should the business be involved, and when?

Business Process Management

Process Analysis – At the very beginning of a BPM project, the business is involved heavily to assist the core BPM team in analyzing the business process, understanding the main problem areas that exist, and formulating a roadmap for recommended process improvements. From that, a high-level implementation plan is developed, along with the estimated potential value / impact to the business. The timeframe for the process analysis exercise can vary anywhere from a couple of days to a couple of weeks.

Implementation Playbacks – During the Iterative Approach, the business must be involved to ensure accuracy to the real needs and requirements of the business, and they must also prioritize the next iterations cycle that define the process roadmap. In a typical 90-day process deployment, there are three main “playbacks” with the business stakeholders for the project, each a 2-hour session separated by 2 weeks.

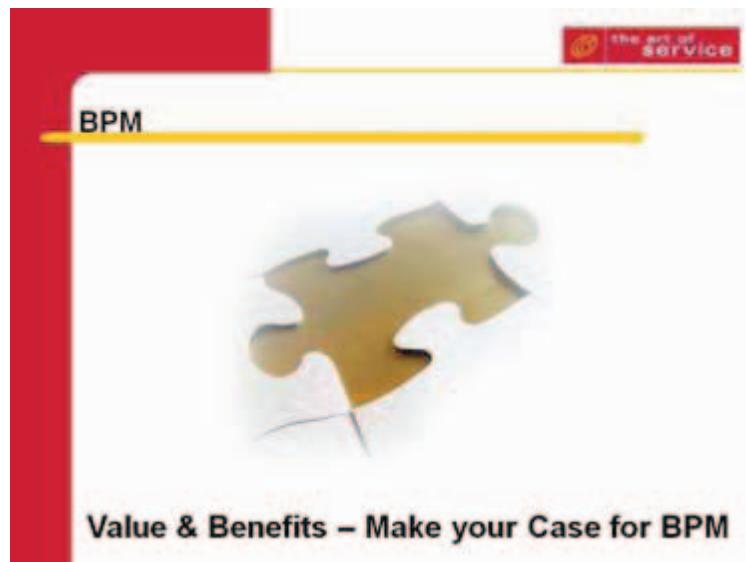
Business Process Management

BPM projects typically have a high profile and are budgeted to deliver high value. Business people are busy throughout their normal day-to-day jobs and have little "spare" time to dedicated to other projects. But leveraging their time and knowledge during the analysis and implementation playbacks will be critical in delivering to the success of your BPM project.

Summary

Many companies have been able to realize significant value with rapid returns by driving process improvement with BPM. Success rates on BPM projects far exceed other more traditional software development projects. However, structuring your first BPM project for success is extremely important in a long term BPM strategy. Picking the right process, fielding the right team, pacing yourself, and demanding business involvement are four small but important recommendations to help you and your organization establish a solid foundation for your first BPM project.

VALUE AND BENEFITS – MAKE YOUR CASE FOR BPM



See BPM Benefits Checklist, found on page 231within this guide.

Business Process Management

The Strategic Value of BPM

Better processes produce lower costs, higher revenues, motivated employees, and happier customers. The most dramatic examples of economic value driven by process improvement come from the companies that have led the adoption of the Six Sigma (and Lean Six Sigma) methodology – most notably General Electric (GE). Mikel Harry, one of the founders of the Six Sigma methodology, has documented the economic impact of focusing on process improvement.

Using the base measure of his methodology – Sigma, Dr. Harry provides a tangible example of how companies like GE have benefited from a commitment to process improvement:

- *With just a one-sigma shift, companies will experience a 20 percent margin improvement, a 12 to 18 percent increase in capacity, a 12 percent reduction in the number of employees, as well as a 10 to 30 percent capital reduction.¹*

Business Process Management

When you consider that GE achieved multiple Sigma shifts on their core markets, it is clear why they have become a top competitor in any market they compete. Their costs are lower and their quality is better. Of course, GE also made Business Process Management a core part of their corporate culture – from the CEO down. Most groups making the case for BPM cannot assume such commitment – at least not to begin with. Not a problem. Even a basic investment in a BPM suite (BPMS) can yield significant returns. Without any process redesign, Connecticut-based research firm Gartner indicates that companies can still expect to receive significant operational improvements for any given process.

Using the base measure of his methodology – Sigma, Dr. Harry provides a tangible example of how companies like GE have benefited from a commitment to process improvement:

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Business Process Management

In fact, the typical BPMS projects are driving more value – a lot more. In another report, Gartner indicates that 78% of projects see an internal rate of return (IRR) of greater than 15%.³ The same report indicates that these projects were deployed quickly (67% in less than six months, 50% in less than four months). So companies are realizing significant value with rapid returns by driving process improvement with BPM.

[View the full slide deck](#)



A Benefits Case Study: Logistics

The concept of continuous improvement is at the heart of the BPM value proposition. In fact, the ability to continuously improve processes and gain incremental ROI on a consistent basis is what sets a BPMS apart from other means of driving process improvement. So, when making the case for BPM, it is critical to consider not only the first iterations of processes and what value they might bring – it is essential to consider the incremental value that will be added over time.

Business Process Management

A large computer manufacturer identified a process improvement opportunity in their logistics operations.

Products that could not be delivered (referred to as "distressed shipments") were costing the organization millions of dollars per quarter in lost revenue.

Process analysis confirmed that:

- Improvements were needed in many areas, and because internal departments and external partners were involved, a complete view of the order as it progressed through the process was difficult to obtain;
- The window of opportunity to save a shipment was a short 48 hours and work priorities, task completion and escalation was crucial to successful resolution; and
- Data about the order was often too little and too late. The organization needed real-time notifications in order to save the shipments.



Business Process Management

The initial process deployment monitored and notified the customer service team the instant an order was marked 'distressed'. Resolution deadlines were automatically assigned and tasks routed so that shipping problems could be addressed immediately. The process also enforced standard procedures so that call-center agents were guided to the best options for the customer.

...and many more.



The results of proactive management of the current process yielded outstanding results. With each new version of the process, they moved their key metric of *Percentage Saved from 5% to nearly 70%*. That represents a savings of over \$2 million each quarter. With continued global growth, that number continues to increase



Business Process Management

Identifying Your Potential Benefits

The basic operational value proposition of BPM is the ability to process more with less effort and higher quality. So BPM has become a cornerstone technology for companies that must grow revenues quickly while containing their growth in headcount. These companies have made the case for BPM based on three core benefits – efficiency, effectiveness and agility. Depending on the process, these different benefits will be realized in different proportions and in different cycles.

Efficiency

It is typical for a company to first see efficiency benefits when deploying BPM. Most processes have significant waste because of manual effort, poor hand-offs between departments and a general inability to monitor overall progress. The initial deployment of a BPM solution eliminates these problems – and the benefit is typically expressed in full-time equivalent time saved.



Business Process Management

Effectiveness

Once a company has realized the basic efficiencies that a more controlled process brings, they will often focus on making the process more effective. These are where some of the largest gains are realized. The returns here are typically expressed in the context of handling exceptions better or making better decisions.



One telecommunication service provider found that by better controlling their billing disputes process better they were able to reduce by \$3 million the amount they were paying out each quarter (approximately 10%). Their BPM deployment helped them identify duplicate issues, research disputes more completely and enforce more consistent payout policies.

Business Process Management

For processes that are regulated, this level of control and consistency provides an added benefit – the avoidance of fines because of incorrect, inconsistent or lack of timely execution of the process. In some cases, this benefit can be monetized (e.g. reduction in fines), but often this compliance benefit is viewed as critical even if a financial benefit cannot be directly associated with it.

Agility

The final key benefit BPM provides is agility. In the era of the Service Oriented Architecture (SOA) and On-Demand , agility is a well understood concept. In the world of Process Management, the ability to change quickly is essential. Our customers change their key processes 4-7 times per year. The driver for change can be internal or external. New opportunities can arise. New partners or customers need you to support a different way of doing business. Federal or international regulations can require you to change your processes. BPM provides the platform you need to be able to change your processes – faster and in amore controlled fashion than any other option.



Business Process Management

Agility benefits typically include supporting federal regulations faster – eliminating chances of fines or delays in approval. Another example includes the ability to change a process to accommodate unforeseen events. An insurance agency can quickly adjust their claims approval threshold upward when a natural disaster happens in a specific part of the country. It can be difficult to calculate hard returns from agility, though most organizations recognize that the ability to quickly adapt processes is a critical competitive capability.

Comparing the Alternatives

Typically, there are three possible alternatives to using BPM to drive process improvement. These include buying a packaged application that addresses the process or functional area; extending an existing software application; or custom developing a solution to address the organizations needs.

Business Process Management

Comparing the Alternatives

Typically, there are three possible alternatives to using BPM to drive process improvement. These include buying a packaged application that addresses the process or functional area; extending an existing software application; or custom developing a solution to address the organizations needs.

Buying an Application

There are four problems with buying applications to solve process problems: time to value, risk of adoption, responding to change, and expanding scope.

See BPM Architecture Considerations, found on page 231 within this guide.



Business Process Management

Time to Value - According to Forrester Research, the industry average for installing new applications is 14.5 months – and 36% of the projects are delivered late⁶. When compared against the data for BPM installations, many BPM deployments would have three or four versions of a process deployed in that time – each generating significant business value. Additionally, most applications require organizations to start with their core data model and base functionality. A great amount of time could be spent implementing capabilities that are not directly relevant to your process problem, but are required for the proper execution of the application. There are no such start-up costs for working with BPM.

Risk of Adoption – Users often resist having to learn an entirely new application. Worse still, if the capabilities do not match the users' needs, then it will not be used and process efficiency will get worse – not better. In contrast, leading BPM solutions can bring process into the tools that users are familiar with today – like Microsoft Outlook. This virtually eliminates training and adoption hurdles. Furthermore, BPM allows project teams to focus on the specific capabilities needed by participants in the process – and no more. No time is lost identifying which application capabilities will not be used or need to be customized.

Business Process Management

Responding to Change - Once the application has been installed, organizations are often faced with difficulties keeping the application synchronized with the changing priorities of the business processes. Applications are not designed to accommodate frequent change – they are focused on standardizing actions and processes. In fact, customizing a standard application often introduces additional problems and costs, as discussed in the next section.

Expanding Scope – Process improvement requirements can come from all parts of the organization. While the first problem might be in on-boarding new employees, the next could be in managing shipment logistics. Buying specific applications for each of these process problems would not be practical. In contrast, a BPM suite can be used to improve any process.

Business Process Management

Extending an Existing Application

If an existing application is in place, some companies will evaluate extending that application to help drive improvement in key process areas. There are three problems with taking this path: cost, complexity and immaturity.

Cost – The cost of purchasing additional modules and the development tools required to customize the existing application can often be extensive – more costly than buying BPM. In addition, extend the applications often requires unique, expensive skills. Often, applications must be extended using proprietary application specific languages. Contracting consultants with this knowledge can be expensive. In contrast, leading BPM solutions are standards based and many consultants have been trained in the core skills and technologies required for deployment.



Business Process Management

Complexity - Extending packaged applications generally makes future upgrades more complex sometimes significantly more complex. Most application vendors advise clients not to extend or customize their applications. They suggest a "vanilla" implementation in order to make future upgrades possible. In addition, extending a transactional application to support process management capabilities often means that companies will have to custom develop capabilities like workflow and reporting. This exposes development teams to the greatest possible risk: they are constrained by the existing application on things like data model, user interaction, yet they must also custom develop complex new capabilities specific to process management.

Immaturity – While many application providers are adding process to their applications and platforms, their offerings are still immature. According to Gartner, “many of the large vendors (such as IBM, Microsoft, Oracle and SAP) moving into the BPMS market are trying to capitalize on the current hype and interest in process improvement and adaptability, but they are looking forward to a time (circa 2009) when BPMS capabilities are part of a larger product offering.⁷” In short, the process management capabilities offered by the large vendors cannot presently drive process improvement.



Business Process Management

Traditional Application Development

Most companies have the capability to develop applications in-house. So, it is not uncommon for these companies to evaluate whether they can use their traditional application development instead of using a BPMS. There are two areas where traditional application development is a poor fit for driving Process improvement: requirements and time to market.

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Traditional Application Development

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Business Process Management

Requirements – According to Forrester Research, 57% of application development projects are poorly scoped and 30% have unattainable requirements⁸. These same percentages – or worse – can be expected using application development for process improvement. In contrast, BPM project success rates – over 90% - suggest that BPM is a superior technology for getting process improvement requirement right.

Time to Market – BPM projects tend to be delivered faster, cheaper and more reliably than most application development projects. How much faster? Based on our research with customers that have existing application development capabilities (e.g. Java-based development), BPM delivers productivity gains in virtually every phase of the project delivery.

The diagram consists of a red vertical bar on the left and a white panel on the right. The white panel features a yellow header bar with the text 'Business Process Management'. Below this is a table titled 'Typical BPM Project Phases' with three columns: '% of Project' and 'Productivity Improvement'. The table shows the following data:

Typical BPM Project Phases	% of Project	Productivity Improvement
Functional Requirements and Functional Design	25%	50%
Development	50%	20-25%
QA/Testing	25%	30%
Business Rollout	N/A	N/A

At the bottom of the white panel, the text 'Productivity Improvements across Project Phases (Source: Lombardi)' is written in blue.

There are several reasons for this improvement in productivity. First, BPM provides the key functionality necessary to define process improvement requirements and implementation –modeling, workflow, simulation, etc. These are all capabilities that developments teams will need to custom develop or integrate if they are using traditional application development tools.



Business Process Management

Second, all of those capabilities are integrated into a cohesive development environment in leading BPM suites. This integration simplifies implementation and change management.

Finally, leading BPM suites support graphical development of process solutions instead of requiring complex coding. Not only does this speed development it also means that less skilled technical resources are required to deploy BPM.



Common Areas of Cost

By now, the benefits of BPM should be clear. But what does it cost to implement this type solution? What should companies include on the cost side of the BPM equation? The primary cost areas are software, people, and hardware.



Business Process Management

Software
A detailed review of pricing models from various BPM vendors is beyond the scope of this document. An organization investigating BPM must ensure that they completely understand what 'software' includes. Some vendors license components individually or require additional software to support the BPM deployment. BPM suites that are based on industry standards like TeamWorks are more likely to be successfully deployed using the existing infrastructure components of organization. Most BPM vendors support the ability to buy BPM at the departmental level and grow that license to the enterprise as requirements grow.

This allows companies that wish to grow their BPM footprint more slowly the ability to get started with process improvement at the departmental level.



Business Process Management

People
An organization should plan for a project manager, a subject matter expert, 1-2 business analysts, and 1-2 developers. This core project team aligns the Business and IT organizations to ensure project success. The team is generally made up of customer resources, system integrators that may be contracted by the customer. This may seem like a small project team when compared to traditional development technologies. That is the value of the productivity BPM brings for delivering process improvement.

Companies seeking to drive continuous process improvement must recognize that these teams need to be dedicated to ongoing BPM projects. They do not work and then disperse to other projects. This means that staffing BPM capabilities becomes an ongoing investment and one that will grow as companies add processes. Recognizing this, some companies set up Centres of Excellence (COE) for BPM through which all process management projects pass.



Business Process Management

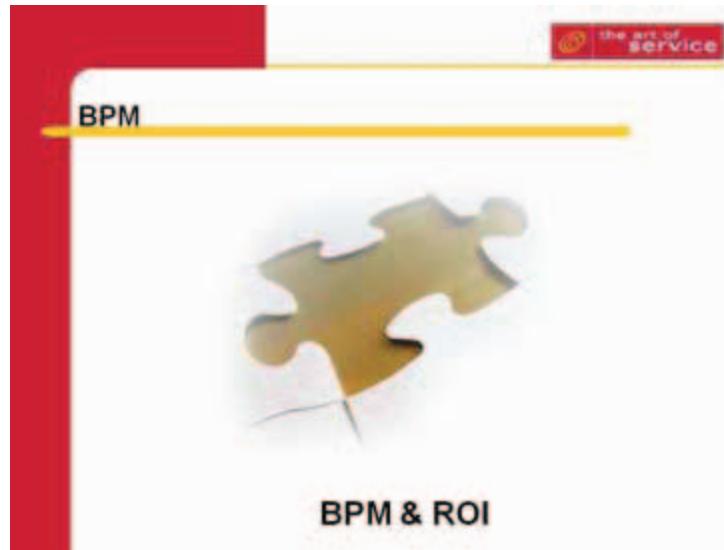
Hardware

Ongoing hardware costs are comparable to other application deployment needs. BPM allows organizations to start with a modest infrastructure and grow over time as their process portfolio grows. As always, organizations should remember to account for different environment needs, such as development, QA and production environments. Organizational requirements, such as CPU Utilization guidelines must also be accounted for when reviewing the minimum hardware sizing estimate provided by a BPM vendor.

Summary

BPM is the best investment a company can make in establishing a platform for continuous improvement. The challenge for many companies is justifying the BPM investment instead of using traditional paths for solving process problems – like buying an application or building a custom application. When developing a business case for BPM, examples of successful BPM projects can help frame a value proposition or even highlight areas of benefit that may not have been considered. Using the customer stories and benefit checklist outlined in this paper, an organization is armed with the information required to make the case for BPM as the lowest risk, highest return investment a company can make to drive process improvement.

BPM AND ROI



Justifying cost – whether for daily business operations or for the technology used to support them – is a constant requirement for competitive industries. Business Process

Management (BPM) technology has reached a point of maturity to clearly show an impressive rate of return. This presentation explores how business and IT leaders estimate and frame the Return on Investment (ROI) for BPM projects.

Business Process Management

Business and IT managers are consistently required to estimate and demonstrate the results and benefits of IT investments. It is generally accepted that return on investment (ROI) represents the key measure of IT decisions and investment priorities. Justifying and validating the business case for business process management (BPM) is no exception.

BPM continues to gain momentum as the number of real-life examples of success have increased. While many IT projects and programs continue to struggle to perform as promised, BPM projects, in contrast, produce real gains and payback in months versus years. Gartner reported that 67 percent of BPM projects in its survey were completed in less than six months, and successful projects had an internal rate of return of no less than 10 percent. Aberdeen has found that best in class companies more than recouped their investment, with some organizations realizing a return of more than twice the investment.

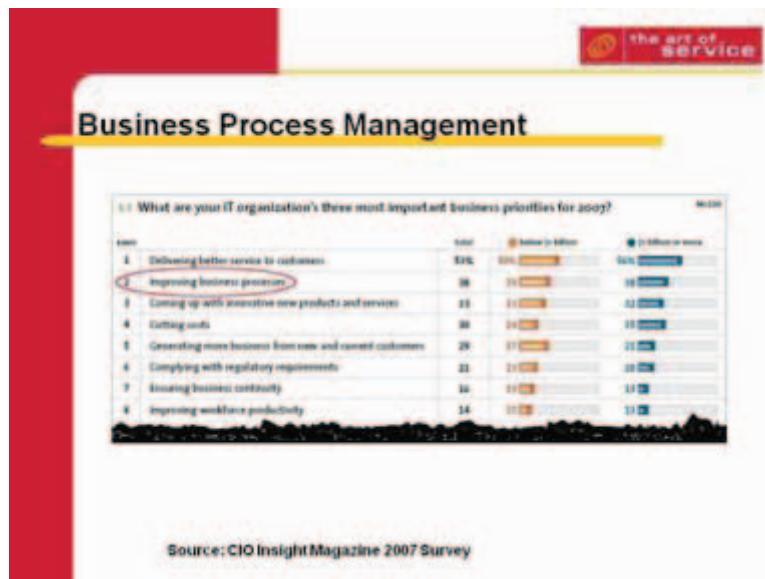
Business Process Management

Yet, some companies struggle in their attempts to demonstrate the value of BPM. IT professionals need to assess the real gains from the original application so as to build the case for subsequent proposals.



The return on an IT investment is best justified when results are expressed in monetary terms. Simply put, executives respond when value is expressed in terms of cost reduction or revenue increase. Successful BPM projects deliver just that by enabling process automation and improvement. That's why in a recent CIO Insight Magazine survey of the most important priorities for 2007, "improving business processes" ranked #2, just after delivering better service to customers.

BUSINESS PROCESS MANAGEMENT



The top ranked priority, “delivering better service to customers,” and the fourth ranked priority, “cutting costs,” also rely heavily on the improvement of business processes. After all, customer value and shareholder value is created by the level of performance of a company’s business processes.

Business Process Management

About half of the Global 5000 companies are estimated to be using BPM technology . Part of the attraction of BPM is that it produces rapid payback. Contrary to experiences with other enterprise systems, with BPM you can start small, plan to go for an early, if modest, payoff, and then build your systems incrementally.



In order to estimate the ROI from any IT project, it is important to understand the scope of investment, typically expressed in terms of the needed investment in software, people, training, and hardware. Then it's essential to understand the core components of calculating ROI – cost, time, quality, and productivity, and frame the anticipated benefits of the project in terms that leaders understand – customer satisfaction, revenue improvement, cost reduction, and risk mitigation and compliance.

The Art of Service

Business Process Management

There are six key steps involved in estimating the ROI on BPM projects.

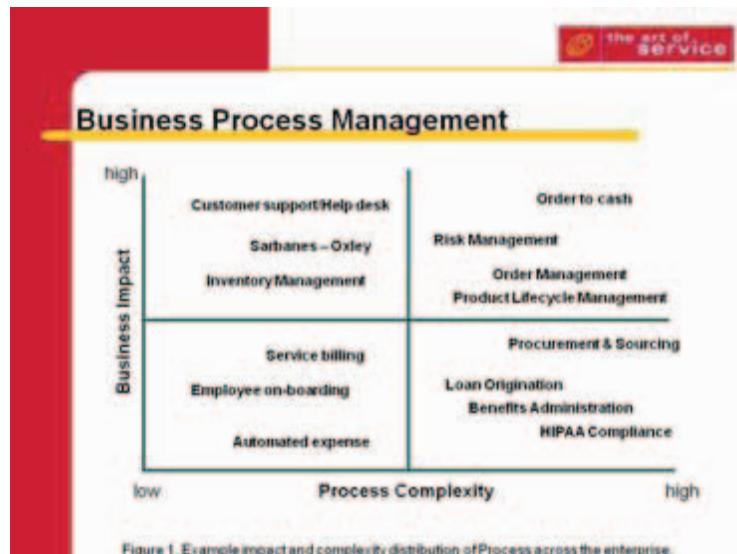
1. Identify problems and opportunities
2. Define the scope of the process to be improved
3. Estimate both hard and soft benefits
4. Estimate the extent of the needed investment
5. Frame the cost-benefit in terms that leaders understand
6. Package, present, and gain commitment



1. Identify problems and opportunities

The first step to estimate ROI of a BPM project is to identify business problems to fix or opportunities for improvement that can be effectively addressed with BPM. In this respect, it is important to select an initial project area where the likelihood of creating value (increased revenues and/or reduced costs) is high and project complexity is relatively low. There are essentially two approaches to problem/opportunity identification. The first is to listen to complaints and feedback from customers or people in customer touching departments such as sales and customer service, compare the relative risk-reward of potential projects, and then scope a project accordingly. The second is to carry out a high level assessment of process candidates where BPM can be deployed to yield rapid, visible payback, compare the relative risk-reward of potential projects, and then scope the selected project

BUSINESS PROCESS MANAGEMENT



To illustrate one method of comparing the relative risk-reward of potential projects, this figure provides a view on the relationship of the estimated size of impact versus process complexity for selected BPM solution areas. While the example provides some general guidance, note that such an assessment will be different for each company.

Business Process Management

2. Define the scope of the process to be improved

Once a process candidate has been selected, the next step is to clearly establish the scope of this process. Several frameworks exist for understanding scope, but the key is to capture the following information: where the process starts, the key steps, where the process ends, and the outputs and outcomes produced by the selected process. Typically, referred to as the "AS-IS" state, this snapshot can be used to measure current performance. Defining scope and measuring performance are essential to establishing the "baseline" needed for estimating ROI.



3. Estimate both the 'hard' and 'soft' benefits

Think of the 'hard' benefits in terms of the core components of cost, time, quality, and productivity. BPM enables an organization to produce benefits in each of these areas. Estimating baseline performance of the process in the previous step will likely expose areas of cost reduction, for example, eliminating the need for certain manual tasks like data entry or manual report generation. These cost savings are often best described in terms of savings in full time equivalents (FTEs). Cycle-time compression is a multi-edged sword. Reducing the time to complete a process drives down cost, improves responsiveness, and positively impacts customer satisfaction. Similarly improving quality through the reduction of error rates has clear 'hard' benefits for customers and also to the company in terms of reduced costs such as manual exception handling, fewer returned products, and lower warranty costs. Productivity improvements such as increasing throughput (more transactions with the same or fewer resources) are also important to capture.

Business Process Management

While sometimes difficult to quantify, it's equally important to consider 'soft' benefits such as increased transparency and visibility, improved capability for ad hoc reporting, and improved risk mitigation. These soft benefits are sometimes categorized under the heading "agility" or "flexibility."

4. Estimate the extent of the needed investment

A realistic estimate of the required investment in software, people, training, and hardware is equally critical. In this respect, the focus should be on incremental costs, and core infrastructure expenditures should be treated as the "cost of doing business." To estimate the 'total cost of ownership' (TCO) pay particular attention to incremental staffing, training, and other incremental costs in areas such as quality assurance, capacity planning, other production related incremental expenses. Also consider the estimated savings once BPM systems are in place as a result of repurposing.



Business Process Management

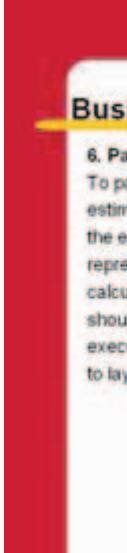
5. Frame the cost-benefit in terms that leaders understand.

	Reduced Costs	Increased Customer Satisfaction	Compliance and Risk Management
Time	Shorter processing cycle times Reduced administration time	Faster processing time More responsive Fewer manual errors	Decreased time to process Faster report generation
Quality	Fewer manual errors More efficient data entry	More visibility Consistent business practices Better exception handling	Better policy enforcement Controlled environment Reduced risk
Productivity	Fewer hand-offs Higher throughput	Greater focus on value added tasks Fewer hand-offs	Consolidated view of compliance effort Significantly reduced manual tracking
Other	Reduced support costs Improved ad hoc reporting	Stronger customer loyalty Stronger brand	Piece of mind Better risk mitigation Greater trust

Table 1. Framing the Benefits

Once both the benefits of the BPM deployment and the needed investment are understood, it's vital to frame these factors in terms that executives will understand and support. This table outlines one example of a worksheet for framing the benefits.

The actual completion of such a worksheet depends, of course, on the nature and scope of the selected process and should be populated with specific benefits relevant to the chosen project. Addressing customer-touching processes will generally have higher values in terms of "customer satisfaction" and potential revenue increase opportunities.



Business Process Management

6. Package, present, and gain commitment
To package estimated cost-benefits, create a summary statement of estimated benefits in terms of cost reduction and revenue increase, versus the estimated incremental investment. This will facilitate a crisp representation of the breakeven point for the investment and the ROI calculation. When presenting the case for BPM to executives, the objective should be to go beyond commitment of funds to full engagement of the executive group at critical stages of the initial BPM project. This is important to lay the groundwork for subsequent efforts.



BPM initiatives yield significant results when properly scoped, planned, and deployed. Gartner reported that 78 percent of the BPM projects in their survey yielded an internal rate of return (IRR) of over 15 percent. Aberdeen has observed that 50 percent of organizations in their survey turned to BPM to complement ERP functionality. . Whether BPM is applied to targeted areas or used to complement an existing IT environment, research reinforces success using BPM, often a critical factor for gaining support and corporate commitment.



Business Process Management

Example Cases

BPM success stories span both the private and public sectors and include both product-based and service industries. In the commercial sector, the case of a leading vibratory equipment supplier is thought provoking. The BPM project was triggered by the realization that sales representatives would often negotiate custom product modifications without advice, involvement, and assistance from the engineering department, thereby creating disconnects between the customer's expectations and the manufactured results.

Moreover, sales orders were often incomplete, lacking certain information to ensure timeliness and accuracy of contracts and product delivery. While the entire contract to cash process needed to be addressed, the initial effort focused on the “contract to delivery” component of this process. In estimating the ROI of the BPM effort, the company expects that BPM project deployment would take place in under four months, the breakeven point to recoup project related expenses would be 10 months, and the estimated ROI was about 25 percent.



Business Process Management

Key benefits were estimated in terms of cost savings due to reducing the loss of time, and costly duplication of engineering and manufacturing resources. Both cost savings and quality improvements were anticipated related to the reduction of inaccurate contracts, incorrect billings, and write-offs.

Increased revenues would be generated (1) by eliminating losses due to the enforcement of rules relative to engineering and manufacturing mandates, and (2) through improved customer satisfaction by reducing delivery delays. The sales cycle, and order development and processing times, will be significantly reduced and error rates reduced by at least 95 percent.

To illustrate the deployment of BPM in the public sector, consider this case of BPM applied to the application management process. An agency with the mission of encouraging the development and deployment of anti-terrorism technologies recognized that its capability to monitor and manage key applications was flawed. Several independent and unlinked Excel spreadsheets were being used to track application status. These spreadsheets were perceived to be inaccurate and out of sync with one another. Lists of applications and key deadlines were charted by way of whiteboards in various offices. The lack of visibility and the means to anticipate action on deadlines lead to a “fire-fighting” environment.



Business Process Management

This public sector organization deployed BPM to reduce staff used to track the status of applications from six FTEs to one process administrator; to realize time savings of eight hours per week in the generation of weekly reports; to enable visibility into internal milestone goal completion (met vs. unmet) by employee; to enable visibility into upcoming milestones (both internal and external) across the organization to ensure applications stayed on schedule and external deadlines were met 100 percent of the time; and to improve compliance via the auto-maintenance of a complete audit trail of documents created that related to the review and access to technology information submitted by applicants. The organization was able to design, implement, and see benefits of a sophisticated BPM project within six months.

BPM Trends that affect ROI There are also a number of trends that are important to monitor, including the availability of BPM “software as a service” (SaaS), the increasing convergence of BPM and business intelligence (BI), better insight into the interdependence of BPM and Service Oriented Architecture (SOA), and the increasing use of BPM to provide added functionality to Enterprise Resource Planning (ERP) systems. In evaluating BPM vendors, it’s important to consider the extent to which a given vendor is a leader in these key trend areas. Appian is a leading vendor in this respect as it was the first to offer on-demand BPM through its Appian Anywhere product. Also, consider the extent to which vendors offer full Web-based modeling capability with desktop-like functionality (no downloads or installs), Business Process Management Notation (BPMN) compliance, and features such Microsoft Office integration.



Summary

BPM has the potential to produce value for any company in virtually any industry. Table 2 depicts key business drivers for a selected sample of industries conducted by Aberdeen .

Business Driver	Manufacturing	Service Sector	Government
Realtime visibility into operations	65-67%	80%	75%
Reduced operating costs	41-58%	40%	50%
Revenue growth	23-59%	44%	NA

Table 2. Top Business Drivers by Industry

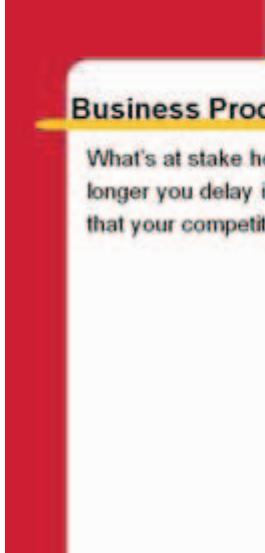
Now, what should you look for in a BPM system or Business Process Management Suite (BPMS)? BPMS should offer a robust modeling capability, ease of use, scalability, and the ability to leverage rules-based logic, combined with powerful analytics. These key features should address both human-centric and system-centric processes, and should deliver increased control over and visibility into key business processes. Similarly, a BPM system should enable the organization to explicitly assign responsibilities to people or groups or to dynamically assign them according to business rules, policies, skills, or workload balancing algorithms, and provide the means to act as a sort of centralized, Web-based layer of logic atop legacy applications and ERP systems.



Business Process Management

There is a natural evolution in terms of the deployment of BPM systems. Most organizations begin by tackling a transactional based business process with the dual objectives of cost reduction and increased visibility. However, thoughtful managers realize that it is important to go beyond one time improvement and that BPM has the potential to address a broad range of issues to improve customer satisfaction, reduce costs, increase revenues, and mitigate risks. The skill set of estimating and demonstrating the ROI on BPM projects is essential to get the most out of this technology.

In spite of better project management, iterative development, and emerging Web infrastructure, the Standish Group estimates that in 2006 only about 35 percent of all IT projects were delivered on time, on budget, and meeting user requirements. BPM projects can significantly improve that proportion of success. Gartner noted that by simply “making the current-state handoffs, timing, and responsibilities explicit, productivity improvements of more than 12 percent are normally realized.” Aberdeen recently reported that some companies average a return of more than twice the original investment in BPM implementations. BPM practitioners realize that a significant portion of the ROI gained by using BPM isn’t just what is delivered, but how it is delivered.



The Art of Service

Business Process Management

What's at stake here? Ultimately, competitive advantage. The longer you delay in deploying BPM, the greater the likelihood that your competitors have not.



See Example: Common Business Objectives, found on page 235 within this guide.

BUSINESS PROCESS MANAGEMENT



BPM CONTINUAL IMPROVEMENT



IMPROVING PROCESSES

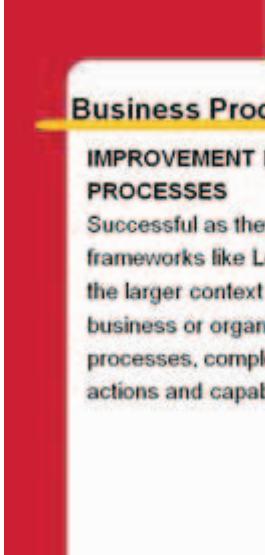
Businesses and organizations of all types now regularly embrace some type of formal approach to improving their business processes. While every improvement program is tuned to the industry and environment at hand, each approach is based on a common-sense strategy: first select an area for improvement, then assess the current state and conditions next determine the change to a new state, and finally, implement the improvement.



Business Process Management

When an organization implements a program to repeatedly improve processes, it's called Continuous Process Improvement, or CPI. CPI programs like Lean, Six Sigma, and TQM are famous for setting in motion a combination of philosophy, management framework, and supporting tools to evaluate and improve operational processes in an ongoing manner. They programmatically institutionalize the pursuit of improvements in the overall performance of the organization or enterprise. When approached this way, and implemented and managed properly, CPI initiatives can be wildly successful and lead to dramatic increases in the quality of products and services, competitiveness, and the value delivered to customers.

Because process excellence is a key driver of business performance, organizations with successful process improvement initiatives are zealous in their support for and commitment to CPI. They apply their CPI methodologies across the enterprise: top-to-bottom, wall-to-wall, and even beyond their own walls – with suppliers and customers. They live and breathe the language and the tools. They directly measure the effectiveness of their activities and go on the record with their results. For example, leading corporations practicing Six Sigma, report returns on investment of five times or greater, with collective results now exceeding \$100 billion in total value.



Business Process Management

IMPROVEMENT IS ONLY A PART OF MANAGING PROCESSES

Successful as they are, process improvement initiatives and frameworks like Lean and Six Sigma represent only a part of the larger context for managing the processes within a business or organization. In addition to improving individual processes, complete process management requires other actions and capabilities.



In focusing on process improvement, CPI practices are only a part of an overall system of comprehensive process management.

- Consider the following:



Business Process Management

a) Processes must first exist before they can ever become wasteful or suffer excess variation – and therefore need CPI intervention to be improved. Complete process management requires initial process design, development, and implementation.



- b) Managed processes include all types of processes: people processes, system (as in computer and software system) processes, and combination or hybrid processes – all along a value stream. It's not enough to manage or improve only one type or in one functional area.
- c) The act of implementing any new or changed process must in itself be well-managed. Improvement initiatives demand effective strategic alignment, governance, and project management, requiring project leadership, teamwork, configuration, and change management.
- d) Most important, any effective, performing process must be standardized and managed to specifications – with controls. CPI methodologies like Six Sigma require such controls, but this part of CPI tends to be under-emphasized.

See more information and tools on Six Sigma, in your bonus documents, found within this guide

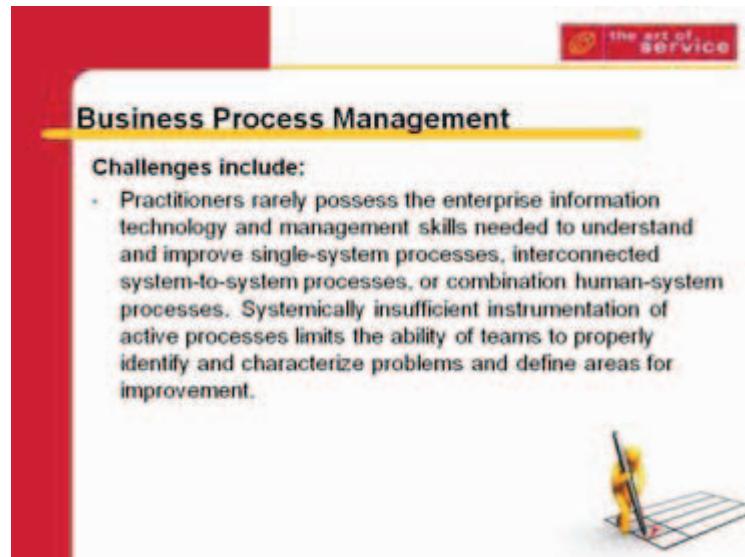


Business Process Management

THE LIMITATIONS OF CPI FRAMEWORKS LIKE SIX SIGMA

For all the power and benefits of problemsolving and process improvement methods and tools, you cannot rely on improvement activities alone for the complete life-cycle management of your business processes. CPI frameworks improve specific processes and address critical problems, one black-belt project or kaizen event at a time. CPI methods tend to create "atomic units" of optimized subprocesses that then must be integrated and managed within the larger context to improve the entirety of the business or enterprise value stream.

Process improvement frameworks like Six Sigma typically also fall short in managing broad-scale, cross-functional, and cross-organizational processes, and in addressing process challenges when the analysis and solutions require interplay with enterprise information systems.



The slide is titled "Business Process Management" in bold black font. Below the title, a section titled "Challenges include:" lists several bullet points. To the right of the text is a small graphic of a person sitting at a desk with a computer monitor, keyboard, and mouse.

Challenges include:

- Practitioners rarely possess the enterprise information technology and management skills needed to understand and improve single-system processes, interconnected system-to-system processes, or combination human-system processes. Systemically insufficient instrumentation of active processes limits the ability of teams to properly identify and characterize problems and define areas for improvement.

- A lack of access to data across the enterprise or throughout a value stream restricts effective process measurements. Practitioners typically spend considerable time and effort collecting data in non-standard and non-repeatable ways. Project scope is limited, time is wasted, and error is introduced, because analysis and simulation tools are used off-line and data is entered manually.
- CPI practices are ineffective at controlling processes. Manual methods inhibit the ability of process teams to sustain performance gains over the long term.



Business Process Management

Compounding these limitations, processes are now increasingly becoming more complex. They span functions, enterprises, people, and systems – in some cases, globally. For process improvement methods to provide value in this larger context, they must be able to address these broad challenges.



**See The Integration of Knowledge Mapping into Existing Business Processes,
found on page 191 within this guide.**



Business Process Management

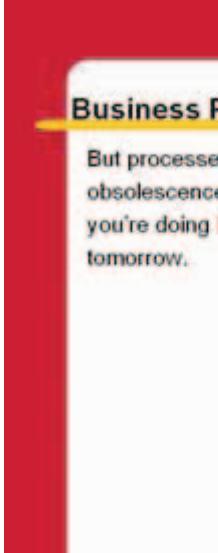
Meanwhile, the enterprise information technology environments have long been too cumbersome and have lacked the capability to respond to the needs of CPI. Furthermore, process improvement teams and information technology groups rarely find common ground for addressing these problems. Solutions within this larger context have now become a business imperative.



THE LIFE CYCLE OF BUSINESS PROCESSES

Within an operating business, all operational processes should be stable and performing at all times. Active processes should be well-defined and continuously managed and perform to specifications. Key performance indicators should be monitored to ensure that processes are working as desired, and that out-of-control or out-of-specification conditions are anticipated and responded to appropriately. This is one of the fundamental tasks of Business Process Management.

[See KPI's, found on page 237 within this guide.](#)

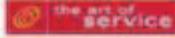


Business Process Management

But processes are dynamic and tend toward instability and obsolescence. No matter what you're doing today – and how you're doing it – you will likely need to be doing it differently tomorrow.



See Business Process Management-How to Scale your Process Documentation Initiative, found on page 247 within this guide.



Business Process Management

Once a process needs improvement – or a new process needs to be developed – the proven methods of CPI should be invoked to help determine the new or better process. The changes may be large or small. They could require the process to be redefined and realigned within the business and value chain. Whatever the change, a modified process must be developed, implemented, and integrated before it can replace the existing process.



Once a process needs improvement – or a new process needs to be developed – the proven methods of CPI should be invoked to help determine the new or better process. The changes may be large or small. They could require the process to be redefined and realigned within the business and value chain. The changed process must then be developed, implemented, and integrated before it can replace the existing process.



Business Process Management

Process change should be conducted with precision and urgency, in order to complete the update, establish the new performing process, and realize the value as quickly as possible. A process change passes through four major Phases.



1. Identify the need to improve (The decision to change). Many factors influence the decision to improve a process. These may be internal or external. They may imply a large change or a small one. The decision to change a process should be deliberate, goal-oriented, principle-based, quantifiable, and tightly scoped.

Business Process Management

1. Identify the need to improve (The decision to change). Many factors influence the decision to improve a process. These may be internal or external. They may imply a large change or a small one. The decision to change a process should be deliberate, goal-oriented, principle-based, quantifiable, and tightly scoped.



2. Determine the changes (using improvement methods). The time-tested techniques of CPI should be used to determine process improvements. Invoking a Six Sigma DMAIC project or conducting a Lean kaizen event will characterize the problems with the process, determine the process changes, and define the new process and standards of performance. If it's a new process, tools within frameworks like Lean or Design for Six Sigma (DFSS) should be used. Simulations, design of experiments, prototypes and models may also be appropriate.



Business Process Management

3. Define and Align. A new or revised process must be defined rigorously. The process models, value-stream maps, system definitions, logic, interfaces, and key performance indicators must all be specified. Further, the process as-defined must be strictly aligned with strategic and operational business goals and drivers, including the Balanced Scorecard.



4. Implement and Integrate. The implementation of a new or revised process can involve many people, organizations, facilities, capital, material, and systems. The human and system elements of the process must be individually optimized and collectively integrated.



Business Process Management

THE EMERGING WORLD OF PROCESS-MANAGED BUSINESS

An enterprise applies business process management (BPM) in order to continuously improve its performance, through proactive controls and agile responses to adjusting and optimizing the many active processes which collectively define its business outcomes. The disciplined framework of Business Process Management is the most advanced and mature framework for effecting total process excellence, representing a culmination of the past fifty years of achievements in methods, tools, and systems. It is a breakthrough in optimizing large-scale complex adaptive system-like the modern business.



Organizations that apply BPM leverage a framework of prescriptive methods and tools. These include information technologies known as BPM Platforms for modeling, measurement, and control, as well as improvement methodologies like Lean, Six Sigma, and TQM for analysis and understanding that can be applied within the context of the vision and principles of the business.



Business Process Management

Leveraging the management and improvement schemes of the past, BPM includes sophisticated systems of measurement, analysis and control, as well as the means and methods for quickly adapting to changing market and environmental conditions by modifying processes and procedures across an enterprise and throughout a global value chain.



BPM: THE NEXT STAGE FOR CPI

The next stage for process improvement methodologies is the greater framework of Business Process Management (BPM). Within a BPM environment, individuals and teams working with improvement frameworks like Six Sigma and Lean can better leverage the tools and techniques of their trade to manage the complete life cycle of all types of business processes.



Business Process Management

Together with advanced BPM technology platforms, the CPI methodologies underpin a fully comprehensive business process management framework. Neither the improvement methods nor the BPM technologies are sufficient by themselves, but collectively, they comprise the major support layers of the BPM system, combining to provide exponentially improved business performance.



CPI Methods and Tools represent the necessary methodological foundation: the philosophy, principles, and techniques used to govern how teams systematically and repeatedly improve processes and enable teams to define and sustain stable, performing processes. The CPI framework adopted by an organization must be adapted to fit the overall BPM model for the enterprise. Without it, BPM is free-floating and ungrounded.



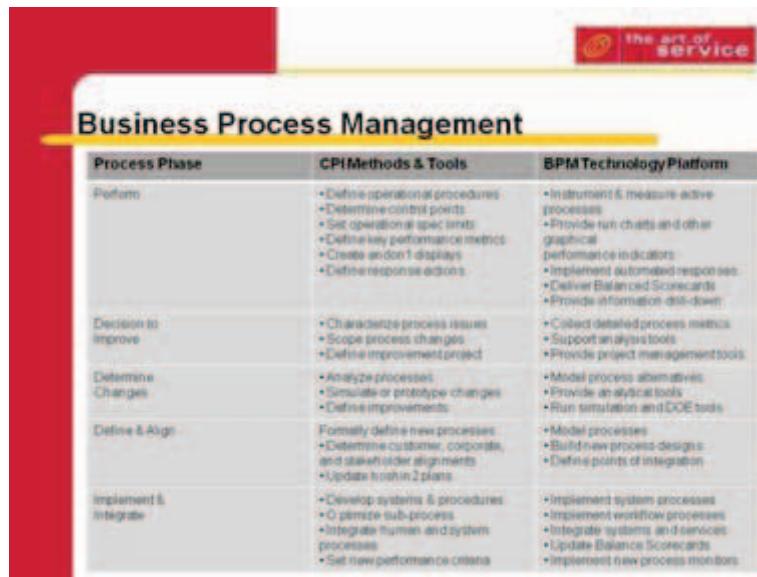
Business Process Management

The BPM Technology Platform is the complementary set of enterprise information tools and technologies that facilitate application of CPI methods to the business processes at each phase of their life cycle. BPM technologies help connect CPI tools to processes. Without the BPM platform, CPI tools are insufficient.

During each phase of the BPM life cycle, CPI methods and tools, combined with BPM technology platform capabilities, fulfill the complete needs of the process-managed organization.



BUSINESS PROCESS MANAGEMENT



BPM – THE POWER OF PROCESS TO THE PEOPLE

These enabling forces are aligning with global forces in ways that are creating opportunities never before experienced in business. In the midst of these great movements are the professional practitioners:

- the business people who own, live, and perform the core business processes
- the methodologists, who apply CPI tools to address shortcomings and improve outcomes
- the information systems teams, who create the technology environments that empower
- the business people and the methodologists

THE ART OF
SERVICE

Business Process Management

There are many other stakeholders, who have their own needs and interests. And, ultimately, there are the customers and markets that are better served when these teams align to deliver innovative solutions of unsurpassed value through a process-managed business environment.

This combination of process methodology and process technology, within a BPM framework promises to fuel new successes for everyone.

Consider the effects on each of the different constituencies: The Process Performers. The individuals within and across organizations who work in the core business processes directly create and contribute to the success or failure of the products and services in their markets. Through BPM, these process performers are increasingly empowered by instantaneous global insight into what's happening and the application knowledge of what's possible. This is what enables them to cope with the increasing urgency of global competition, tighter resources, and shrinking margins for error. For them, BPM means more innovation, greater leverage of intellectual capital, more effective operations, and more satisfied customers.



Business Process Management

The Methodologists. Companies the world over have built the foundations for success by implementing formalized process improvement initiatives like Lean and Six Sigma. Many process and quality practitioners have solved problems in product and service quality, time to market, customer satisfaction, profitability, and employee morale. The individuals, teams, organizations, corporations, and institutions have all benefited from these successes, and are ready and willing to take on the new challenges. BPM means they can combine their savvy and discipline with the systems world, access to data and system processes, and optimize processes across the enterprise and throughout the value chain.

The Technologists. The evolution of the technologies in BPM platforms – including Enterprise Application Integration (EAI), Service Oriented Architectures (SOA), workflow, process modelling, simulation engines, codeless development, and standards like BPMN, BPEL, WSDL – have vaulted the Information Technology community forward. No longer is the IT staffs saddled with the frustration of large budgets and lengthy schedules. IT professionals can now assemble new processes and build new businesses more quickly and effectively than ever. And, combined with the methodological underpinnings of CPI, these new processes and businesses will be more effective and robust than ever before.



Business Process Management

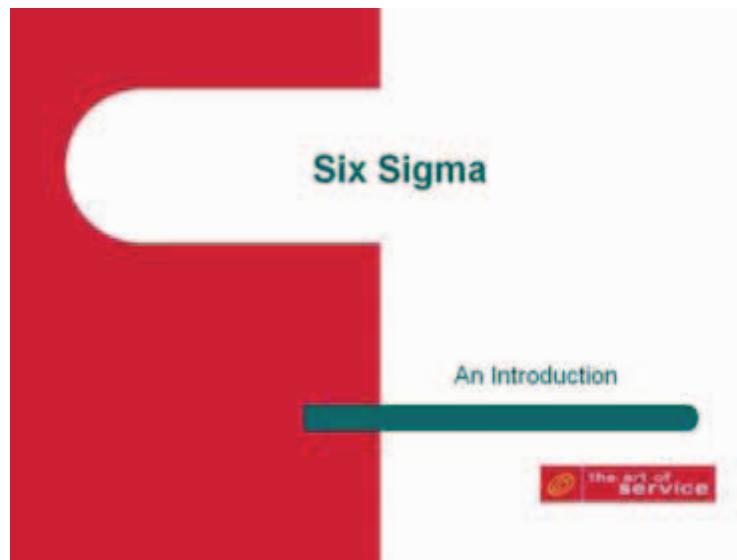
The Stakeholders. Many stakeholders look in on business from the outside. Analysts, auditors, regulators, shareholders....from their perspective, they've been unable to see into a business with sufficient depth or fidelity. BPM capabilities provide the outsiders with the information and knowledge they seek –and the satisfaction they desire – without levying onerous efforts on the performers, methodologists, and technologists – and thereby allowing the resources of the business to be focused on core processes, innovation, and value creation.

The Customer! And why is all this necessary? Because the customer demands value! Customers and markets have decreasing tolerance for waste and defects, for lost time and wasted effort, for products and services that aren't to their need or liking. BPM is important because it helps the customer – the one who matters most

BUSINESS PROCESS MANAGEMENT



SIX SIGMA



What is Six Sigma

- A statistical measure of variation
- Full Six Sigma equals 99.9997% accuracy
- Methodology for improving key processes
- A “tool box” of quality and management tools for problem resolution
- A business philosophy focusing on continuous improvement
- An organized **process** for structured analysis of data

There is a Six Sigma Fact Sheet document available on page 257, within this guide.

Processes

- Everything we do can be considered a process or part of a process
- Every process can be characterized by:
 - Average performance
 - Variation
- Processes are performing optimally when the result of the process is at the expected value (meaning there is minimal variation).

History of Six Sigma

- Motorola developed the Six Sigma methodology in the mid-1980's as a result of recognizing that products with high first-pass yield rarely failed in use
- Statistical term dates back to the 1800's (Carl Frederick Gauss)



Six Sigma Methodology

- D.M.A.I.C. (Define, Measure, Analyze, Improve, Control)
- Provides a logical sequence for applying existing problem solving tools and concepts
- Repackaging of existing tools and concepts
- Various quality/management tools applied at each step
- Project sponsor review recommended at conclusion of each step before moving to next step



BUSINESS PROCESS MANAGEMENT



The slide has a red header bar. In the top right corner of the header bar is a small logo with the text 'the art of service' and a stylized orange icon. Below the header bar, the title 'What is Six Sigma Quality?' is written in blue. To the right of the title is a red rectangular stamp with the word 'QUALITY' written in white capital letters.

- The numerical goal is 3.4 defects per million opportunities (99.9997%)
- Six Sigma's goal is the near elimination of defects from any process, product, or service.
- Juran once concluded that in the western world, around 1/3 of work is redoing what had already been done.
- This cost of low quality could be around 30% of total effort!

One of the misconceptions with 6S is that 'It only works in manufacturing industries'
– WRONG !!

6S started life in Motorola's manufacturing areas where the concept of Statistical Process Control was accepted.

However, if we are going to continue to use the term "process" then we should also use SPC in order to measure and improve those same processes. Most service areas don't have a clue as to how well they are doing now.

This is a methodology, a concept that can be applied equally to manufacturing as it can to service.

AND look at the potential payoffs in terms of productivity increases, leading to direct cost savings.



SIGMA	DPMO	CAPABILITY
6 sigma	3.4	World Class
5 sigma	230	
4 sigma	6200	Industry average
3 sigma	67,000	
2 sigma	310,000	Noncompetitive
1 sigma	700,000	Defect-prone

So here are the measurable levels for Six Sigma
DPMO – Defects Per Million Opportunities.

the art of
service

When to use Six Sigma?

- Unknown causes/situations
- Problems are common place and not well defined
- When "broad spectrum" approach is inappropriate
- When other problem solving methods fail
- In a complex situation with many variables

There is a Starter Kit document on page 261 and Six Sigma Short Overview document available on page 277, within this guide.

The Statistical Tools of Six Sigma

To find your Sigma Level:

- Clearly define the customer's explicit requirements
- Count the number of defects that occur.
- Determine the yield-- percentage of items without defects.
- Use the conversion chart to determine DPMO and Sigma Level.



Defining what is to be measured is perhaps the hardest element – but it must involve the customer.

[There is a Defining Requirements document available on page285, within this guide](#)



Six Sigma Belts

- 3 levels (or Belts)
- Based on level of competence in understanding and applying related tools
 - **Green belt** – basic analytical tools; works on less complex projects
 - **Black belt** – emphasis on application and analysis; works on projects with help from Green belts
 - **Master Black belt** – understands application and statistical theory behind application; trains other belts; leads project reviews
- Actual definition and competencies for each belt can vary by organization and training institutions

Why adopt Six Sigma?

- Defined process for problem solving
- Proven methodology to solve problems
- Consistency with results
- Focus on the “bottom line” which encourages credibility/support from the top of the organization

It's not all Plain Sailing!

- Adoption requires a cultural change in order gain best results
- Top Management must be patient – there is no quick fix
- Six Sigma is about getting the right answer, not just any answer

WARNING
CHALLENGES AHEAD

Six Sigma Summaries

- It's amazing what can be known when we look at data differently.
- DMAIC is not for every project
- When applied correctly, DMAIC will produce consistently better results than most other methods
- “New Culture” at many organizations today
- Very marketable
- A Six Sigma approach works!



Six Sigma according to GE

"Six Sigma is a highly disciplined process that helps us focus on developing and delivering near-perfect products and services to our customers. "Six Sigma", a statistical term, describes a process that results in less than 3.4 defects per million operations, a process that is very near perfection. The central idea behind GE's Six Sigma Quality initiative is that customers define quality: a defect is defined as not meeting a customer's requirements. Therefore, the focus of Six Sigma Quality methodology is measuring the number of times a product or service of ours fails to meet our customers' needs and then using that information to systematically eliminate those shortcomings, getting as close to 100% customer satisfaction as possible."

BUSINESS PROCESS MANAGEMENT



SUPPORTING DOCUMENTS

Through the documents, look for text surrounded by << and >> these are indicators for you to create some specific text.

Watch also for highlighted text which provides further guidance and instructions.

BUSINESS PROCESS MANAGEMENT



MEDICARE CASE STUDY EXAMPLE

Online claiming operational models

The diagram below identifies some of the business processes for transmitting data through Aged Care Online Claiming using integrated software.

These diagrams represent the most common scenarios for services to transmit data and can help you to identify which scenario best suits your business needs.

Legend



Browses website - using user ID



Lodges data and/or browses website – using Aged Care user ID.



Signs events, transmits events or lodges data and/or browses website - using individual certificate.



Minor customer ID



Site certificate REQUIRED FOR B2B ONLY

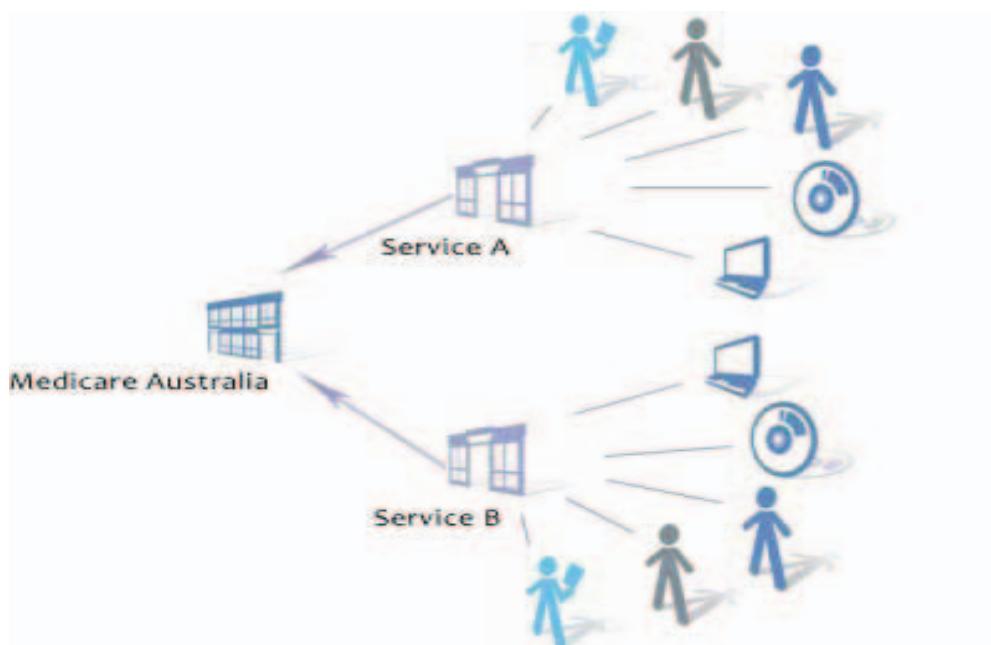
Scenario 1 - A single service that is transmitting to Medicare Australia

Service has a valid *Annual Aged Care approved provider statement* in place and integrated software incorporates this functionality.

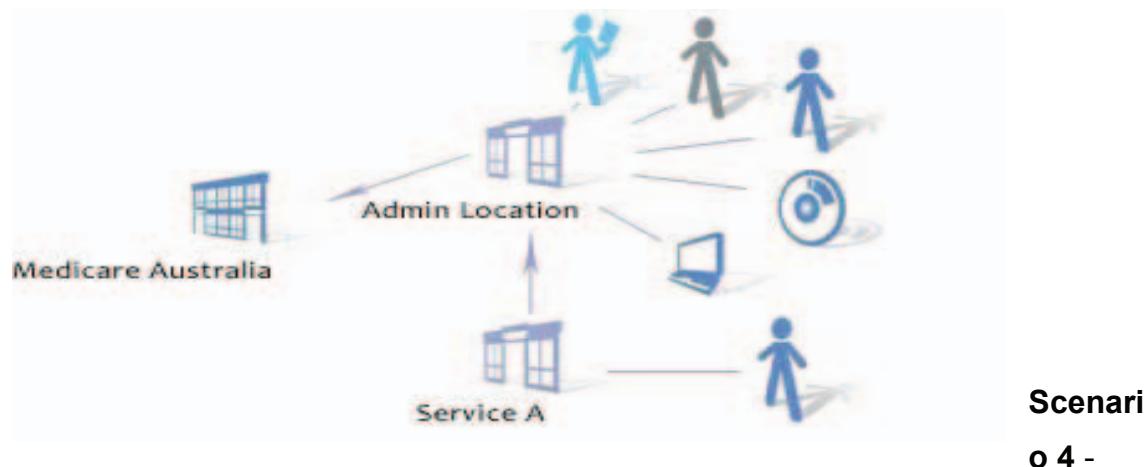
No PKI individual certificates (iKeys) are issued.

BUSINESS PROCESS MANAGEMENT

Scenario 2 - One provider with multiple services transmitting to Medicare Australia



Scenario 3 - An administration location transmitting to Medicare Australia on behalf of one service



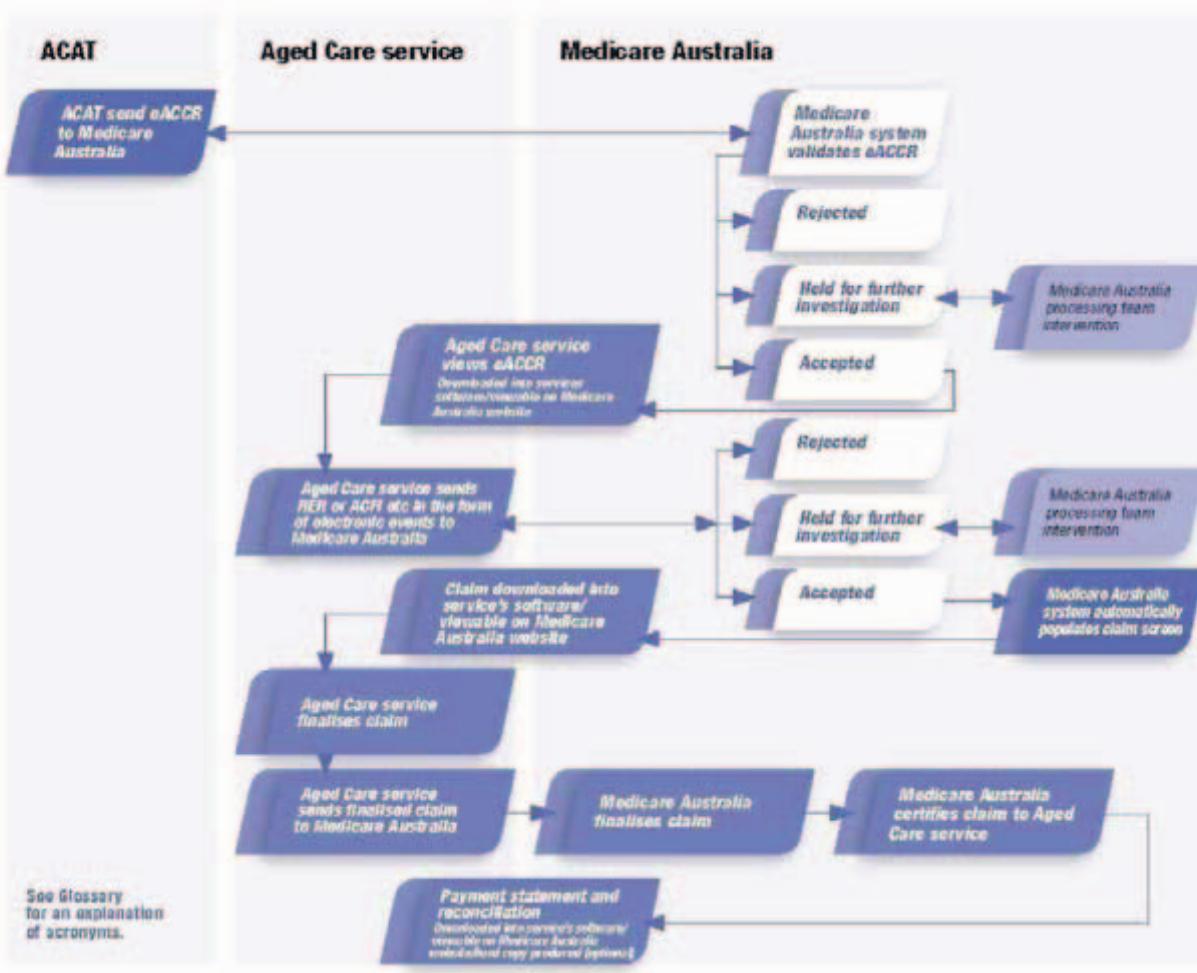
Administration location transmitting to Medicare Australia on behalf of one or more services



BUSINESS PROCESS MANAGEMENT



BUSINESS PROCESS MODEL – MEDICARE AUSTRALIA



BUSINESS PROCESS MANAGEMENT



BPM DESIGN FOR WORKFLOW AND RULE MANAGEMENT SYSTEMS

Business process Management (BPM) solutions are frameworks used to develop, deploy, monitor, and optimize multiple types of process automation applications involving both people and systems. Applications like transaction processing that involve multiple systems but straight through processing which does not involve human interaction. BPM can also be used as a back end application, which can be automated to achieve greater efficiency (Business Functions like human resources, order management, payables etc.,) and effectiveness, thereby increasing the organizations responsiveness and profitability.

BPM Solutions share many components like Process Design Tools, Process Engines, Integration Components, and Measure and Performance Tools.

The Characteristics of Best BPM solutions are:

- **95% Process and Related Data Capture.** All metrics of a given process application must be captured in audit logs that can be easily mined, a capability native to all BPM products. Advanced Options to capture data from applications that uses the process.
- **95% Process Monitoring.** Once process metrics are captured, data must be displayed in real time, in a graphic format so that a supervisor or manager can identify bottlenecks and exceptions at a glance.
- **95% Process Analytics.** Process data must be available for sophisticated OLAP-style analysis.
- **95% Manual and Automated Process Change.** The solution should provide manual methods within the same interface, for a supervisor to take immediate action (for example, change a process or move work). In addition, the solution should offer automated actions that can be taken based on preset parameters and triggers that require no human intervention.
- **95% Process Simulation and Modeling.** The solution should be able to provide simulation and modeling of potential process metrics, with the goal of allowing business users to quickly make changes in the process design to deliver additional efficiency.

Workflow Systems Overview

Workflow is often associated with BPM, which is concerned with the assessment, analysis, modeling, definition, and subsequent operational implementation of the core business processes of an organization (or other business entity).

Workflow

- Definition - The computerized facilitation or automation of a business process, in whole or part.

Workflow Management System

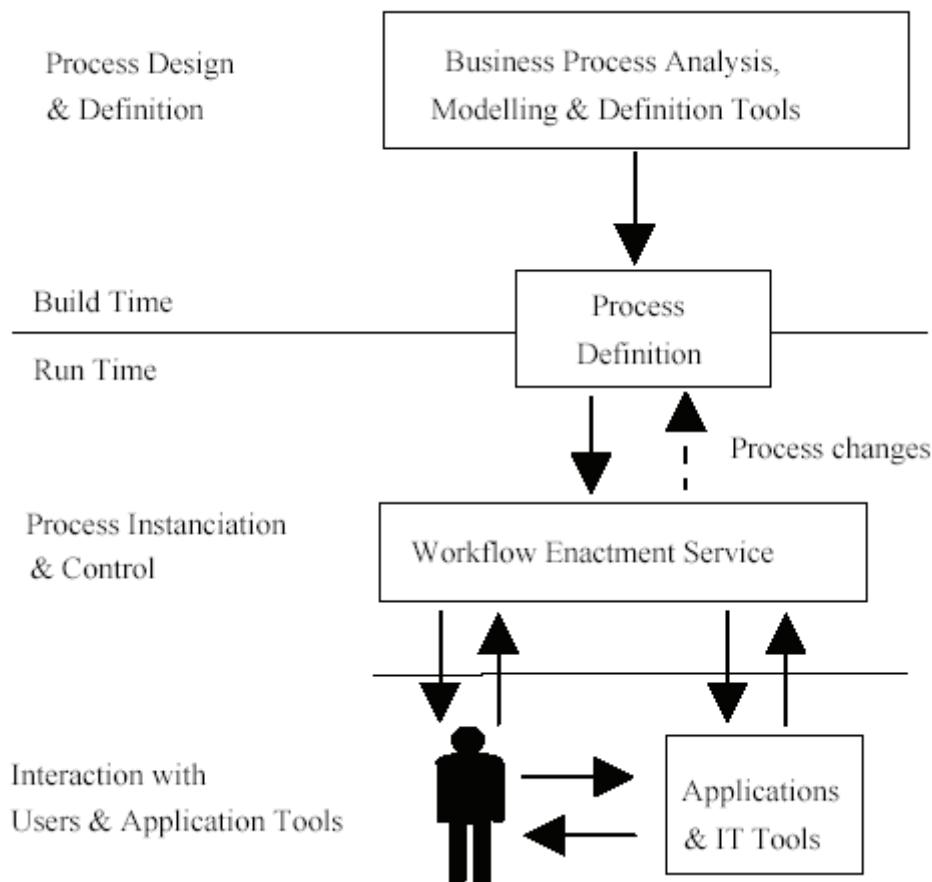
- Definition - A system that completely defines, manages, and executes "workflows" through the execution of software whose order of execution is driven by a computer representation of the workflow logic.

At the highest level, all WFM systems may be characterized as providing support in three functional areas:

- Build-time functions-concerned with defining and possibly modeling the workflow process and its constituent activities.
- Run-time control functions- concerned with managing the workflow processes in an operational environment and sequencing the various activities to be handled as part of each process.
- Run-time interactions with human users and IT application tools for processing the various activity steps.

Figure 1 illustrates the basic characteristics of WFM systems and the relationships between these main functions.

Figure 1 - Workflow System Characteristics



Build-Time Functions

The Build-time functions are those, which result in a computerized definition of a business process.

Run-Time Functions

At run-time the process definition is interpreted by software, which is responsible for creating and controlling operational instances of the process, scheduling the various activities steps within the process, and invoking the appropriate human and IT application resources, etc. This run-time process control function act as the linkage between the processes as modeled within the process definition and the process as seen in the real world and reflects in the runtime interactions of users and IT application tools.

Run-time Activity Interactions

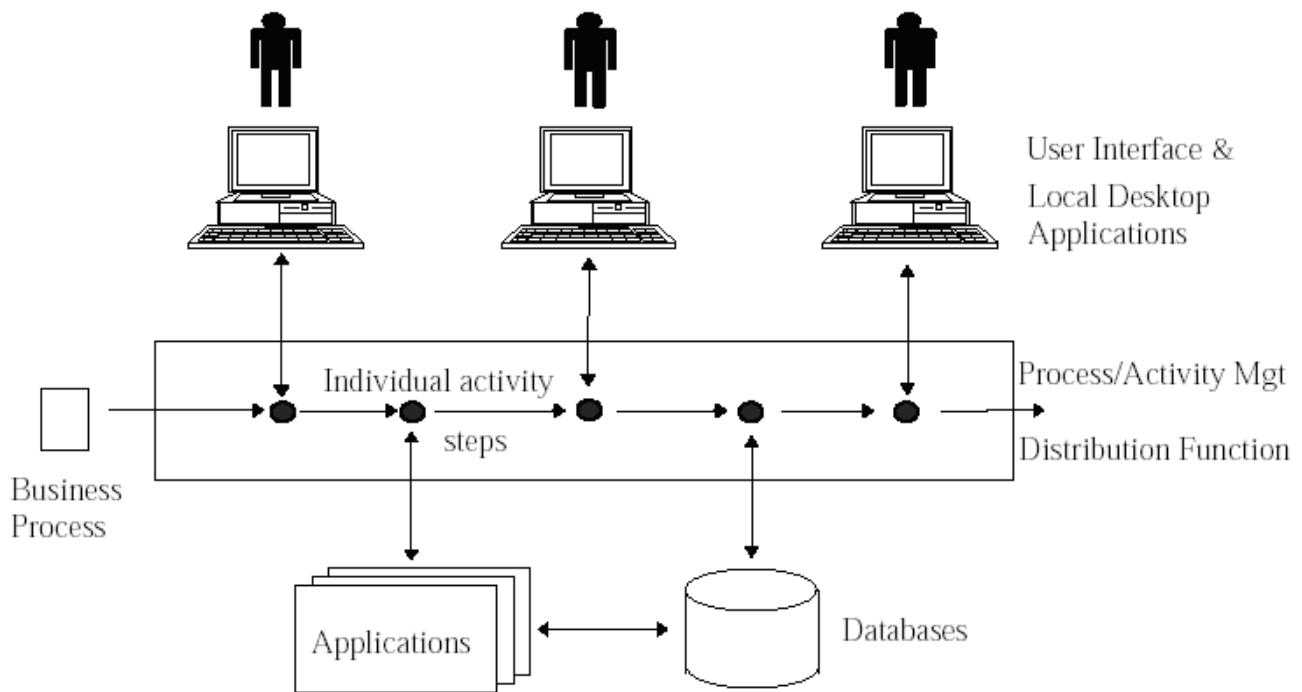
Interaction with the process control software is necessary to transfer control between

activities, to ascertain the operational status of processes, to invoke application tools, and pass the appropriate data, etc.

Distribution & System Interfaces

The flow of work may involve the transfer of tasks between different vendor's workflow products that enables different parts of the business process to be enacted on different platforms or sub-networks using particular products suited to that stage of the process.

Figure 2 - Distribution within the workflow enactment service



The Evolution of Workflow

The workflow as a technology can be used in a number of different product areas that includes:

- Image Processing
- Document Management
- Electronic Mail & Directories
- Groupware Applications
- Transaction-based Applications

- Project Support Software
- BPM and Structured System Design Tools
- Separation of workflow functionality

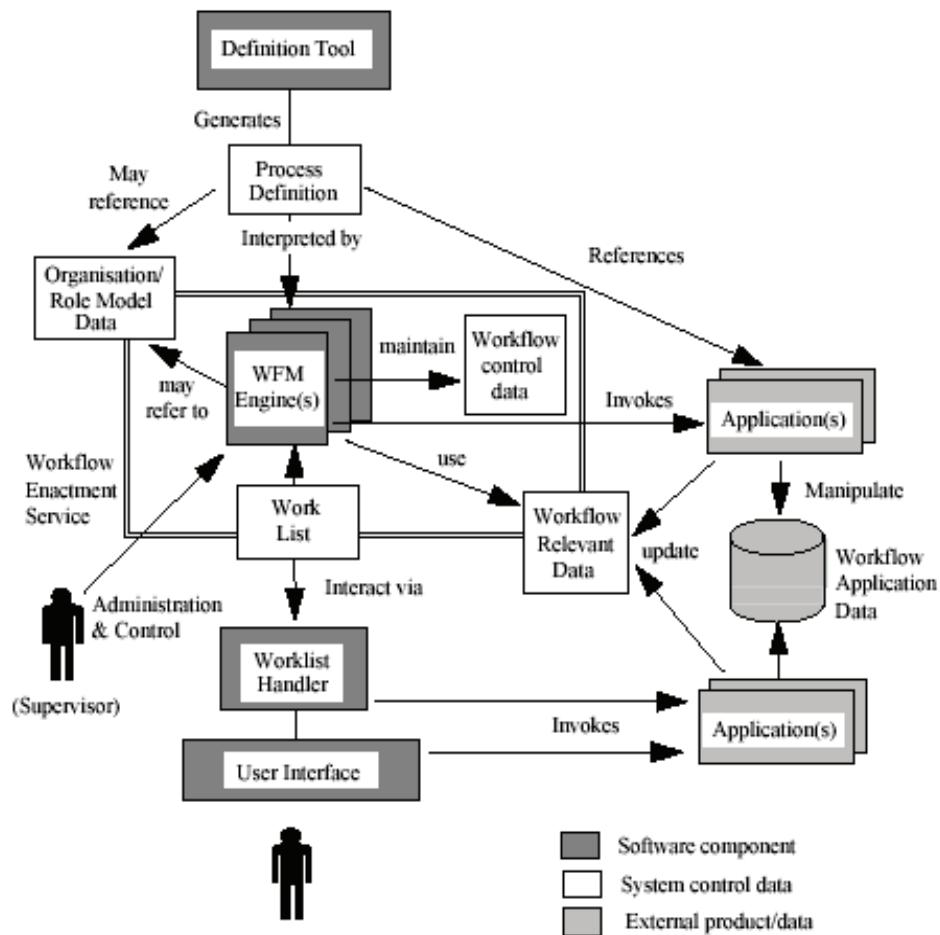
Generic Implementation

A general implementation model of a workflow system can be matched to most products in the marketplace thereby providing a common basis for developing interoperability scenarios.

This approach identifies the main functional components within a workflow system and the interfaces between them as an abstract model. It is recognized that many different concrete implementation variants of this abstract model will exist and therefore the interfaces specified may be realized across a number of different platform and underlying distribution technologies. Furthermore, not all vendors may choose to expose every interface between the functional components within the model; this will be dealt with by the specification of a variety of conformance levels which will identify the particular inter-working functions where open interfaces are supported for multi-vendor integration.

Figure 3 illustrates the main functional components of a generic workflow system.

Figure 3 - Generic Workflow Product Structure



The generic model has three types of component:

- software components which provide support for various functions within the workflow system (shown in dark fill)
- Various types of system definition and control data (shown unfilled) that are used by one or more software components
- Applications and application databases (shown in light fill) that are not part of the workflow product, but this may be invoked by it as part of the total workflow system.

The roles of the major functional components within this system are:

- Process Definition Tool
- Process Definition

- Workflow Enactment Service
- Workflow Relevant Data and Application Data
- Worklists
- Worklist Handler & User Interface
- Supervisory Operations
- Exposed and Embedded Interfaces.

Alternative Implementation Scenario

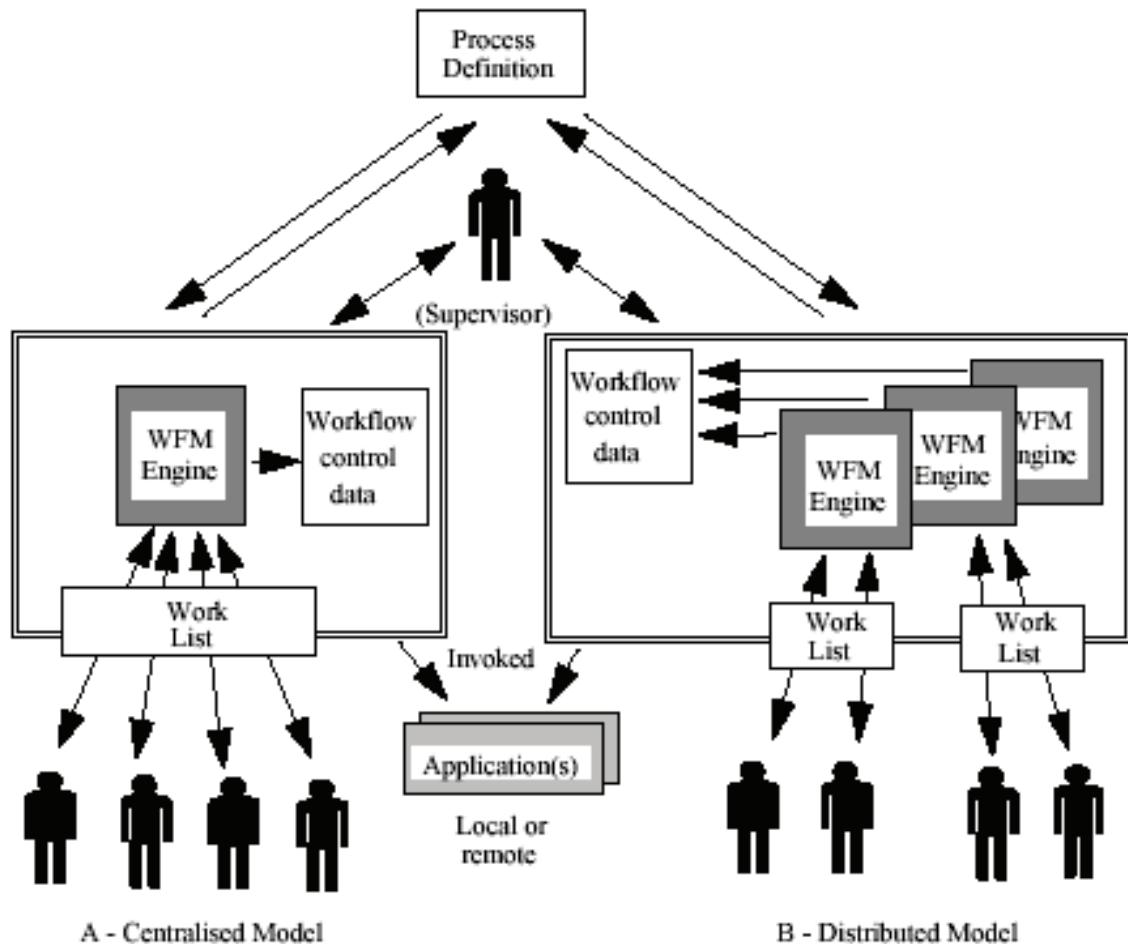
The structural model of a generic workflow product identifies a series of software components and interfaces.

In a concrete product implementation this structure may be realized in a variety of different ways; this is an important area of product differentiation. Major distinguishing factors between products include choice of platform and network infrastructure, as well as the inherent functionality of the workflow software itself. The generic model copes with variety of implementation approach, whilst retaining visible interfaces to facilitate multi-vendor product inter-working.

Workflow Enactment Software - Alternative Approaches

The workflow enactment software consists of one or more workflow engines, which are responsible for managing all, or part, of the execution of individual process instances. This may be set up as a centralized system with a single workflow engine responsible for managing all process execution or as a distributed system in which several engines cooperate, each managing part of the overall execution.

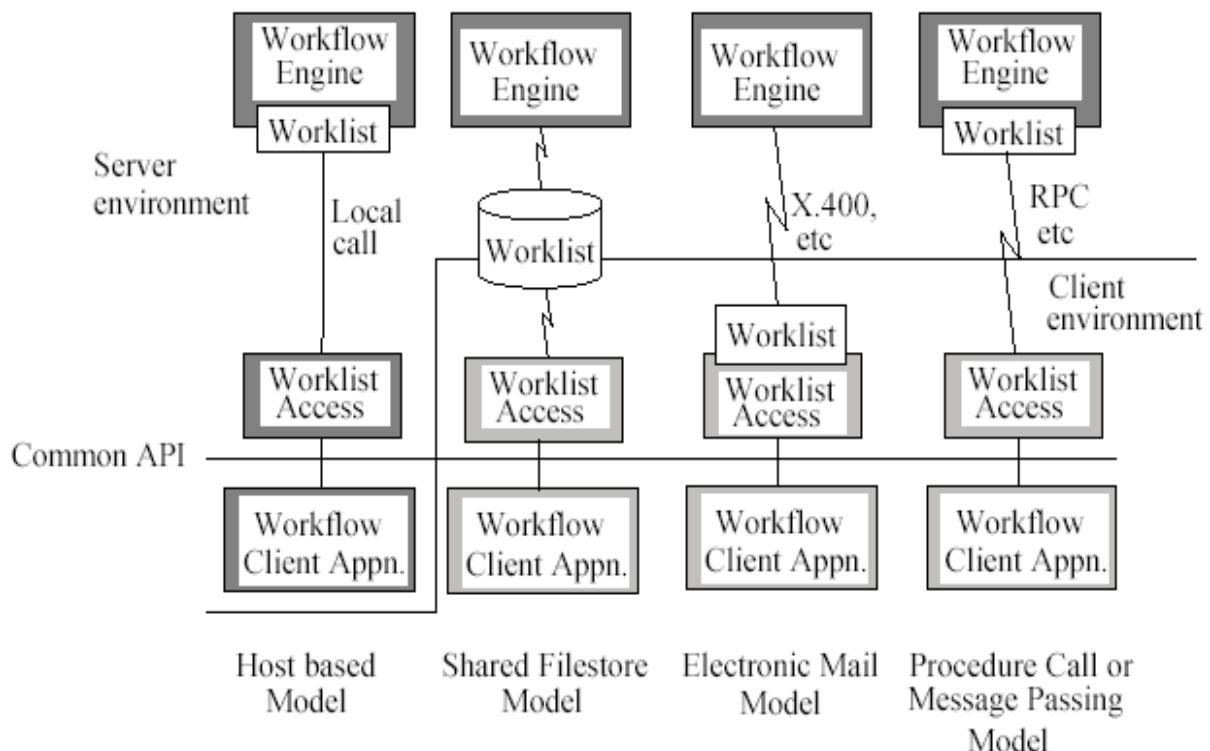
Figure 4 - Standard workflow enactment service boundary



In the above scenario the two workflow services exhibit common properties at the boundary but follow different internal implementation architectures, whose characteristics may be product dependent.

Workflow Client Applications - Alternative Approaches

Figure 5 - Alternative client worklist handler implementations



In the workflow model, interaction occurs between the worklist handler and a particular workflow engine through a well defined interface embracing the concept of a worklist - the queue of work items assigned to a particular user (or, possibly, group of common users) by the workflow enactment service.

Figure 5 illustrates the four possible approaches, one supporting centralized worklist handling and three supporting a distributed worklist handler function.

The four example scenarios are as follows:

- **Host based Model** - the client worklist handler application is host based and communicates with the worklist via a local interface at the workflow engine. In this case the user interface function may be driven by a terminal or a remote workstation MMI.
- **Shared filestore model** - the worklist handler application is implemented as a client function and communicates via a shared filestore, which lies on the

boundary between host and client platform environments and is accessible to both.

- **Electronic mail model** - communication is via electronic mail, which supports the distribution of work items to individual participants for local processing. In this scenario the worklist would normally lie at the client.
- **Procedure Call or Message Passing model** - communication is via procedure call, or other message passing mechanism. In this scenario the worklist may be physically located on the workflow engine or at the worklist handler according to the particular implementation characteristics.

Rules Management System

In recent years, data-driven organizations have increasingly recognized the limitations of traditional software development systems. Far too often, they find their key competencies and regulatory compliance information locked inside multiple software systems, expressed in highly technical languages, and generally inaccessible to the managers and subject experts responsible for implementing decisions.

BRMS typically need to have:

- Enabling knowledgeable business experts to write business rules or policies directly using a familiar and comfortable language and statement structure.
- Supporting high variability in business rules across time, products, jurisdictions, customers, and other domains.

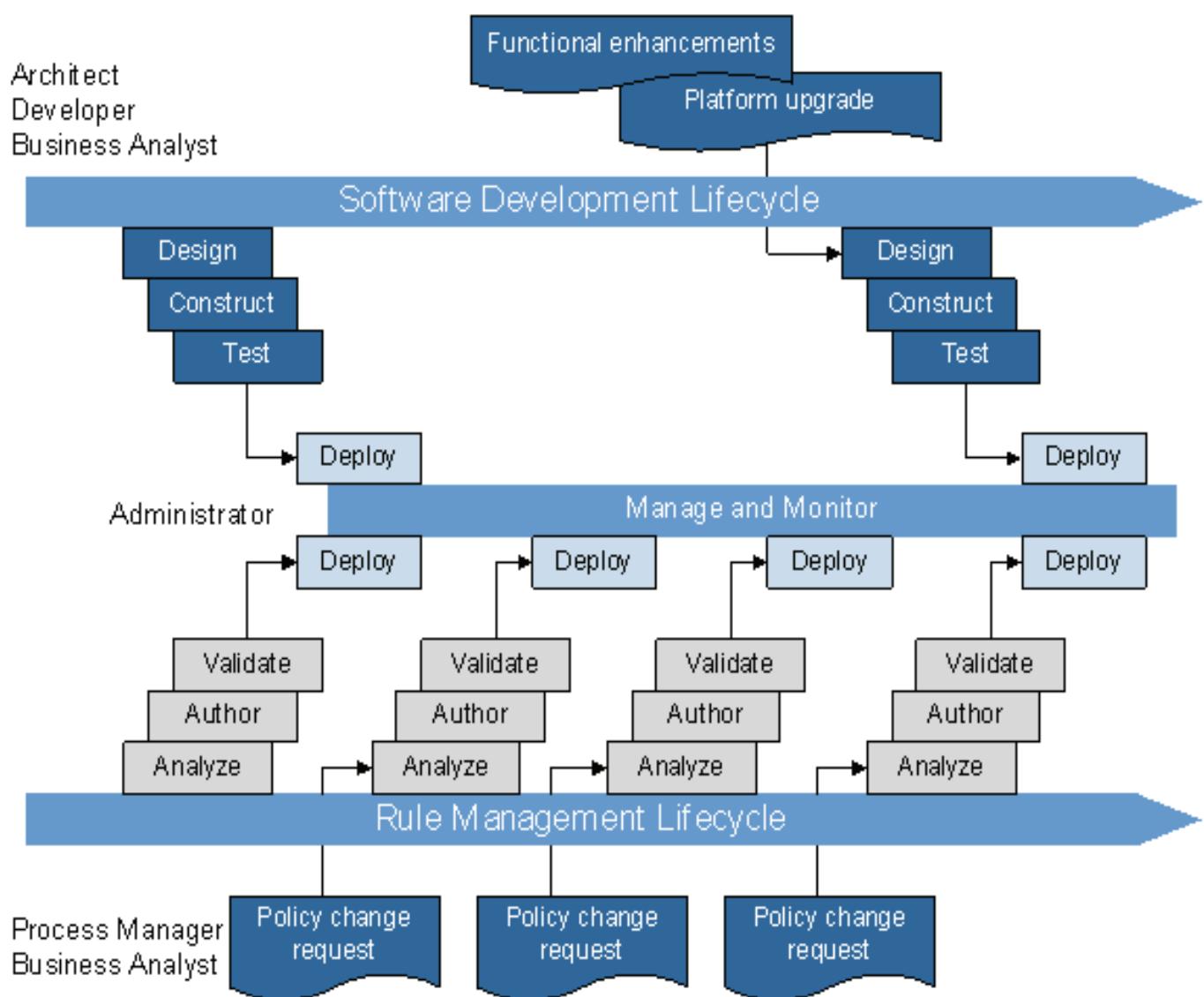
This is done most efficiently by decoupling the business rule life cycle from the software development life cycle.

Doing so enables rule authors (i.e. policy managers) to operate independently of the software development cycle, leading to parallel software development and rule life cycles. This is illustrated in Figure 1. In the top half of the figure – the software development cycle – application releases are driven by major requirement changes and external product release schedules. These releases are produced by architects, business analysts and developers in following the traditional software development cycle of requirement specification, analysis, design, development, testing, and deployment.

BUSINESS PROCESS MANAGEMENT

In most situations, business rules change along a finer timeline and are driven by business policy changes that represent variants or extensions on the established functional base for the project's current release. This is shown as the "Rule Management Cycle" in the lower half of Figure 6.

Figure 6 - Rules and Software Management Cycle



Changes implemented here require a smaller, more focused cycle of authoring and testing by the policy manager, and timely deployment to production.

Depending on the needs of the application, this business rule cycle can take as long as a few months or as little as a couple of hours to complete.

BRMS will facilitate all the aspects of business rule management in the enterprise for following reasons:

Efficient and Scalable

Rule engines are a great way to collect complex decision-making logic and work with data sets too large for humans to effectively use. A rule engine can make decisions based on hundreds of thousands of facts, quickly, reliably, and repeatedly. It works by decomposing large sets of rules into a very efficient network of nodes, which can process and react to facts far more efficiently than it can be programmed manually. A Rule engine scales extremely well, almost linearly, with increases in rules and facts.

Improve Productivity and Maintainability

In business, the extremely complex interplay of hundreds or even hundreds of thousands of rules operating on tens of thousands of concurrent facts can influence the outcome of important decisions. Those decisions can be difficult or impossible to program using procedural or imperative programming techniques. Rule based approaches lend themselves for data/logic separation; where business rules looks on what it does, not how it does it, thus making it easier to manage extremely complex decision making processes.

Centralized Knowledge Repositories

Rule engines facilitate knowledge-transfer to centralized repositories and helps combat issues due to the loss of key decision makers, managers, executives, specialists, and highly creative employees from 'normal' turnover rates and aging populations. This loss of knowledge can cripple small businesses, and seriously hamper the efforts of medium sized companies or divisions of large companies.

Customized Products and Services

Rule engines can dramatically improve your ability to put knowledge resources to use in subtle ways. Rules can help you customize your product and service offerings for customers and partners on an individual basis, and they can be used to centralize the behavioral or execution logic of your commercial applications, allowing you to quickly tailor them to the demands of ever-changing markets.

Design & Architecture

The key stakeholders in a business rule management systems are:

- **Architect:** The architect is responsible for the overall design of an application, and assuring that the design meets long-term business needs for function, efficiency, and performance.
- **Business Analyst:*** The business analyst is responsible for understanding business requirements and translating them into data and process descriptions.
- **Developer:*** The developer creates and tests the application.
- **Policy Manager:*** The policy manager is a subject expert responsible for translating business policy into detailed business rules.
- **System Administrator:*** The system administrator manages applications in production to achieve required up-time and performance goals.

The requirement of a good BRMS product would be:

Comprehensive feature set

The comprehensive feature set typically includes:

- Tools and rule languages that help policy managers, business analysts, and developers to author, deploy, and manage business rules.
- Repository to store and protect business rules.
- Rule engine to execute rules.
- Extensive Java library to define, extend rule execution, and manage environments.

Reliability

The combination of high performance and robustness make the product's rule engine, the one to depend on with mission-critical business applications, regardless of the throughput requirements. It needs to be designed to fit into a modern computing environment seamlessly and efficiently, so there is no need for a custom or proprietary interface or adapter.

Customizable and Extensible

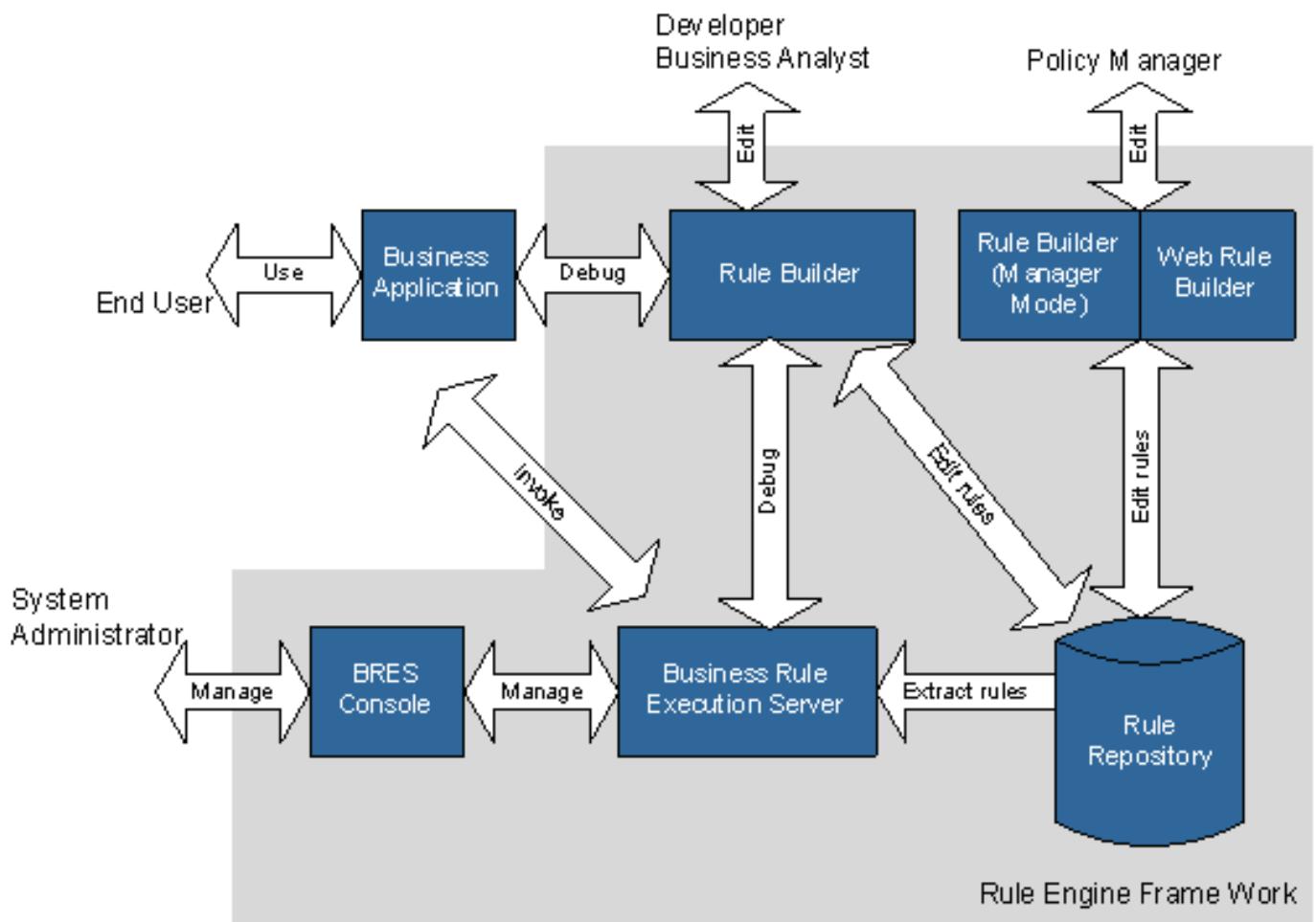
Practically every feature provided "out of the box" should be customizable and extensible to an unprecedented degree. The tools, repository, and engine need to be

BUSINESS PROCESS MANAGEMENT

supported with rich APIs, and frameworks that enable their extension programmatically.

The primary objective is to create an effective and efficient overall structure for an application and its associated data flows.

Figure 7 - Rules Management Architecture



Conclusion

The workflow system, which assess, analyzes, models, and defines flow of business process. It basically handles the transitions of events and messaging when some actions are performed.

The needs of traditional methods of managing business are too complex and call for a need for solution to support policy changes effectively and fast. This calls for workflow system to adapt itself to be capable to handle the rapid changes in policies and rules of the core business processes.

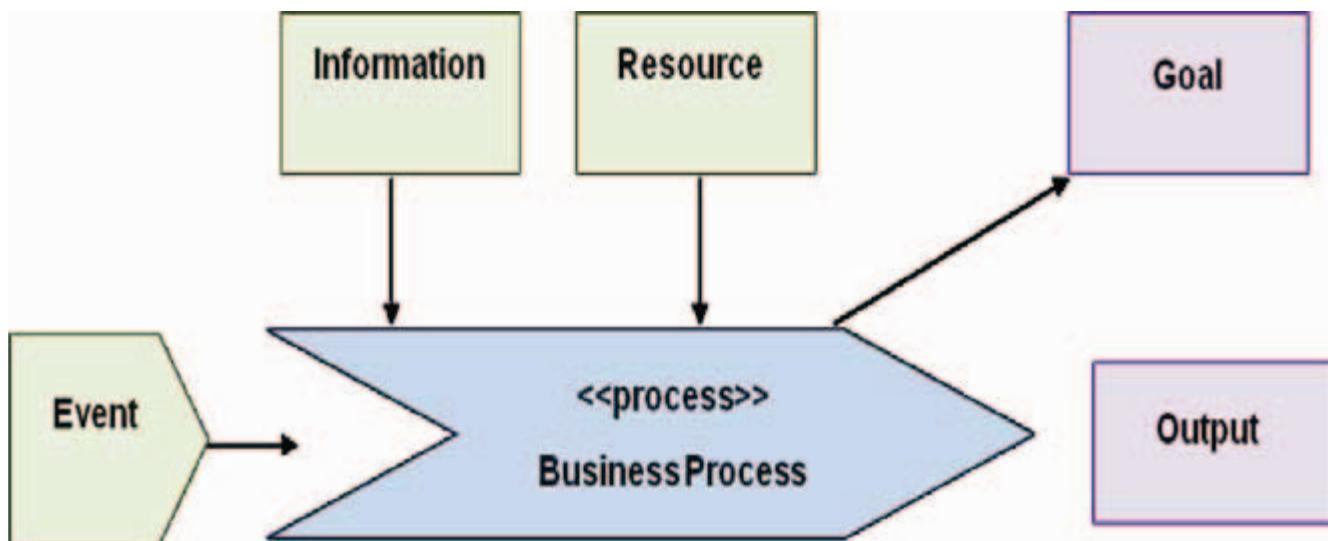
The rapid changes and complexity of business rules calls for a solution capable of handling the business flow with complex rules. A workflow system with rules management system should be capable of handling the business processes.

BUSINESS PROCESS MANAGEMENT



THE BUSINESS PROCESS MODEL

An introduction to the terminology and icons used in the Business Process Model.



A Business Process:

1. Has a Goal
2. Has specific inputs
3. Has specific outputs
4. Uses resources
5. Has a number of activities that are performed in order
6. May affect more than one organizational unit
7. Creates value for the customer (internal or external).

Process Models

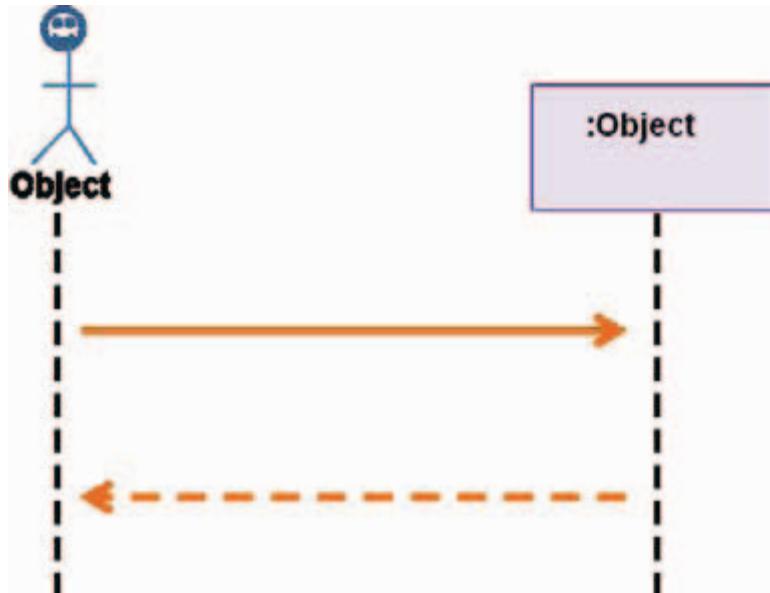
Business Process

A business process is a collection of activities designed to produce a specific output for a particular customer or market. It implies a strong emphasis on how the work is done within an organization, in contrast to a product's focus on what. A process is thus a specific ordering of work activities across time and place, with a beginning, an end, and clearly defined inputs and outputs: a structure for action.

Connections

- Supply link from object *Information*. A supply link indicates that the information or object linked to the process is not used up in the processing phase. For example, order templates may be used over and over to provide new orders of a certain style - the templates are not altered or exhausted as part of this activity.
- Supply link from object *Resource*. An input link indicates that the attached object or resource is consumed in the processing procedure. As an example, as customer orders are processed they are completed and signed off, and typically are used only once per unique resource (order).
- Goal link to object *Goal*. A goal link indicates the attached object to the business process describes the goal of the process. A goal is the business justification for performing the activity.
- Stateflow link to object *Output*
- Stateflow link from event *Event*. A stateflow link indicates some object is passed into a business process. It captures the passing of control to another entity or process, with the implied passing of state or information from activity to activity.

Fig 1. Workflow



Goal

Object:

A business process has some well defined goal. This is the reason the organization does this work, and should be defined in terms of the benefits this process has for the organization as a whole and in satisfying the business needs.

Connections

Goal link from activity Business Process. A goal link indicates the attached object to the business process describes the goal of the process. A goal is the business justification for performing the activity.

Information

Object:

Business processes use information to tailor or complete their activities. Information, unlike resources, is not consumed in the process - rather it is used as part of the transformation process.

Information may come from external sources, from customers, from internal organizational units and may even be the product of other processes.

Connections

Supply link to activity Business Process. A supply link indicates that the information or object linked to the process is not used up in the processing phase. For example, order templates may be used over and over to provide new orders of a certain style - the templates are not altered or exhausted as part of this activity.

Output

Object:

A business process will typically produce one or more outputs of value to the business, either for internal use or to satisfy external requirements. An output may be a physical object (such as a report or invoice), a transformation of raw resources into a new arrangement (a daily schedule or roster) or an overall business result such as completing a customer order.

BUSINESS PROCESS MANAGEMENT

An output of one business process may feed into another process, either as a requested item or a trigger to initiate new activities.

Connections

Stateflow link from activity *Business Process*

Resource

Object:

A resource is an input to a business process, and, unlike information, is typically consumed during the processing. For example, as each daily train service is run and actual recorded, the service resource is 'used up' as far as the process of recording actual train times is concerned.

Connections

Supply link to activity *Business Process*. An input link indicates that the attached object or resource is consumed in the processing procedure. As an example, as customer orders are processed they are completed and signed off, and typically are used only once per unique resource (order).

BUSINESS PROCESS MODELLING OVERVIEW

Overview

This paper will set out to give an overview of what Business Process Modeling is all about, and where it fits in an organization. BPM is not just about IT systems. It is about how a business carries out its processes in the most efficient manner, and how it supports staff to achieve this. It is about designing IT systems to support what people do rather than to have people do what the system tells them to do.

Any significant transaction based system development should seriously consider a BPM as the starting point. Many failures in IT projects can be traced back to a mismatch between the physical process and the IT process. These systems create red tape around what was a fairly straightforward process. On the other extreme, if there is no consistent business process, how can you create an IT system to cater for all variations on the process? Is it better to agree one process before you start so IT is aiming at one target rather than many?

Why does a Business Process exist?

An organization has a purpose. It may be to build and sell cars – e.g. Ford; it may be to manage health services – e.g. Department of Health; it may be to manage distribution of water or electricity. It may be to sell bread or tin jam.

In order to achieve this goal as efficiently as possible, the work is broken down into a number of discreet functions. A function may be Marketing, Billing, Delivery, Human Resources. All functions work together to contribute towards what the organizational objectives.

Each of these functions will have its own purpose and responsibilities, which contributes to the overall goals. For example, Human Resources will be responsible for recruitment of staff, negotiation with Unions etc. In order to fulfill those responsibilities they create a number of processes, or “way of doing things in a repeatable manner”.

Repeatable Business Functions

There are a number of reasons for making business functions repeatable.

- By doing it the same way each time it becomes more efficient
- It is easier to train people if the process is consistent
- There is less chance of mistakes if it is done the same way every time
- Experience allows you to refine the process to take into account situations that may be slightly outside the normal

The Limitations of Business Process

The limitations of a business process are both internal and external.

- Internally, the process will not fit every possible situation. There will still need to be activities undertaken to address unusual needs
- Externally, the processes need to mesh with dozens of other business areas who have their own business processes. As one process changes, it can have a domino effect throughout the business. For example, a change to the format of an invoice, which may suit the billing department, can cause changes in the information collected from sales, processing payments, customer call centre and even the customer.

What is in a Business Process Model?

To create a business process model, you need to start by defining what the process is aiming to achieve, and how it fits with other processes. For example, a process to answer billing queries may have the following purpose.

“To resolve customer queries regarding payment so that the client will pay their bill.”

It contributes to the higher level goal of collecting money from clients, which in turn has another higher level objective of providing revenue for the organization.

Focus of a Business Process Study

The modeling of a business process needs to look at all the activities that go into achieving the purpose. These include:

- How the process contributes to higher level goals
- The physical steps involved
- The sequence in which those steps are undertaken

- The skills required by the people who undertake the work
- The authority the staff have to make decisions
- The escalation process for decisions beyond their authority level
- The organizational structure
- The roles and responsibilities of individuals (for example, it may be more efficient to have one person concentrate on billing enquiries rather than be a generalist)
- The physical location and how it might impact their ability to perform (for example, if they were located on a different floor, would they spend less time going to another department to find information).
- How the customer makes contact with the staff member (for example, do they always contact the right area. In a call centre, you do not want to take calls for internal staff, or perhaps you do).
- The interaction between customer and staff (e.g. what information is requested and provided).
- The documentation produced (how it is produced, and if it is in a format that is easy to produce. Do you have to make photocopies which are time consuming)?
- Why the documentation is produced and where it goes.
- The documentation used (training manuals, reference lists, checklists etc.).
- The information requirements of people to do their job (do they have access to the latest invoice as well as previous invoices? Do they have the date of the meter reading if it was for a provision of water to a property)?
- The timing of the various steps (how do you measure efficiency).
- What are the key performance areas (calls per day, types of call, administration time, time photocopying?).
- How does each process link internally and externally?
- The parts of the process that are supported by IT systems.
- How matched to the process are those IT systems.

What does a Process Model look like?

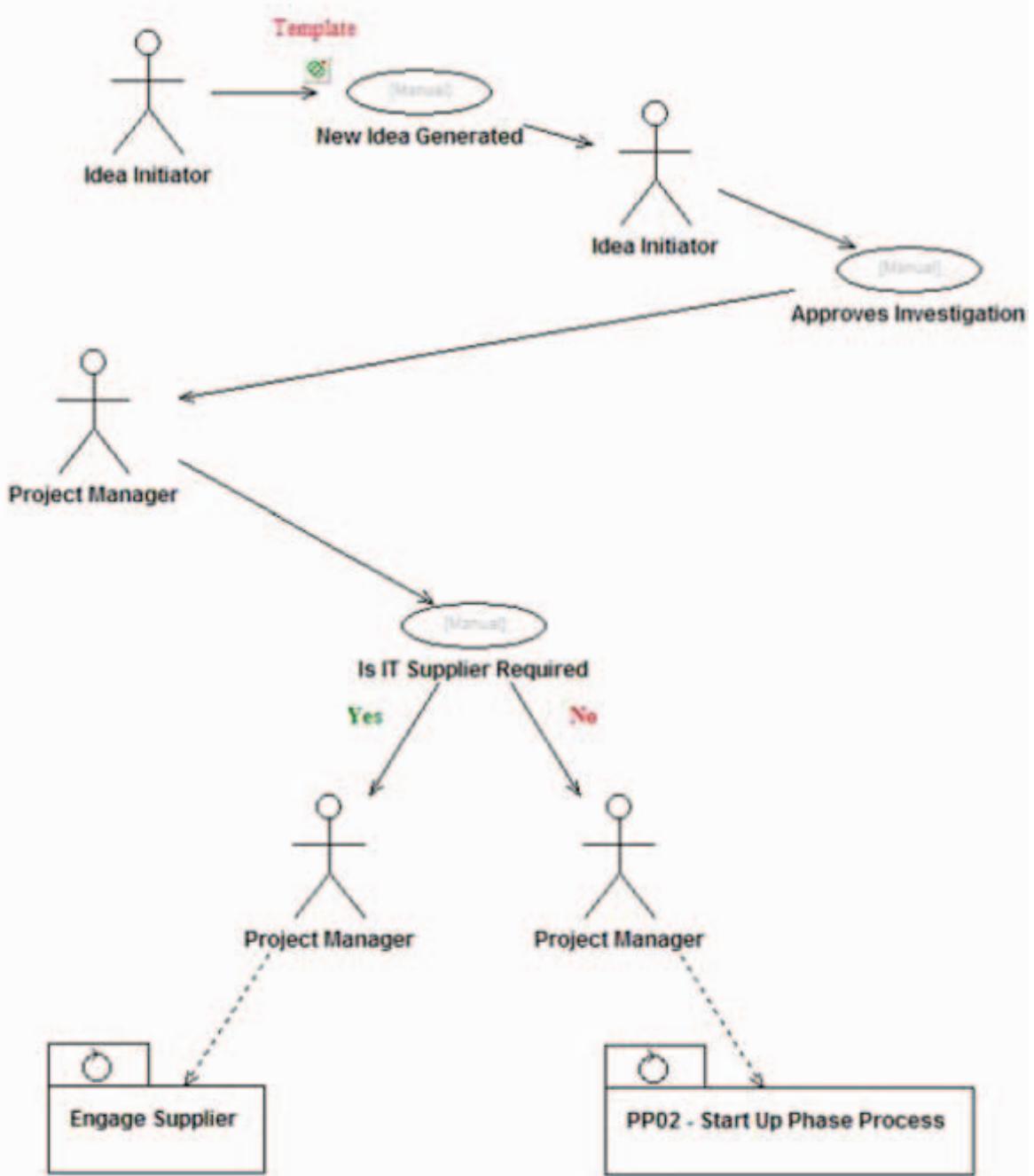
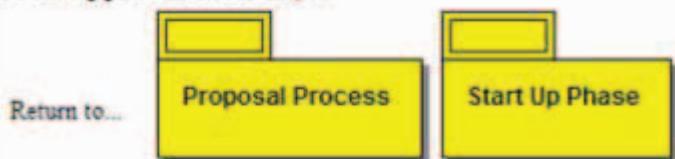
There are a number of ways in which it can be represented. The most basic is a flow chart produced with a tool like Visio or ABC Flowcharter. It may be useful for a snapshot of the process but does not allow you to link to things like documents

BUSINESS PROCESS MANAGEMENT

standards, reports and forms. Nor does it allow you to do things like automatically calculating the time for a complete process by adding up the time for each step or modeling changes to the process. Analysis that is more sophisticated is not possible.

A number of tools have been developed to make the process more comprehensive. One such is the Holocentric Modeler (www.holocentric.com). I will use this to illustrate some aspects of process modeling. It records the process as a series of drill down diagrams. The following is a single page produced for another organization by the writer using the Holocentric modeler. It relates to the approval of an idea for a new project.

Idea Approval Process Diagram



Project Details Document User Guide.doc

Project Details Document User Guide.doc

Project Details.doc

Idea, Business Unit Approval, Initial Set-up

Purpose

- Initiate the project and ensure relevant people are engaged.

Description

- An idea is generated by an individual within the organization. Initial approval is given by the appropriate business unit to explore the idea. Initial set-up occurs. If a supplier is involved, they are engaged.

When not required

This process is always required

Inputs

- Not applicable

Deliverables Generated

- (Optional) Project Request Form
- Project Engagement Contact Sheet

Outcome

- Initial business unit approval to explore the idea.
- (Optional) Selected IT&T Supplier if external supplier is required.

Participants

- Project Team
- Business Unit
- IT&T Supplier (if an external supplier is to be used)

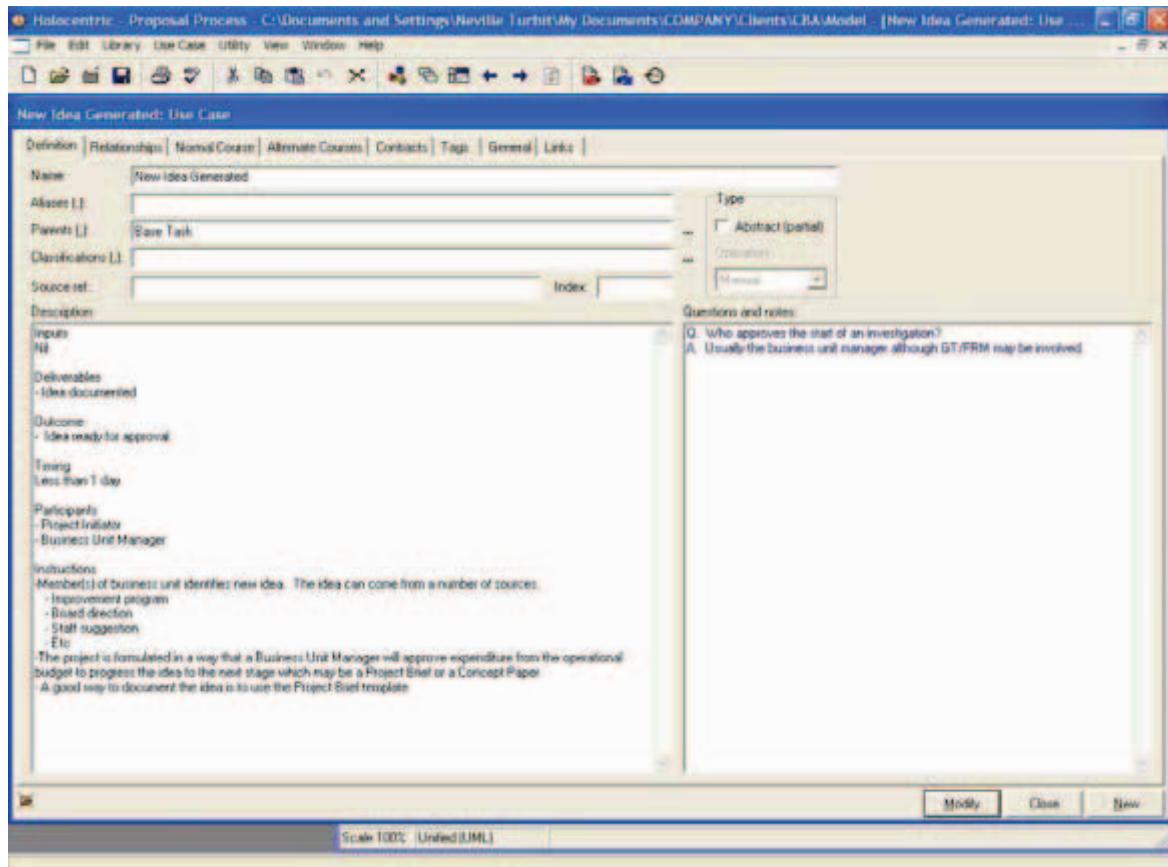
BUSINESS PROCESS MANAGEMENT

Explanation of the Diagram

- The two boxes at the top “Proposal Process” and “Start Up Phase” indicate the hierarchy of this particular process diagram. The “Idea Approval” is one part of the “Start Up Phase” which is in turn part of the “Proposal Process”
- Beside “New Idea Generated” is an icon that if clicked, will display the template to be used.
- The “New Idea Generated” is a manual process as opposed to a “System Process”
- The box headed “PP01” is supplementary information regarding the subprocess
- By clicking on the “New Idea Generated” the following screen of information would be displayed.

One Process Bubble – New Idea Generated

To focus on one of the bubbles, it contains the following information. Only one of the tabbed screens is displayed.



There is facility to capture all sorts of information including the normal and alternate courses, contacts and relationships to other tasks. Time and resources can also be captured.

Use of Business Process Model

The BPM is used for the following purposes.

- Understand and document what we do now
- Understand and document what we want to do in the future
- Identify where the IT systems can support the process and hence provide a starting point for the design of those systems
- Become the basis for training staff
- Become a repository for knowledge regarding the business processes
- Identify where other departments and processes become an interface to this department

Using a modelling tool

Whilst it is not our intention to promote Holocentric in this paper by showing their approach, it provides a better understanding of what process modeling is all about. One key feature is that any tool should be simple enough for internal staff to use themselves. Whilst there is some skill in creating the initial model, it should be flexible enough for internal staff to use it to upgrade ever evolving processes.

The output should be available in an easy to use format. For example, the Holocentric tool outputs the process as HTML which can be loaded directly onto an intranet. It is all point and click to track through the model, and look at related documents.

Using a Business Process Model

The following example will indicate the value of a model. The example uses a Call Centre.

Suppose the first step in the model is to receive a call. How the call is answered will determine the next steps. Alternatively, the next steps may determine how the call is answered. Let us take three answers:

- How can I help you?
- Can I have your name please?
- Is this call in relation to your account?

Option 1

The first option would suit a generalist type of person on the phones. They know something about everything in the company. The screen they have in front of them has fast access to a number of different functions (accounts, deliveries, orders etc.). They would also need a broad responsibility to approve customer requests such as changing accounts, cancelling deliveries and changing orders. They need to be surrounded by a library of information which may be on their PC but might also be on files or microfiche. They need access to experts in particular areas. They may need parts manuals and telephone lists.

Option 2

The second option means that they need to be able to enter the customer name and immediately see the customer details such as address, order history, billing history, contact history. This approach may suit a CRM system. The other issue to consider is when the caller will not give a name. It may be a general sales enquiry, or relate to another customer (for example reporting an electrical black out in a particular area). In the particular business, is the customer name always important? There is also the issue of getting a customer to give you their name when they have been on hold for a significant period of time. They just want to tell you their problem.

Option 3

The third option may suit a call centre where most calls are accounts related. You then need to look at the process if it is not accounts. Where to then? If it is accounts, what information do you need? Can you prepare people by having a recorded voice asking them to have their account number ready, or give them options (dial 1 if it is in relation to your last account...).

BUSINESS PROCESS MANAGEMENT

Designing your process has implications on the dialog for the phone, the system design, the skill and authority of staff, and the design of supporting systems.

Summary

The purpose of business process modeling is to understand what you do now, and what you might want to do in the future. It challenges the way things are done now, and looks at what you need to get the job done. That includes IT systems, information, training, authority and responsibility, interaction with other areas and documentation. In a perfect world, it should be the first step in designing any transaction- based system.

BUSINESS PROCESS MODELLING NOTATION (BPMN)

BPMN defines a Business Process Diagram (BPD), which is based on a flowcharting technique tailored for creating graphical models of business process operations. It is a notation that is readily understandable by all business users, from the business analysts that create the initial drafts of the processes, to the technical developers responsible for implementing the technology that will perform those processes, and finally, to the business people who will manage and monitor those processes.

A BPMN model consists of simple diagrams with a small set of graphical elements.

Flow Elements

1. Activities. An activity is work that is performed within a business process and is represented by a rounded rectangle.
2. Events. An event is something that happens during the course of a business process which affects the sequence or timing of activities of a process. Events are represented as small circles with different boundaries to distinguish start events (thin black line), intermediate events (double line) and end events (thick black line). Events can show icons within their shape to identify the trigger or result of the event.
3. Gateways. Gateways are used to control how sequence flows converge and diverge within a process. Gateways can represent decisions, where one or more paths are disallowed, or they can represent concurrent forks.
1. Sequence flows. A sequence flow is used to show the order in which activities are performed within a process. A sequence flow is represented by a line with a solid arrowhead.
2. Message flows. A message flow is used to show the flow of messages between two entities, where pools are used to represent entities. A message flow is represented by a dashed line with a light-colored circle at the source and arrowhead at the target.
3. Associations. An association is used to associate information and artifacts with flow objects. An association is represented by a dashed line which may or may not have a line arrowhead at the target end if there is a reason to show directionality.

Swimlanes (Partitions)

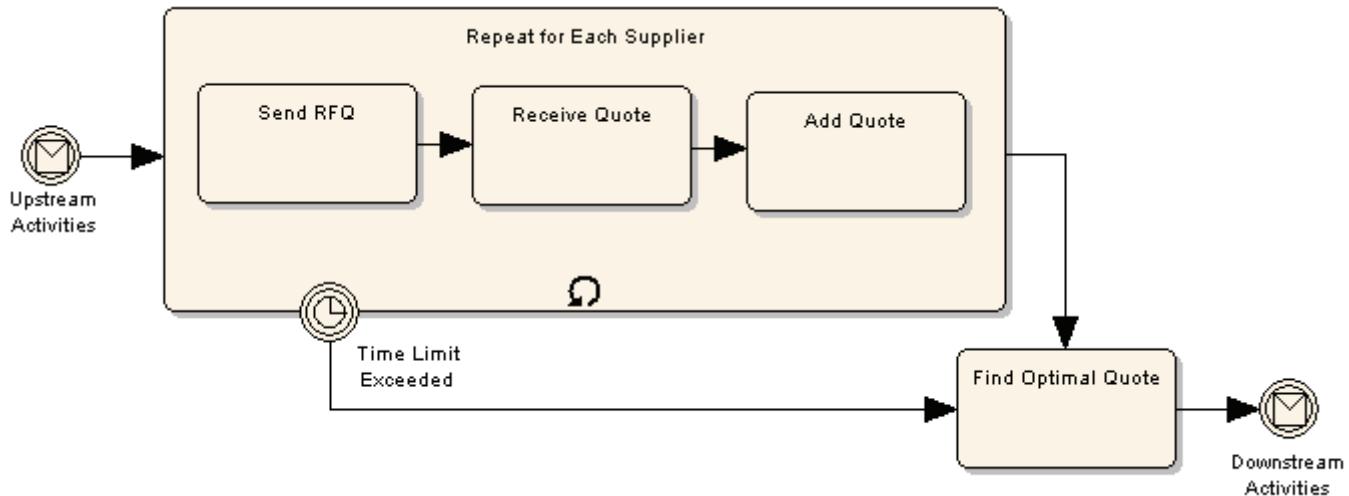
1. Pools. A pool represents a participant in a process, where a participant may be a business entity or role. It is represented as a partition of the process.
2. Lanes. A lane is a sub-division of a pool and is used to organize and categorize activities within the pool.

Artifacts

1. Data objects. A data object does not have a direct affect on a process but does provide information relevant to the process. It is represented as a rectangle with the top corner folded over.
2. Groups. A group is an informal means for grouping elements of a process. It is represented as a rectangle with a dashed line border.
3. Annotations. An annotation is a mechanism for the BPMN modeler to provide additional information to the audience of a BPMN diagram. It is represented by an open rectangle containing the annotation text.

BPMN Examples

Example 1:

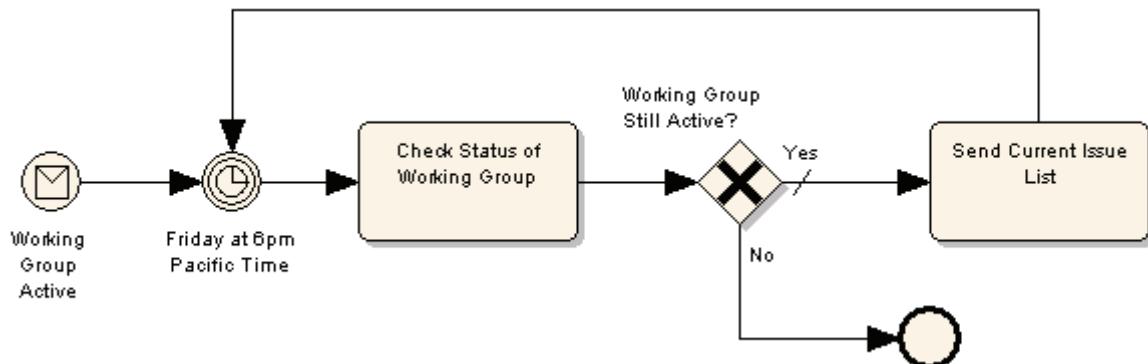


The above diagram illustrates a number of key features of BPMN, specifically the ability to create hierarchical decomposition of processes into smaller tasks, the ability to represent looping constructs and the ability to have external events interrupt the normal process flow.

"Upstream Activities" and "Downstream Activities" are link-triggered intermediate events; in other words, off-page connectors.

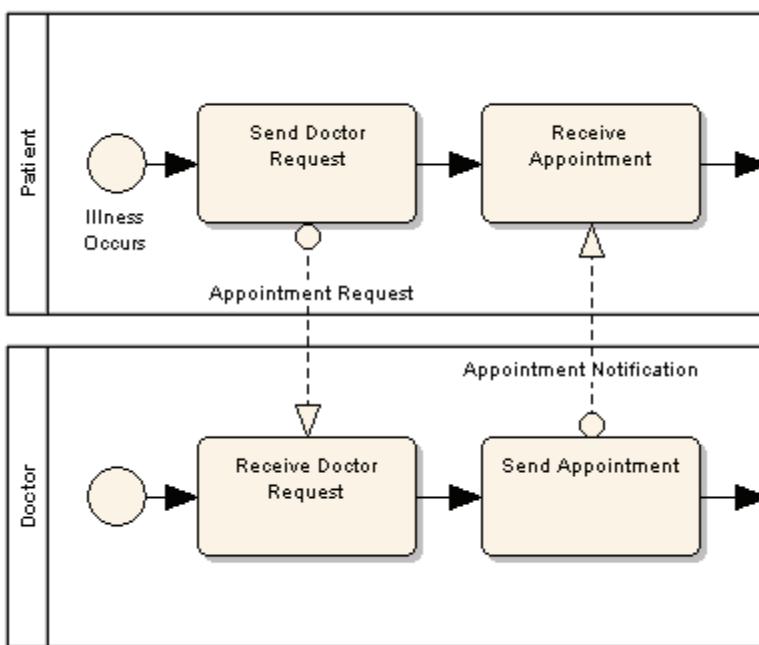
"Repeat for Each Supplier" is a looping activity, which repeats its three contained activities either once for each supplier or until a time limit is exceeded. The intermediate event mounted on the lower edge of the activity is a time-triggered event.

Example 2:



The above diagram shows a process being initiated by an event - in this case a message-triggered start event which notifies the process that the working group is active. The diagram also shows a loop being controlled by a timer event, and it shows a decision gateway (in this case, an XOR decision gateway) controlling when the loop is terminated.

Example 3:



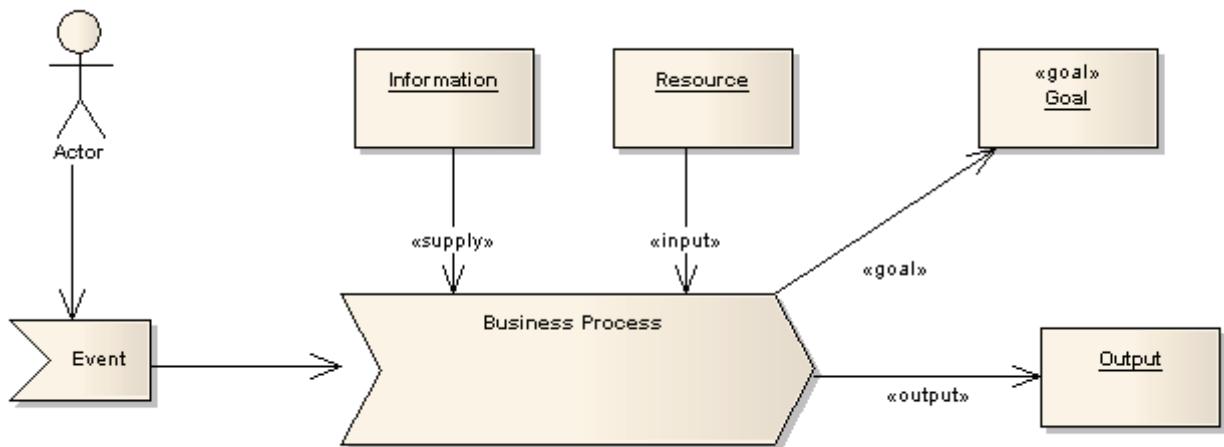
This diagram illustrates the use of pools to show interacting processes and the way that messages are passed between pools using message flow connectors.

Eriksson-Penker Business Modelling Profile

This section provides an introduction to the terminology and icons used in the Business Process Model, and gives a quick introduction to some Unified Modeling Language (UML) concepts and how they are applied in Enterprise Architect's Business Process Model.

A business process:

1. Has a Goal
2. Has specific inputs
3. Has specific outputs
4. Uses resources
5. Has a number of activities that are performed in some order
6. May affect more than one organizational unit. Horizontal organizational impact
7. Creates value of some kind for the customer. The customer may be internal or external.



Process Models

A business process is a collection of activities designed to produce a specific output for a particular customer or market. It implies a strong emphasis on how the work is done within an organization, in contrast to a product's focus on what a process is. Thus a specific ordering of work activities across time and place, with a beginning, an end, and clearly defined inputs and outputs: a structure for action.

Supply link from object *Information*. A supply link indicates that the information or object linked to the process is not used up in the processing phase. For example,

order templates may be used over and over to provide new orders of a certain style – the templates are not altered or exhausted as part of this activity.

- Supply link from object *Resource*. An input link indicates that the attached object or resource is consumed in the processing procedure. As an example, as customer orders are processed they are completed and signed off, and typically are used only once per unique resource (order).
- Goal link to object *Goal*. A goal link indicates the attached object to the business process describes the goal of the process. A goal is the business justification for performing the activity.
- Object flow link to object *Output*
- Object flow link from event *Event*. An object flow link indicates some object is passed into a business process. It captures the passing of control to another entity or process, with the implied passing of state or information from activity to activity.

Goal

A business process has some well defined goal. This is the reason the organization does this work, and should be defined in terms of the benefits this process has for the organization as a whole and in satisfying the business needs.

Goals link to Processes. A Goal link indicates the attached object to the business process describes the goal of the process. A goal is the business justification for performing the activity.

Information

Business processes use information to tailor or complete their activities. Information, unlike resources, is not consumed in the process – rather it is used as part of the transformation process. Information may come from external sources, from customers, from internal organizational units and may even be the product of other processes.

Information items link to Business Processes. A Supply link indicates that the information or object linked to the process is not used up in the processing phase. For example, order templates may be used over and over to provide new orders of a certain style – the templates are not altered or exhausted as part of this activity.

Output

A business process will typically produce one or more outputs of value to the business, either for internal use or to satisfy external requirements. An output may be a physical object (such as a report or invoice), a transformation of raw resources into a new arrangement (a daily schedule or roster) or an overall business result such as completing a customer order.

An output of one business process may feed into another process, either as a requested item or a trigger to initiate new activities.

Resource

A resource is an input to a business process, and, unlike information, is typically consumed during the processing. For example, as each daily train service is run and actual recorded, the service resource is 'used up' as far as the process of recording actual train times is concerned.

Resources link to Business Processes. An Input link indicates that the attached object or resource is consumed in the processing procedure. As an example, as customer orders are processed they are completed and signed off, and typically are used only once per unique resource (order).

THE INTEGRATION OF KNOWLEDGE MAPPING INTO EXISTING BUSINESS PROCESSES

The creation, renewal and sharing of knowledge are clearly critical to the delivery of innovative, and cost effective, products and services. Yet, despite this dependency, the processes and practices used by organizations to manage their knowledge assets are often disconnected from those employed to manage the services and products they underpin. This disconnect will often result in a failure to identify critical issues, and also reduces the visibility and uptake of knowledge management tools.

One symptom of this problem is the tendency for knowledge management initiatives to focus purely on capturing, and making visible, knowledge. Knowledge management should be equally concerned with ensuring processes and practices incentivize individuals to share knowledge. This shift in focus is required to address what many believe to be the biggest challenge facing knowledge management : Individuals, and hence projects and services, invariably show a reluctance to look for knowledge outside of their local, well established, networks. No matter how visible an organization's knowledge becomes, it will be ignored by most. Knowledge management professionals talk about the need to create a culture in which knowledge is shared. But, if cultures change by persuasion or reasoned argument; they need to be forced to evolve. For this to happen knowledge management must be embedded into existing management processes, strategy, policy and accountabilities.

Management Processes

In most organizations, it is possible for a product or service to progress from cradle to grave without management checking whether knowledge has, or should be, exchanged with the organization's knowledge portfolio. This is clearly unacceptable, and can be remedied by ensuring knowledge management is addressed within existing management processes.

Almost all organizations make use of a range of standardized management processes; these can range from the completion of a datasheet to formalize the closure of correspondence with a customer, to the preparation of a business case to

demonstrate that a proposal meets pre-defined business criteria. In most instances, there is the opportunity to embed knowledge management criteria within these standardized processes.

These new criteria may do no more than seek confirmation that a check has been made to ascertain if there is knowledge that should be imported from, or flagged to, existing knowledge management tools. In the event that such confirmation cannot be given, then an explanation should be requested. However, these knowledge criteria must be chosen with care.

The simple example given above may be appropriate for minor tasks. In other cases a much more detail submission should be mandated, and in many instances the submission of a **knowledge plan** should be required. In the case of a project, say for the building of a waste treatment plant, such a knowledge plan would need to address:

- The completeness of actions being taken to control competitor, customer, supplier and distributor's access to the organization's knowledge.
- The completeness of actions being taken to maintain access to, and freedom to exploit, the knowledge required by the project.
- The sufficiency of the knowledge available to the project.
- Whether there is particular know-how that the project should be importing from, or exporting to, the rest of the organization.
- Whether the project's deployment of knowledge will have an impact on the organization are other activities.

It is clearly vital to monitor the adequacy of responses to these criteria or questions. Ideally such checks should be embedded in whatever processes are already used to approve the release of funding. Hence a failure to provide an adequate response to such knowledge criteria will result in a reduction in funding. Appropriate checks can also be made as part of any existing compliance monitoring and even feature within the organization's KPIs. In this way individuals will soon learn to manage, and

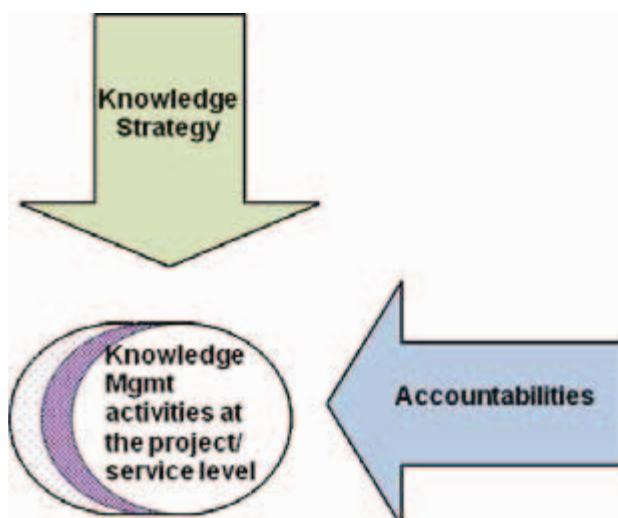
provide information on, knowledge with the same rigor as is currently applied to, say, financial data.

By integrating KM into existing business processes it is possible to create an environment in which KM is recognized to be part of normal good practice. It therefore becomes just another activity that is planned and budgeted for, and not an add-on activity that must be accommodated by stretching budgets and working longer hours. Ultimately, the checks and controls become invisible because participation in KM becomes second nature.

However, simply mandating that services and products should address knowledge management is not the complete answer. Generally, the organization also needs to provide guidance to help individuals contribute to knowledge management; this is especially important in two areas.

Firstly, it is important that everyone in the organization is clear who is **accountable** for carrying out the key activities needed to make knowledge management work. Secondly, there must be sufficient guidance, in the form of an overarching knowledge **strategy**, to steer decision-making so that all elements of the organization are working to a common approach.

An organization's knowledge strategy and accountability framework together to provide guidance and constraints on the decisions, which can be made at the project and service level.



Accountabilities (and Policy)

An organization's policy should describe the principles it will adhere to, in this case, when managing its knowledge assets. It is believed that key accountabilities should flow naturally out of this policy. For example:

Policy	Knowledge will be deployed, protected and shared so as to serve the interests of all stakeholders.
Accountability	<p>Function Heads are accountable for commissioning and implementing fit-for-purpose local knowledge plans.</p> <p>The Board will monitor the adequacy of actions taken by Function Heads to deploy, protect and share knowledge.</p> <p>Budget holders are responsible for ensuring projects and services are compliant with local knowledge plans before funding is released.</p>
Minimum action	<p>Knowledge management criteria, identified by the Chief Knowledge Officer, will be built into processes used to approve the release of funding.</p> <p>The Chief Knowledge Office will develop a system of KPIs, describing the status of the Function's knowledge management activities, and report findings to the Board.</p>

There is inevitably considerable variation in the detail presented within different organization's policy framework. Some organizations may decide to limit their policy to a series of statements analogous to those given in the top line of the above table. However, policy statements of this type are often little more than motherhood statements that rarely aid in the running of the organization. Conversely, some organization's policy contains detailed procedures describing not only what should be done, but how?

The recommended knowledge policy framework is normally structured as follows:

- A number of short policy statements are given defining the principles the organization wishes to follow in the management of its knowledge assets.
- Each policy statement is accompanied by clear accountabilities, identifying both those responsible for policy implementation, and the actions that need to be undertaken to ensure compliance.
- Supporting procedures can be prepared where necessary. However, in general these should be kept outside of the policy framework.
-

This structured approach provides a clear description of; the organization's policy, the minimum actions needed to ensure compliance, and identifies those responsible for monitoring compliance.

Strategy

It is believed that a knowledge strategy should provide a vision that helps services and projects to take decisions on the capture, maintenance, protection and disclosure of knowledge assets. (Instead of describing the approach being taken to knowledge management). As such it should, amongst other issues;

- Identify where, or the circumstances when, communities of practice and databases should be formed.
- Discuss knowledge gaps and how they are to be filled.
- Identify key knowledge assets and what actions are necessary to ensure it is appropriately managed.
-

BUSINESS PROCESS MANAGEMENT

For most organizations, the critical area of their knowledge strategy concerns the management of the knowledge that underpins their differentiating and enabling capabilities. Differentiators and enablers can be defined as follows:

Differentiators are capabilities to which an organization wishes to have unique access (these are critical to companies in the private sector).

Enablers are capabilities, with limited availability, that are essential to product and service delivery (here the focus is on ensuring secure and cost effective access, rather than pursuing the creation of a unique capability).

Differentiating and enabling capabilities can range from disciplines such as project management, to technical expertise such as an understanding of specific chemical reactions. Enablers and differentiators are likely to exist in the following areas:

- Service delivery / product manufacture.
- The supply chain and its management.
- Customer management (attraction / retention /interface).

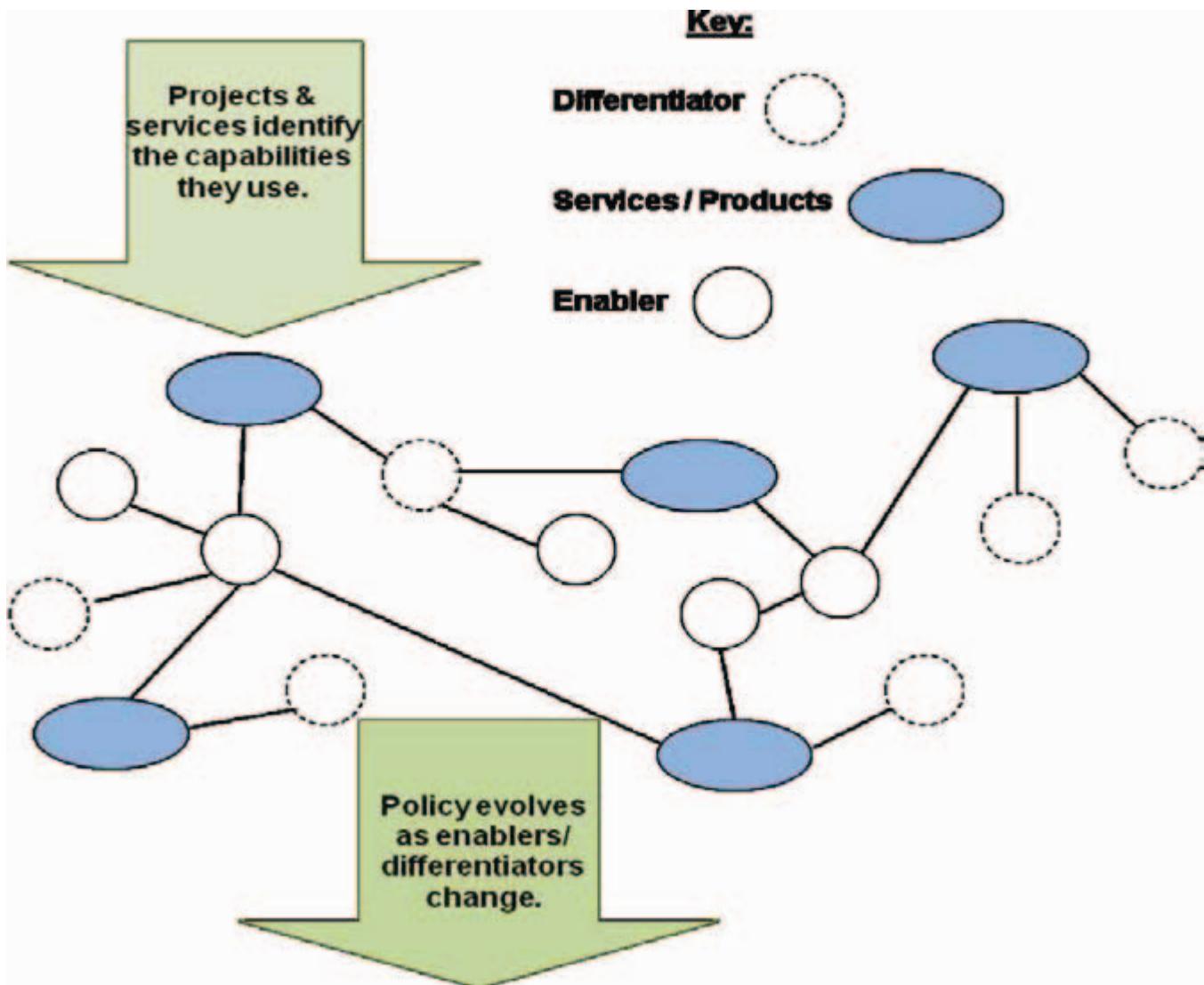
To be a true differentiator or enabler a capability will typically underpin a range of products or services.

Clearly, individual projects and functions should not be allowed unlimited freedom on how to manage the knowledge underpinning the organization's enablers and differentiators.

The knowledge strategy must therefore provide a framework to guide local decisions and actions. For each enabler or differentiator the knowledge strategy should therefore identify; key knowledge that should be captured and shared, whether inventions should -as a default- be patented or kept secret, which is responsible for decision-making, etc

Earlier we proposed that existing management processes should be adapted to encourage projects and services to exchange knowledge. These management processes can also be used to require projects and services to confirm the

importance, or alternatively update the enablers and differentiators captured in the organization's knowledge map.



This process will help an organization refine its view of its key know-how and hence allow its knowledge strategy to evolve.

Further, this process will help identify areas where communities of practice or database would be of utility, and ultimately, whether the knowledge underlying key capabilities are being correctly managed.

Targets and Challenge

It has been found to be the most important area to address when seeking to improve knowledge management in large organizations. Specifically, once strategy, policy

and accountabilities are clear, then the process of making visible the performance of accountability holders is an extremely effective lever for change.

Senior management, or the corporate body, should therefore routinely challenge how effectively knowledge is being managed by the functions. Metrics or other indicators can be of considerable use in this process of challenge and can both:

- Make visible the quality of the organization's knowledge management.
- Make visible the alignment of the organization's knowledge assets to strategy.
i.e.: measuring the "role" and "utility" knowledge assets in each business area.

Monitoring the Quality of Knowledge Management: Here the choice of Key Performance Indicators (KPIs) is critical, the correct KPIs can be used not only to identify areas where improvement is required, but more importantly serve as guidance on the activities that should be undertaken to improve performance. Some KPIs will take the form of simple checks, which will have a "yes" or "no" answer, for example; Are accountabilities clear, and if delegated, are approvals and reporting structures clearly defined?

Monitoring the Quality of the Knowledge Portfolio: It is obviously not possible to review the alignment of all knowledge assets to business strategy. Instead the process of challenge should probably pay particular attention to the "health" of those knowledge assets underpinning the organization's key differentiating and enabling capabilities. It may be useful to develop a system of metrics to help in this process. Here it should be recognized that knowledge assets have two basic characteristics that should be examined. Role. Here metrics will seek to measure the potential importance of a given asset (e.g.: the extent to which the knowledge is important in satisfying the customer's needs). Utility. Here metrics will seek to measure whether a given asset is fit for purpose, and if its longevity is consistent with this need (e.g.: whether the knowledge base is of sufficient quality to meet the needs of the customer).

Each knowledge asset will therefore have two characteristics, defining respectively its Role and Utility. If metrics are used to represent these characteristics, then any

misalignment between the Role and Utility scores will highlight potential problems that need to be considered by management.

Intellectual Asset Management

Intellectual asset management brings together knowledge and intellectual property management. Specifically, it seeks to:

- Minimize third party access to, and freedom to exploit, key intellectual assets.
- Ensure ongoing access, and freedom to exploit, key intellectual assets.
- Raise the visibility of, and ensure full exploitation of, key intellectual assets.
-

Ultimately, intellectual asset management, like knowledge management, must be addressed by its integration into existing processes, strategy, policy and accountabilities.

Specifically:

- Management processes should check whether projects and services are both managing and protecting key intellectual assets.
- Internal management reports should make visible both the strength of the intellectual asset portfolio and the quality of its management.
- Policy and accountabilities should clearly define responsibilities for the management of intellectual assets.
- Intellectual assets should be visible to projects and services.
-

In other words, intellectual asset management can, and therefore should, evolve naturally from knowledge management using the tools and processes described here.

BUSINESS PROCESS MANAGEMENT



BPM BENEFITS CHECKLIST

Below is a checklist that you can review for each of your processes or to get a general sense of the types of benefits you can expect from BPM.

Benefit	Example
Efficiency	
Eliminate Manual Data Entry	Reduction in time to add a new employee record into the HR e.g. system from 9 hours to 10 minutes.
Reduce Process Cycle Time	Reduction in compensation processing timing for 12,000 sales reps e.g. from 33 days down to 7.
Reduce Manual Analysis/Routing	Elimination of 80% of the manual work previously required to route invoice exceptions to the appropriate resolution teams.
Effectiveness	
Handle Exceptions Faster and Better	Evolve process from saving 5% of distressed shipments to saving 70% - yielding \$2M per quarter in saved revenues.
Make Better Decisions	Better review process results in \$3M saved in billing dispute write-offs that would formerly just been processed because the process was poorly controlled.

BUSINESS PROCESS MANAGEMENT

Consistent Execution	Customer satisfaction improvement to 92% based on proactive tasks that help ensure the home loan process executes better and faster.
Agility	
Faster Regulatory Compliance	Change customs related processes after September 11, 2001 within 90 days to comply with new federal regulations for better shipping visibility.
Support New Business Models	Ability to change shipping partners within 10 minutes in core process allows manufacturer to change primary shipper every quarter – based on best bid provided.

PERFOM BUSINESS CONTINUITY AND DISASTER RECOVERY VIA BUSINESS MANAGEMENT AND OTHER SOFTWARE TOOLS

Organizations wishing to improve their Enterprise Architecture and their Business Continuity and Disaster Recovery capabilities can implement an approach using BPM tools for planning their business processes, EA, and BC/DR right up front to dramatically increase their ability to plan for and recover from a disaster or other disruption to business operations. Currently, the BPM and BC/DR software industries represent two separate and distinct paths with little or no intersection between them. This capability can revolutionize the BC/DR discipline and empower business owners by placing more of the ability to perform the planning into their hands versus relying totally upon subject matter experts to plan and conduct their programs. This approach runs leaps and bounds ahead of traditional approaches where contingency personnel rely upon paper-based or other static plans that may be obsolete by the time they are activated or rendered ineffective by real-life circumstances. A plan is only as good as the last update. BPM tools can provide pre-planned and real-time capabilities to plan for and respond to a disaster or disruption.

This new approach in its very infancy employs a BPM application totally unanticipated by industry experts within the disciplines of BPM, EA, and BC/DR. BPM software tools can exponentially increase the scope and effectiveness of BC/DR planning either by themselves or in conjunction with other software packages such as BC/DR planning packages, regression testing and operational testing tools, IT management systems and Manager of Managers (MOM), and other potential applications. This approach holds the most potential for those organizations that find and retain professionals who understand the inter-relationships and how to develop business processes, which can design the enterprise architecture, and write BC/DR plans as well as run the programs. This capability facilitated by incorporating BPM tools can benefit all industry and government segments, regardless of type or nationality in focused or broad approaches depending on an organization's individual tastes and requirements.

Almost universally, organizations address BC/DR as a parallel effort at best although they usually address it as an after-thought, if at all. BC/DR crosses all of an

organization's boundaries and affects external parties as well. Although largely not addressed to the degree organizations truly require, it represents one of the most complex business problems any organization could possibly resolve. To complicate matters, almost no one in the industry has the ability to perform BPM, design the EA, and write all the BC/DR plans as these skill-sets are normally discrete skill-sets and few understand the ramifications of these three disciplines combined and to sufficient depth. This gap between BPM, EA, and BC/DR often exists as each has skill-sets that often do not really incorporate the thinking of counterparts in other organizations.

Current state of BPM and BC/DR tools

Industry analysts do not predict BPM tool growth for BC/DR and no IT, BPM, or BC/DR professional seems to have heard of this application in current use or even forecasted to this degree. Within the information security profession, Gartner Group industry analysts and others expect that BPM tools would be only used minimally for IA and mainly for C&A in limited circumstances and not for BC/DR.

BPM tools range from extremely sophisticated BPM tools in the Gartner Group Magic Quadrant that have all-encompassing capabilities to interface and execute commands and procedures through and with other software packages to more simplified versions that mainly provide the capability to perform BPM within themselves and provide a repository for limited documentation.

BPM and BC/DR software companies focus on their own markets, regardless of its level of sophistication. However, one of the high end BPM software companies has written applications for the financial industry that address a sub-set of requirements. Typically, BPM tools are used more on the business and operations side with some applications for the IT side. This tendency probably exists because the business process management experts understand the power of harnessing these software programs for BPM and IT professionals would normally focus on business processes as they apply to EA.

The Impact of a BC/DR Program

Most organizations' business operations could be negatively affected by various types of disruptions and business owners would ideally analyze their implications

BUSINESS PROCESS MANAGEMENT

and plan accordingly. Disruptions may stem from seemingly benign causes to obvious and extreme disruptions. In the end, the resulting organization's disruption in its ability to provide services can be the same regardless of the type of disruption. Obvious catastrophes such as Hurricane Katrina and the San Diego wildfires provide some of the most vivid examples of recent major disruptions. Disruptions can also result from some of the following examples:

- Inability for staff to man jobs caused by illness, inability to access the work site, pandemic
- Power outages
- Supply chain complications interfering with the ability to provide parts and supplies in our increasingly just-in-time economy
- Equipment malfunctions
- Natural disasters
- Acts of war
- Cyber-terrorist attack, etc.
- Benefits of using BPM for BC/DR

Any type of BPM tool could facilitate designing the business processes, designing the EA, and BC/DR planning. Often the current BC/DR state entails use of spreadsheets and word documents in lieu of BC/DR software programs. Although this approach is in its infancy in part because IT system designers are virtually never the people who write the BC/DR plans, organizations would ideally plan the business processes to include those required for recovery from a disruption, design the supporting EA complete with its disaster recovery capabilities, and plan the BC/DR capabilities right up front. Unfortunately, the sad fact is that virtually none of the professional disciplines fully understands what it takes to accomplish the goals and objectives of its counterparts to sustain the continuum of BPM, EA, and BC/DR. Furthermore, the pool of professionals who possess the conceptual understanding and can provide the excruciating detail of what it takes to maintain and recover operations from a business process, humanistic, and technology perspective is minute but growing.

In varying levels according to the tool's sophistication and the user's abilities, BPM tools offer substantial benefits for both EA and BC/DR as well as for BPM.

- As with BC/DR tools, BPM tools can allow for pre-planning a series of likely scenarios and their requisite responses.

BUSINESS PROCESS MANAGEMENT

- Some of the more sophisticated BPM tools can facilitate the analysis required to develop BC/DR plans and programs by collecting data provided by personnel as well as systems and performing the analysis.
- Ability to start with a simpler application all the way up to agency or headquarters level
- Provide capability of planning business processes in Visio or other tools
- Provide ability to associate processes with documentation, resources, and other elements necessary for plan execution
- Most importantly, provides ability to plan new processes and re-associate existing processes and resources according to need in real time should the pre-planned scenarios and associated resources become infeasible
- Often use web access to be accessible regardless of location
- Provide for security capabilities
- Provide ability to develop new processes for completely new alternate site if the original alternate and alternate processes sites are unavailable for some reason and needs require a totally new plan
- Provide varying levels of sophistication or simplicity to suit organizations budget, skills, and extent to which it wishes to incorporate BPM

BPM tools may be used in conjunction with or in place of BC/DR tools by building BC/DR processes and supporting resources within the BPM tool, just as one would build any other process. BC/DR tools range from fairly simple and easy for almost anyone to use to highly sophisticated ones that provide sophisticated capabilities but require a substantial manpower commitment to maintain properly.

Myths surrounding BC/DR

Many myths surround the discipline of BC/DR and often stem from the point of view of individuals and organizations. One of the most prevalent myths, just because an organization has an alternate or BC/DR site does not mean that it has an executable plan and an effective BC/DR program. Having a plan and program that the organization hasn't tested does not indicate success under fire. Unfortunately, hiring so-called experts does not guarantee viability of plans as the BC/DR discipline is so complicated and broad-reaching that anyone can tell a good story and write fluffy plans that few can evaluate or execute properly. The only real way to test the

effectiveness of a BC/DR plan and program is a thorough testing program and feedback for improvement. Organizations could use BPM tools to assist with the testing and maintenance aspects of a program as well as other processes.

Conclusion

BPM tools used separately or in conjunction with other software tools such as BC/DR could revolutionize the incredibly complex and all-encompassing realm of BC/DR planning and life-cycle management. These tools could exponentially facilitate an organization's ability to prepare for and recover from a disaster in pre-planned and real-time scenarios. Using any BPM software tool could enhance an organization's BC/DR program and its selection can be based upon an organization's budget, desire to incorporate this solution, and its ability to harness the human capital possessing the ability to implement this approach in greater or lesser degrees.

BUSINESS PROCESS MANAGEMENT



RACI METHODOLOGY AND BPM

A simple yet powerful methodology that focuses on the “human-side” of BPM is the RACI Methodology. The RACI methodology is similar to the Responsibility Assignment Matrix (RAM) from the Project Management Institute. In the Project Management Body of Knowledge, RACI chart is explained as a type of RAM because it assigns the role that the resource is to play for each given activity. Additionally, the RACI Methodology can be found in Business Process Management as a useful method of helping to identify activities, roles, and responsibilities.

The methodology is a relatively straightforward tool that can be used for identifying roles and responsibilities during a BPM implementation process. BPM projects require organizations to transform and adapt to new culture. Transformation does not happen overnight, and it sure does not happen automatically. People who are involved in the process from top to bottom have to contribute so that successful transformation happens. BPM projects of any size will be controlled and systematic, if roles and responsibilities are defined.

RACI helps organizations to assign roles and responsibilities for every process, so everyone involved in the process know what they are responsible for.

- **Responsible** – The person(s) responsible for the process or project.
- **Accountable** – The person(s) to whom “R” is accountable. He/She must sign off or approve assignments and is ultimately accountable.
- **Consulted** – The person(s) who has information and/or resources needed to successfully complete the assignment. He/She must be consulted for the successful completion of the assignment.
- **Informed** – The person(s) who must be informed of project status, updates, and milestones. He/She need not be consulted, but needs to be informed on the status and progress of the assignment.

*A variation of RACI uses “S” – Supportive, person who can provide resources or play a supportive role in the implementation.

BUSINESS PROCESS MANAGEMENT

RACI is typically supported by a RACI chart (or RACI matrix), which helps players involved understand what their role is and who is responsible, and who is ultimately accountable. A RACI Chart is useful for clarifying roles and responsibilities in a cross-functional/cross-departmental project or assignment.

Below is a simple example RACI chart:

RACI CHART (including “Supportive Role”)

	Board of Directors	Project Manager	Production Manager	Sales Manager	Production Supervisor
Process 1	A	R	I		C
Process 2	I	A	R	C	S
Process 3		A	RC		I
Process 4			RA	C	I
Process 5	RA	I	C		S

RACI Chart

- The first step in developing a RACI chart is identifying all the processes/activities in the BPM project. Once the processes are identified, create a matrix and list the processes on the left hand side of the chart.
- The second step is to identify all the key players (roles) and list them along the top of the chart.
- The third and final step is to complete the cells in the matrix and identify who has the R, A, C, and I for each process.

Important Considerations

- As a general rule of thumb, every process should preferably have only one “R”.
 - A gap occurs when a process exists that has no “R” and an overlap occurs when a process exists that has multiple “R”.
- Avoid gaps and overlaps. If a process exists and does not have an “R” or has more than one “R”, the process generally can be broken down into sub-processes.
 - Every process should have a unique process owner. This will ensure that all activities within the process are streamlined through the process owner.
 - If a process exists without an “R”, the person accountable should determine who is responsible for the process.

Taking time to document these key roles and responsibilities for processes will uncover all of the stakeholders involved, identify who's accountable, who's responsible, and who should be consulted and informed. The RACI Chart is straightforward and takes minimal effort and time. Once completed, however, the chart is of great value as everyone involved in the process knows exactly what their role is and who is responsible, and who is accountable.

RACI – Business Case

In a recent consulting engagement with the human resource department for a mid-market manufacturer, the client was assisted to streamline their processes and implement a department-wide BPMS application. The initial project schedule was based on the vision of the client company's CEO, which was tightly integrated with his vision for the entire organization. Working with the HR department and with the

VP of the Human Resources department, it was discovered that the VP had several priorities of his own. The CEO had appointed the Director of HR as the Project Manager for the project, who had priorities of her own. With three different individuals, with different priorities spearheading the project, the project team was a bit confused, to say the least.

The CEO was preoccupied with various other priorities; he had very little time to devote to the project. The Director of the department had several issues within the department, which kept her firefighting, even though she was the Project Manager, she had very little time to work on improving the processes. The VP of the department, in the middle of the project changed his priorities for the department, which caused changes in project priorities and reallocation of resources. The reprioritizing was done without consulting or informing the CEO, making him quite upset.

The whole incident created tension within the client's project team. The team wasn't sure who was responsible, who was accountable, and to whom they needed to consult and inform. It was at this point, the team finally developed a RACI chart. Developing a RACI chart was the turning point of the project. The RACI chart helped uncover all the stakeholders involved. The team was able to identify who was accountable, responsible, and who should be consulted and informed. By developing a RACI chart, all stakeholders involved, their roles and responsibilities were clearly visible for the clients. They were able to assign roles and responsibilities for all the processes involved.

Once the RACI methodology was in place, the project implementation phase progressed quickly and successfully. The project team was able to implement its process improvements while knowing who was accountable, who was responsible, and who should be consulted and informed throughout the implementation phase.

Summary

A key ingredient for successful BPM implementation is the involvement from all key participants. The RACI methodology helps organizations clearly assign

BUSINESS PROCESS MANAGEMENT

responsibilities and ensure that key participants are involved. BPM success largely depends on a given organization's culture, and how well the players involved can adapt to change. In order to become a "process-driven" organization, top management's involvement and support is a must, especially if processes are cross-functional and cross-departmental.

Change is rarely successful if driven from anywhere other than the very top of the organization chart. Using the RACI methodology, organizations can clearly identify all the key participants, including stakeholders for a given process, and ensure that tasks are performed, while everyone is kept in the loop.

BUSINESS PROCESS MANAGEMENT



ALIGN ROLES AND RESPONSIBILITIES TO MAKE BPM WORK

Business units and the IT organization are both responsible for ensuring that business process management initiatives are successfully executed. The more roles and responsibilities for each side that are defined at the onset of a BPM project, the more quickly an organization can reap the benefits.

What you need to know:

IT organizations have little time to take on the roles and responsibilities of the business process architect or the business process analyst. For an organization to take advantage of this new era of competitive differentiation, the business side of the organization must embrace the new roles required to manage business processes. Tight alignment between business units and the IT organization will be a critical success factor. Establishing a common vocabulary and setting up clearly defined roles and responsibilities are key to achieving success.

Analysis:

Companies that have the best-orchestrated business processes will become the leaders in their industries. Business process management (BPM) is a clear path toward orchestrating business processes; however, BPM requires tightly aligning business and IT responsibilities.

Some companies mistakenly view BPM as just another IT project. Yet, BPM is not only about technology. It is a business strategy and structured approach to governing an organization's activities and processes, and it involves employing methods, rules and execution tools. Enterprise leaders understand the dynamics of their businesses, so they need to take charge of the tools that manipulate the rules governing decisions being made in their business processes. Business leaders must be actively involved with any implementation from the start, not only to understand the broad benefits of BPM, but also to keep their organizations' initiatives on track. This is because BPM aims to harness a complex ecosystem of processes

To make BPM work, companies must better align business units with the IT organization, as well as clearly define roles, responsibilities and a common

vocabulary. Here, we recommend best practices to business executives for creating such a structure.

Managing Change

The more roles and responsibilities are defined at the onset of a BPM project, the more quickly an organization is able to reap the benefits. IT managers do not want business leaders to go off on their own to experiment with BPM technologies, such as modeling, simulation and process analysis technologies. Likewise, the last thing business leaders want is to have the IT department managing their business processes. Before engaging in a BPM implementation, establish some guidelines delineating the responsibilities for the members involved in the project. In the short term, business and IT personnel will share responsibilities for:

- Process deployment
- Process execution and performance
- Business and process rule analysis and management
- Operational procedures, including version-level control
- Creation of processes and rule repositories
- Detailed process design
- Training and education
- Event analysis and management

The business side is responsible for:

- Strategy and business case development
- Business performance metrics
- Process discovery
- Functional process design
- Simulation, optimization and scenario creation
- Process monitoring and analysis
- Business change management and communication
- Business rules and event discovery and analysis
- Policy management

The IT department is responsible for:

- Standards for technical and best-practice procedures
- Service orchestration
- Integration of process steps with physical orchestration
- Templates and frameworks to support discovery and deployment
- Scalability issues supporting scope and complexity
- Process-level and system-level security
- BPM tool evaluation, testing and integration
- Fault tolerance and redundancy
- Clustering and load balancing

New Roles:

In terms of best practices, the industry has seen some leading companies place senior business executives in the IT organization to lead large-scale projects and place project finance people in the IT organization to drive the business-case approval process. In both circumstances, the primary objective is to better align the IT organization with the business. By embedding a business vocabulary and mind-set into the IT organization, the language begins to change, and business value is more easily understood.

The lack of a common "language" between business units and the IT organization has resulted in a significant stumbling block for BPM implementations. Terms such as "repositories," "load balancing," "rules" and "version-level control" apply to business units and the IT organization; however, they have different meanings. When crafting business process management software suites, leading software vendors are increasingly focusing on the business side of the organization as an important user of their tools. This makes it essential for IT organizations to understand a more-business-oriented vocabulary. In companies that have successfully deployed multiple BPM projects, two new roles have emerged that reside in the business units, not the IT organization:

Director of business process management:

This director focuses on the human, organizational and value stream aspects of business processes and their transformation.

- Gain consensus of internal constituents around new process concepts.
- Identify business performance and incentive metrics.
- Draft organizational alignment requirements.
- Design the organization's hierarchy of processes for reusability.
- Build and sustain a process-managed organization.

Business process analyst:

This analyst deals with the more tactical aspects of discovering, validating, documenting and communicating business-process-related knowledge through modeling, simulating and analyzing current and future states.

- Identify opportunities for 'best in class', disciplined and shareable process knowledge.
- Embrace methods, techniques, notations, standards and best practices.
- Show the organization the best way to identify problems and to solve them.

Conclusion:

For IT professionals involved in BPM, the roles and responsibilities are straightforward, such as exposing modeling options for the business, leveraging the capabilities behind a service oriented architecture and constantly evolving the maturing BPM suite of technology solutions. IT professionals need to make a business unit's processes work better through technological enhancements. The reality of executing on this mission is far from simple. It involves managing technology and support for the entire business process life cycle, from strategy through implementation and ongoing improvements. Executives on the business side must figure out how to tightly align business and IT functions.

Tactical Guidelines

BPM will only work in organizations if senior executives recognize that:

- Business units and the IT organization must share responsibilities.
- The IT organization must learn the business units' vocabulary.
- Business units must create new roles.

BUSINESS PROCESS MANAGEMENT



PROJECT TO PROGRAMS

3 Steps for Moving from BPM Projects to PPM Programs

Introduction

Business Process Management (BPM) is in a period of transition. For the past several years, companies have been getting familiar with BPM, undertaking specific *projects* to address “burning process problems”, or launching tightly-scoped *projects* to understand the capabilities of BPM Suites (BPMSs) and how they should be used.

The successes of those initial projects and pilots have given companies the confidence and vision to take their BPM efforts to the next level – moving beyond that first project to a broader *program* encompassing multiple projects that are part of a larger business process improvement initiative.

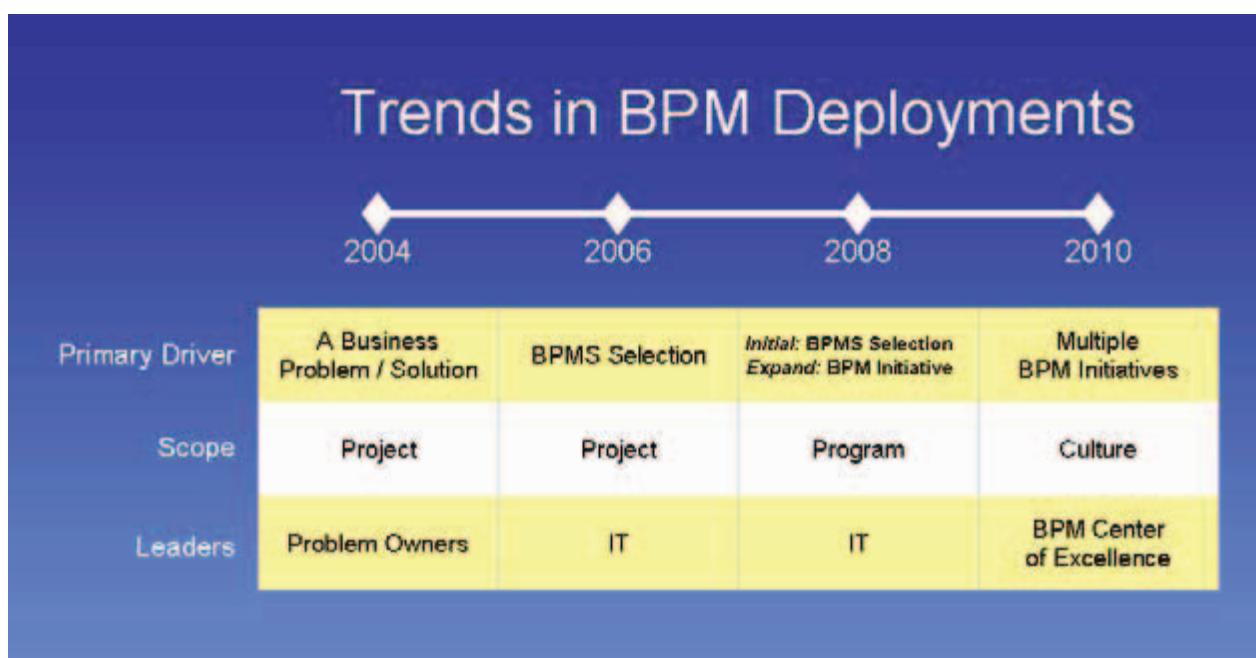
That leads to the logical questions: “What processes should we focus on next? How do we scale the discovery, development, deployment, and usage of process applications across the company? What are the best practices we should follow to maximize reuse across projects to achieve economies of scale?”

This whitepaper describes how the movement toward broad BPM Programs has changed what companies need in terms of BPM technology and “know how”. It describes 3 steps for establishing a solid foundation for a BPM Program that will enable your organization to scale its process improvement capability in a way that will deliver maximum value to the business.

The Trend from BPM Projects to BPM Programs

Over the years there has been a gradual change in how companies have approached business process management. Four or more years ago (before “BPM” became such a well-known buzzword), companies simply sought solutions to specific process problems. These types of improvement projects were usually driven by the “owners” of the problems, who were experiencing specific process pains on a

daily basis. Their goal was to simply “make the pain go away”, with little vision beyond that. Many times, vendors were able to recognize these opportunities to apply BPM tools and technology. In most cases, a poorly performed manual process was replaced with some amount of BPM-based automation to improve both efficiency and accuracy of the process. These early projects could be considered “tactical” in scope (even when they continue to provide significant business value years later).



The awareness of BPM within companies began to increase a few years later (now 2-3 years ago), especially as word spread about the successes from early projects. At the same time, there was a shift in project ownership from the business to IT, as IT sought to standardize upon common BPMS platform technology, either within a line of business or across an entire enterprise. But even as those BPMS selection exercises had an enterprise-wide scope, the scope of the initial usage was usually limited to an initial pilot in order to get acquainted with the new technology.

Today, we are seeing that many companies are moving beyond those first BPM projects to larger-scale BPM Programs, in order to repeat and expand their process improvement successes across a wider range of business processes. A BPM Program consists of a series of follow-on process projects, which are usually

adjacent in scope to the initial deployments. Within the context of a BPM Program, a series of BPM projects can be identified, prioritized and aligned to key process improvement initiatives. As a result, BPM Programs are more strategic in nature, providing end-to-end cross-functional solutions to the business. A BPM Program is the vehicle for scaling BPM properly across the business.

The end game for many companies is to create a BPM Culture, where every white-collar worker is aware of process improvement goals (at personal, departmental, and corporate levels), has complete visibility to their performance against those goals, and leverages tools to carry out their day-to-day tasks in ways that help them meet and exceed those goals.

A Project-to-Program Example: Pulte Mortgage

Many are going through this transition from project to program. One that is far along in the transition is Pulte Mortgage – the financing subsidiary of the nationwide home builder, Pulte Homes. In 2003, the COO of Pulte Mortgage was tasked to find ways to create 300% growth over an 18 month period, primarily by improving their customers' experience in order to increase repeat sales within their extremely competitive industry. Their loan origination process was basically “working” – at the time they already had customer satisfaction ratings of 85%. But they had no visibility into how individual loans were being processed by the 1200 employees across a dozen back office systems. You can't improve what you can't see.

In turn, they initiated a BPM project to track the flow of each loan through the origination process. With this new visibility, they were able to identify bottlenecks in the process that would cause loans to be delayed, and they were able to better prioritize loan processing tasks in order to guarantee that loans would be completed on time. From their process improvement they were able to improve customer satisfaction ratings to a very high 92%.

Based on that positive experience, Pulte Mortgage laid out a long-term BPM Program to implement workflow, tracking, and SLA management for every part of the business. By 2007, 100% of the business tasks at Pulte Mortgage were managed using BPM.

The result: the employees' entire relationship with their work has changed. No more "green screens". Every employee can see their performance against 48 different SLAs in the process that are tied to the strategic initiatives of improving customer satisfaction and enabling company growth and efficiency. Management can see a holistic view of performance – all loans, all tasks, all SLAs, all in real-time.

The entire organization is driven by BPM, and everyone understands where they fit in the end-to end process. Pulte Mortgage is now moving beyond their BPM Program to a BPM Culture.

What is Required for a BPM Program?

BPM Programs bring with them new requirements to enable scalability well beyond the normal requirements of a typical BPM project:

- **Highly-Scalable Execution Platform**

Today's BPMS platforms do a reasonable job of managing a small number of projects. But in a long-term BPM Program, the scale increases by at least an order-of-magnitude: the number of BPM projects, the number of BPM authors and developers, the number of users, the number of process versions can all expand dramatically. In order to achieve economies of scale from sharing and reusing process components across a long-term BPM Program, the underlying BPMS must make it easy to manage many more BPM projects, and support many more process authors, developers, and users. Categorizing and finding reusable process assets in the shared library is critical. Moreover, *understanding* the implementation and performance of multiple versions of processes and their underlying subcomponents will be imperative.

- **Highly-Scalable Communication Platform**

What process improvement opportunities exist in your company? Often there is that "burning process" whose business pain forces an organization to investigate BPM in the first place – by definition, these processes and their specific problems are well-known to all. But how do you discover and prioritize the other improvement opportunities in an enterprise? For each opportunity, how do you agree what the problem details really are, and what are acceptable ways to

resolve them? How do you get your business stakeholders, domain experts, and technical developers aligned on what needs to be done? This frequently presents a huge communications problem – especially when your organization is geographically distributed. You will need a communications tool that has the potential to reach every single white-collar worker in the enterprise. Traditional technical BPMS modeling tools are doomed to fail here – the time, money, and effort associated with installing and using these tools are just too high to reach large numbers of non-technical users. A completely different communication platform is required in order to meet the scale.

- **“Know How” to Scale**

Of course, tools and technology are only part of any BPM solution. What's often more important for success is the “know how” to make BPM Programs work: how to share, how to govern, how to scale. Someday, much of this knowledge will be institutionalized – but we're not there yet. We are still discovering the patterns and best practices for large scale BPM Program execution – so today we must rely on BPM experts and thought leaders to provide specific guidance on how best to transition from implementation of single projects to multi-project BPM Programs.

Structuring a BPM Program

In today's deployments, not all BPM Programs will start out with an up-front “start up” period. Many or most BPM Programs will evolve out of an initial deployment project that serves as the “proof”. In those cases, we can build upon the existing project deployment by using a parallel track approach:

- **BPM Project Track**

In this track, the BPM team performs a quick, high-level inventory of potential process improvement opportunities. This is done with all business stakeholders. The opportunities are prioritized based on potential business value and alignment with corporate strategy. A prioritized opportunity roadmap dictates the order in which BPM projects will be subsequently analyzed, implemented and deployed. The project track “expands” over time, as additional projects are added to the BPM Program. After each deployed project

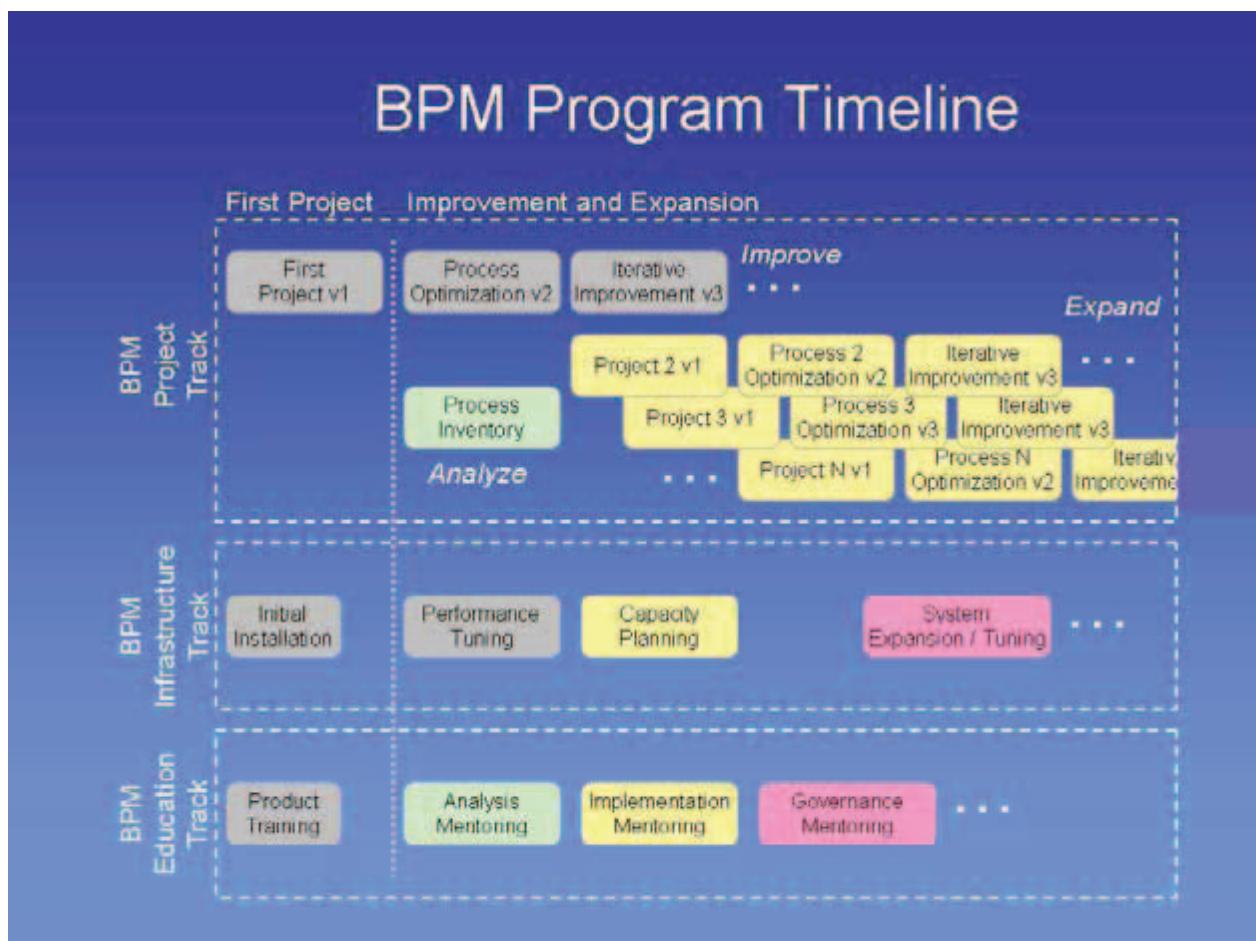
has been in production for some time, an optimization analysis can be performed to guide its next set of process improvements. Process inventories can be repeated to reprioritize the project improvement roadmap.

- **BPM Infrastructure Track**

This track focuses on tuning the existing system infrastructure, as well as capacity planning for future growth.

- **BPM Education Track**

This track administers the educational packages that are required to build a self-sufficient BPM team. Beyond the generic product training, much of the education comes in the form of mentoring, to show the “how to” of analysis, implementation, and governance. This mentoring is best done in the context of the actual program implementation and deliverables.

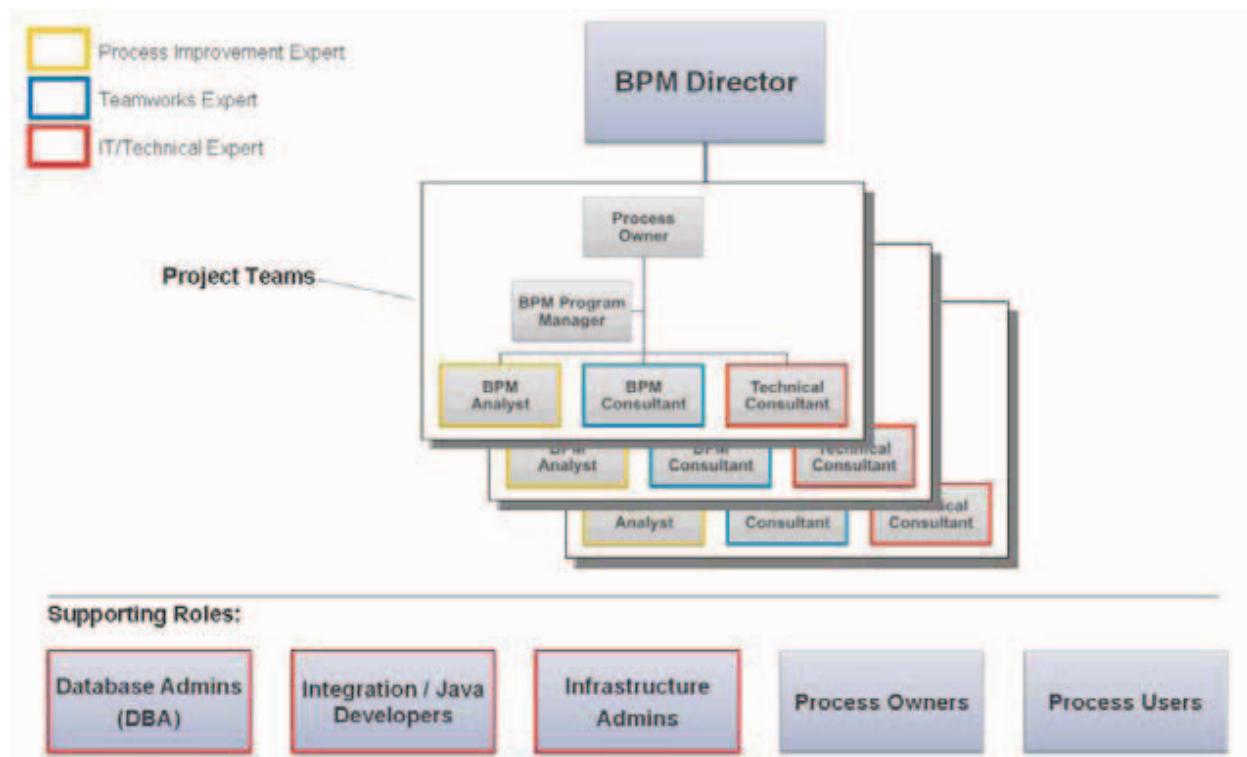


BUSINESS PROCESS MANAGEMENT

Of course it is important to set up a capable team to carry out the BPM Program. For every project, we recommend:

- One or more **BPM Analysts** to assist with process analysis and requirements definition;
- One or more **BPM Consultants** for process design, implementation, and deployment;
- One or more **Technical Consultants** to provide assistance with overall solution architecture, and integration into your enterprise infrastructure;
- A **BPM Program Manager** who is responsible for guiding the deployment effort to success; and
- A **Process Owner** who is empowered to quickly make decisions regarding process delivery, scope, and budget.

A **BPM Director** leads the overall BPM Program effort, across all projects. The BPM Director typically heads the BPM Governance committee that establishes the policies for proper sharing, access, and reuse of processes. Other technical and subject matter experts (SMEs) play supporting roles, as needed.



Starting Your BPM Program

Building a successful BPM Program requires the right foundation – one that can scale. As we described earlier, there are 3 critical steps to laying the foundation for your BPM Program:

Step 1

*Make sure you have a BPM Program **execution platform** in place that can scale to handle the design, execution, sharing, and governance of many projects across your enterprise.* The following platform features enable scaling up from individual BPM Projects to full-scale BPM

A *collaborative design environment* built to support concurrent development by multiple teams of process authors and developers, as they create and share process implementation components. A shared multi-user development environment maximizes sharing, and enables teams to discover and fix implementation conflicts immediately, instead of waiting until test time to resolve problems when merging components that were developed separately.

- A *Shared Model architecture and repository* that links all aspects of the process design, implementation, and run-time data, to ensure that all of the Business and IT views of a process are always in-synch. Only platforms with true Shared Model architecture directly link everything about a process together: the process diagram, the implementation details, KPI and SLA definitions, in-flight process data, historical performance data, and so on. This linkage is critical to providing Business and IT with the visibility they need to remain constantly "on the same page" about their shared understanding of the process design and operational implementation, across all process changes, and across all process versions, that occur during the BPM Program lifetime.
- A *clustered J2EE-based enterprise execution environment* that is incrementally expandable, highly available, and easily partitioned as additional projects are added over time. J2EE technology platforms are proven to support and manage large-scale, enterprise deployments. Teamworks' innovative Shared Model architecture enables implementation teams to select a specific process version, visualize performance "hot spots"

directly on the process model diagram, drill down to the underlying performance facts to uncover root causes, and “playback” any proposed fixes in order to assess the impact – all within a single development environment.

Step 2

*Make sure you have a BPM Program **communications platform** in place that can scale to allow every business stakeholder or domain expert to collaborate on the discovery and documentation of processes and potential improvements.* Traditional BPMS modeling tools are too technical and too costly, and consequently can't scale. In order to support the scale required for large-scale, long-term BPM Programs, your communications platform should have the following capabilities:

- *Real-time collaborative editing of process documentation* stored in a shared, versioned repository, so everyone has an up-to-the-second view of a process definition.
- *Extremely intuitive process editors* that is as easy to use as PowerPoint or Word, so that even non-technical users can fully participate.
- *Entirely web-based and hosted services*, so that users anywhere in the organization can be added immediately with no software installation required.

Step 3

*Make sure you have the BPM Program “**know how**” in place to assist and guide your team in defining, implementing, and deploying the projects in your BPM Program.* To avoid wasting time and expense from trial and error, you will want to leverage the knowledge of BPM professionals that can show you how to implement:

- *Process inventory and analysis* – to help you identify and prioritize the “pipeline” of process improvement opportunities in your BPM Program, that are aligned with your company’s strategic goals.
-
- *BPM mentoring* – to provide you with detailed, hands-on guidance on how to best approach process implementation, operations, and change management in BPM projects.

BUSINESS PROCESS MANAGEMENT

- *Process improvement* – to assist you in setting up the correct KPIs, SLAs, reporting, and analytics needed to optimize your production process applications.
- *Process infrastructure* – to assist you with installation, configuration, performance tuning, and capacity planning of your BPM platform as new projects are rolled out to production. *Process governance* – to help you establish a Center of Excellence and institutionalize best practices for managing and governing BPM Programs as they expand across the enterprise.

BPM ARCHITECTURE CONSIDERATIONS

Introduction

This paper outlines three sets of key architecture considerations required for a successful configuration of an enterprise Business Process Management (BPM) implementation and deployment. These considerations are:

- Deployment Environments
- Architecture Options
- Hardware and Database Sizing

In addition to architecture considerations, another important success criteria for BPM implantations is ensuring the organization's IT group be involved in the early stages of the BPM tool selection process. This is due to the fact that many decisions made and issues uncovered in early stages will have long-term consequences and will be much more difficult to resolve after the BPM tool has already been selected. When IT is involved at the early stage, there is a much better opportunity for ensuring balance between both business and technology factors.

I. Deployment Environments

Although this issue may seem obvious for any software deployment, it is important nonetheless to address how the BPM architecture will be configured in order to get out of the way any preconceived ideas. Typically there are four distinct (yet related) environments that need to be configured during the course of a BPM implementation. These environments are:

- Development: This is used primarily for developing the BPM solutions. All the unit tests, bug fixes, and R&D type of work is done on the Development (or Dev) environment. This environment is not as robust as the others. Sometimes, the Dev environment may end up being the developers and analysts workstations depending on the type of BPM tool selected as outlined in subsequent sections.
- Test/QA: The environment is used primarily for deployment of solutions for testing the features and overall functionality and user-acceptance of solutions. There is no development taking place on the Test/QA environment.

Sometimes this environment is as robust as the Staging and/or Production environments.

- Staging/QA: Depending on the IT infrastructure and governance, this environment is a duplicate of the Production and/or Test environments. This environment may be considered optional depending on the scope of the implementation.
- Production: This environment will be used primarily as a live environment. The final, time-stamped solution is deployed to Production.

There are subtle differences in the way the #3 and #4 environments above are configured. Each will have its own architecture options and sizing as discussed in the next sections.

II. Architecture Options

Depending on the BPM tool selected, there are multiple architecture options to be considered. Below we have identified the four most commonly used options and typically most appropriate for BPM implementation. The selection of these options for each environment depends on different factors such as existing IT infrastructure, budget, and solutions to be deployed.

- Single-tiered or Standalone: This option provides a single and simple deployment for all the BPM components (BPM Engine, Application Server, and Database Repository) on a single machine. In addition, this option provides a simple administration, less overhead, and limited transactional capabilities. This option is for simple to moderate BPM deployments.
- Double-tiered: This option provides a two-tiered architecture deployment where on the one hand, the BPM engine and the App Server are installed on one server and on the other hand the database repository is installed on another server. This usually happens when the IT infrastructure already has some database instances that can be leveraged. This is a mid-level architecture option where there are a little more overhead and more transactional capabilities. This option is for moderate BPM deployments.

- Three-tiered: This option provided dedicated services for all BPM components. In addition, this option provides more complex deployment and administration; there is much more overhead but it is scalable.
- Multi-tiered: This is the most complex architecture where BPM components are divided into multiple dedicated servers for large-scale BPM deployments in an established IT infrastructure that includes clustering, load-balancing, and/or fail-over.

III. Hardware and Database Sizing

In addition to the architecture options, other considerations for architecting a BPM solution relate to calculating and estimating hardware and database sizing. These considerations are:

- Number of Process Instances per Year/Month/Week/Day
- Number of Users
- Number of Participants per Process Instance
- Number of Activities per Process
- Number of Attachments per Process
- Number of Notes per Process
- Third-party systems that will integrate with the BPM Engine (including identity management, enterprise content management, portal for displaying work lists)
- Benchmark Test results
- Vendor experience with other customers who have implemented similar architectures
- Current IT infrastructure

The considerations above relating to specific quantities directly relate to hardware performance – the more users and process instances involved, the greater the computing capacity is for the BPM Engine orchestrating the process. The benchmark results will determine the hardware (CPU, Memory and Hard Disk) and database sizing recommendations for the BPM tool.

BUSINESS PROCESS MANAGEMENT



EXAMPLE: COMMON BUSINESS OBJECTIVES

OPERATIONAL	FINANCIAL	STRATEGIC	INDUSTRY
Shorten development time	Improve return on assets	Establish or enhance strategic positioning	Increase market share.
Increase productivity	Avoid costs	Introduce competitive results	Improve market position
Increase capacity	Increase discretionary spending as a percentage of budget	Introduce competitive products	Increase repeat business
Increase reliability	Decrease non-discretionary spending	Improve professionalism of organization	Take market leadership
Minimize risks	Increase revenues	Provide better quality	Recognized as producer of reliable or quality products and/or services
Improve resource utilization	Increase margins	Provide customized offerings	Recognized as low price leader
Improve efficiencies	Keep spending to within budget	Introduce new products or services	Recognized as compliant to industry standards.

BUSINESS PROCESS MANAGEMENT



KPI'S

Key Performance Indicators (KPIs) are quantitative and qualitative measures used to review an organization's progress against its goals. These are broken down and set as targets for achievement by departments and individuals. The achievement of these targets is reviewed at regular intervals.

KPIs are used to monitor the performance of a company, department, process or even an individual machine. They will also help shape the behaviors of employees within the company.

KPIs need to be flexible and reflect the changing goals of the organization. Goals change as the organization changes in reaction to external factors or as it gets closer to achieving its original goals.

Individual KPIs need to be directly linked to organization goals and objectives, or overall organization KPIs where they are used.

They need to reflect organization culture and values, by indicating the types of behavior and performance the organization will recognize as 'successful' and reward employees for.

KPIs need to be measurable and reflect a balance between operational and people orientated measures.

KPIs are a fundamental component of sustaining a change process and maintaining a performance management culture. KPIs should be aligned with the organization's vision and direction.

When performance is measured, and the results are made visible, organizations can take action to improve.

SMART KPIs

The acronym SMART is often used to describe KPIs.

- Specific
- Measurable
- Achievable
- Relevant
- Timely

Specific

KPIs need to be specific to the individual job and if possible expressed as statements of actual on-the-job behaviors.

For example, a KPI should:

- explain clearly to the employee what he/she has to do in terms of performance to be successful
- have an impact on successful job performance, that is distinguishing between effective performance and ineffective performance
- focus on the behavior itself, rather than personality attributes such as 'attitude to customers'.

Terms such as 'work quality', and 'job knowledge' are too vague to be of much use.

Measurable

KPIs must be measurable, that is based on behavior that can be observed and documented, and which is job-related. They should also provide employees with ongoing feedback on their standard of performance.

Achievable

Performance management needs to be an open, collaborative communication process. KPIs must be seen by all that they are achievable. The KPI must be

realistically achievable. If it is set too high for the circumstances (such as an ambitious production target), not only will it be irrelevant but it will ensure failure.

Relevant

It is essential that employees clearly understand the KPIs, and that they have the same meaning to both parties. Consultation is more likely to result in standards that are relevant and valid.

Timely

KPIs should have an appropriate time frame.

It should be possible to collect the relevant information either 'as it happens' or within a short time afterwards, otherwise it will lose its relevance.

As outputs of the performance management system, KPIs also need to be in alignment with other HR-related functions, including training and development, recruitment and selection, rewards and recognition, and career planning.

Business aspects that require KPIs

KPIs should cover every aspect of the business. Sample examples are

- customer satisfaction
- employee satisfaction
- staff turnover
- absenteeism
- department/division specific measures
- triple bottom line: financial, environmental and social responsibility
- finance including revenue and costs
- OHS reporting including incidents and related costs
- equipment usage and OEE
- maintenance costs and effectiveness
- new product development & innovation
- lead times and down times
- quality.

KPI components

KPIs should identify the required outcomes, for example:

- the minimum acceptable performance e.g. daily breakeven point
- target performance e.g. desired daily output.

KPIs should:

- be communicated to all staff so that they are aware of how they are to be measured and how their KPIs impact on the organization as a whole
- be aligned with the vision and direction of the organization
- have relevant reward and recognition criteria linked to each KPI.

When implementing new KPIs, having baseline data to measure improvements is very important. Progress on KPIs should be communicated at regular times to highlight emerging trends. As these trends emerge, corrective action can be implemented in a timely fashion. KPIs need to be communicated via multiple media.

The measures that are selected must be carefully specified to ensure they do not cause non-lean behaviors. In many cases there will need to be a selection of measures that balance quality and quantity factors to ensure the correct behaviors are encouraged.

Listed below are some examples of the behaviors and outcomes that measures in isolation can cause.

Measure in isolation	Behavior	Outcome
Production output	Make more	Overproduction
Machine efficiency	Run machine longer Run in most efficient sequence for machine	Unnecessary stock Customer orders late

Maintenance costs	Reduction in maintenance activities to reduce costs	Machine breakdowns
Cash flow performance	Pay suppliers as late as possible	Supplier deliveries XX unreliable

Creating KPIs

KPIs must be designed for each proposed change to the production process so that:

- there is a base line measurement taken to establish a starting performance standard
- there are measures developed to track the team's performance
- there are measures established that can highlight any variability. This can assist in future diagnoses
- reward and recognition can be effectively implemented.

Before data is collected three questions need to be asked.

1. What is the purpose of collecting this data?
2. Will this data tell us what we want to know?
3. Will we be able to act on the data we collect?

The goal is to create an easy-to-use, accurate measurement system with as few measures as possible.

The following questions need to be answered when setting up a data collection system:

- What type of metric is it (financial, behavioral or core-process)?
- Why was it selected?
- Where will the data be collected from?
- How will it be collected?

BUSINESS PROCESS MANAGEMENT

- How often will it be collected?
- How often and where will the metric be displayed?
- Who will use it?

KPI examples

Some examples of measures that can be used to monitor the performance of a competitive manufacturing company are listed below.

Financial	Examples
Costs	Material costs Labor costs Operations costs Inventory Overtime Warranty costs Cost of Sales Interest on overdraft Number of projects completed on time and on budget
Revenue	Sales Gross margins Return on assets or investment Product profitability
Team metrics	Overtime Material costs Revenue generated by team Inventory value in team's area Number of projects completed on time and on budget

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Core metrics	Examples
OHS	Lost time injuries Number of staff off work Length of time staff are off work
DIFOT	Delivery in full on time
Quality	First time through quality Yield
Leadtime	Order to cash in bank Raw material to dispatch Dock to dock
Inventory	Inventory turnover rate
OEE	Overall equipment effectiveness
Schedule performance	% changes to the weekly schedule
Value added ratio	Ratio of value adding time to lead time
Team metrics	Turnaround time for jobs Output rates

BUSINESS PROCESS MANAGEMENT

	Quality rates Equipment OEE Attendance rates Schedule compliance Customer feedback Number of deadlines/milestones met Metrics relating to specific team tasks
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Behavioral metrics	Examples
Employee satisfaction	Gained from regular Employee Satisfaction Surveys Staff turnover rates Participation levels in improvement activities
Customer satisfaction	Gained from regular Employee Satisfaction Surveys Retention rates
Skill uptake	Skill matrices
Absenteeism	Absenteeism
Error rates	Error rates Time spent on managing under-performing staff
Team metrics	

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	Number of team meetings Members at team meetings Number of ideas generated Number of ideas implemented Total Savings generated
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BUSINESS PROCESS MANAGEMENT



BUSINESS PROCESS MANAGEMENT – HOW TO SCALE YOUR PROCESS DOCUMENTATION INITIATIVE

How to scale your Process Documentation Initiative.

The 10 Point Checklist

- 30 minutes with your Executive Sponsor every week
- Dates and Deliverables Create Urgency
- Find the Right Documentation Tool - is yours up to the task?
- Build your Company's Process Chart
- An Owner for Every Process
- The 1 Hour Training Bootcamp
- A 2x6 Workshop for Every Process
- Sort out the Good, the Bad, and the Ugly
- Organize a Project Completion Day
- Set the Guidelines for Sustainability

30 minutes with your Executive Sponsor every week

Get Executive Support with 30 minutes Every Week

Strong, visible sponsorship is essential for an initiative of this nature to succeed – you will require time and effort from a large number of people across the business. This weekly meeting creates a definite time commitment on the executive's schedule, keeps them engaged, and is essential to the initiative's success. Each week, you will get push back from groups who are busy "fighting fires" and may not want to prioritize your process documentation initiative. Utilize this meeting to place executive pressure on those groups to ensure commitment is kept. The meeting agenda should be limited to the number of completed processes vs. goal and the support needed in the upcoming week. Do not show process maps or workflow diagrams – this is too much detail.

Clearly & Regularly Communicate with Senior Management

Clear, regular communication with senior managers in the business unit should be established early. These people will have the power and influence to allocate the resources you need and to support your overall initiative. The initial communication should clearly state the benefits they will receive as a result of this initiative. When possible, take the extra 15 minutes to identify each major group's current process pains and show how this initiative will help support its improvement. Talk to someone who has "been around" – you don't necessarily need management input for this. Ongoing communications should state progress (number of completed processes vs. goal) and identified opportunities when available. This open two-way communication will promote trust and a cooperative environment and identifying potential opportunities will get your emails read.

Dates and Deliverables Create Urgency

Documentation for the Greater Good

No one wants to do documentation for documentation's sake. A process documentation exercise spanning an entire business unit must have clear and compelling benefits such as: identifying and prioritizing process improvement projects; enabling organizational consolidation, standardization, and load balancing; meeting regulatory and compliance requirements (such as Sarbanes-Oxley). These objectives will also determine the level of detail sought and any specific requirements of the exercise.

Dates and Deliverables Create Urgency

Setting dates and deliverables for your initiative is critical to ensuring you receive the support needed to be successful. Create a plan incorporating all of these checklist items (deliverables are explained in each checklist item). Work backwards from any hard dates to gauge the degrees of freedom you have to work with – the size of your team, the length of time to complete, and the level of detail and analysis required. The project plan will be a living document while you clarify the number of processes involved, the team you can mobilize, and any logistical considerations (such as

availability of key staff or no-go times like financial yearend). Ensure that key stakeholders are supportive of your planning. Their feedback at this stage may further calibrate the objectives, duration, and team size for the initiative.

Have a Passion for Communication

Plan the frequency, objective, medium, message, and style for audiences including senior management, process owners, your team, subject matter experts, and rank-and-file staff. It is recommended you have the following sets of communication, meetings, and reviews:

- Meeting: Weekly 30 minute meeting with executive sponsor (Checklist Item #1)
- Meeting: Weekly 1 hour meeting with core team (Checklist Item #8)
- Email: Weekly management summary (Checklist Item #1)
- Email: Bi-weekly status check for core team (Checklist Item #8)
- Email: Status check of facilitators progress by project manager (Checklist Item #7)
- Review: Weekly review of prioritized list of processes (Checklist Item #8)
- Review: List of documented and signed off processes (Checklist Item #7)
- Review: Daily review for consistency by project manager (Checklist Item #8)
- Review: Daily progress review (Checklist Item #7)

Find the Right Documentation Tool - is yours up to the task?

The Right Tool for the Task

Obviously, you'll need a tool to document your processes. Be sure your current tools are capable of supporting your initiative and do not create significant additional work. The more difficult it is to get started with a tool the more push back and resistance you will receive. The tool should meet all of the following requirements:

- Simple enough for business users without significant training
- Minimal setup required
- Quickly deployable to a large number of users
- Supports collaboration by multiple users on one process at the same time

- Multiple views of process information for different audiences
- Provides a standard format for gathering process details
- Easy version controls to manage sign offs
- Provides a sustainable repository of process documentation

Create a Standard Format based on the Objective

Establishing a list of standard formats is necessary and helps to speed up documentation times. Make sure to follow your organization guidelines but like most things, this list is best kept short & simple. Most documentation initiatives only need the following information:

- | | |
|--|---|
| <ul style="list-style-type: none">• Activity Name• Associated Milestone• Participant• Owner | <ul style="list-style-type: none">• Brief Description• Subject Matter Expert• Key Inputs & Outputs• Problems |
|--|---|

Build Your Company's Process Chart

The Process Chart Defined

Most organizations view themselves in terms of their organizational chart. Instead build a process chart to organize your company by activities. A process chart details the key processes that make up a company's Value Chain from start to end and organizes your company against the key activities of those processes. Remember to organize by functional groups such as customer dispute or new product engineering instead of departments such as operations or engineering. Be prepared to dispense with notions of geographical, functional, and product based groups that may be firmly entrenched in your organization's culture. Your process chart will facilitate your process mapping by identifying where resources are needed and help you identify participants for the 2x6 workshops, described in item #7.

Define the Value Chain

Start with a short workshop for the senior managers – two hours should be enough. Capture the Value Chain – how does your organization create value? Break the value chain down into the high level activities representing groups of processes. Make sure to capture categories (such as manufacturing, customer service, etc.) and key owners of those processes. At the end of this workshop, make sure you have approval of the value chain as it will guide the rest of your documentation initiative.

Identify your Process List

Armed with the list of process categories and key owners, approved by senior management, you need to determine the full list of processes that you will be documenting. This may require separating the categories to the next level down, perhaps the process supervisors. A series of focused, one-hour meetings, one for each distinct area within the business unit should be sufficient – again make certain to obtain management validation at the end of each session. Remember, you are looking for processes that support your value chain. Processes such as minor exception processes or data entry processes for a tool are not needed unless they significantly impact the value chain.

An Owner for Every Process

Finding the Process Owner

This is most likely a new concept in your organization – ownership of processes, rather than business units, particularly where processes cross functional lines. When processes cross functional lines it may be difficult to identify an owner. You may find that multiple managers are seen as the process owner. In this situation, use your key objectives to determine who the process owner becomes. For example, if identifying opportunities to cut costs is a key objective, assign ownership based on whose functional unit requires the most resources.

With Great Power comes Great Responsibility

Make sure process owners understand they have responsibility for signing off on the documentation generated and sponsoring subsequent process improvement

projects. This means they must be available on a daily basis to review, provide feedback, and give sign off for the processes they own. They will also be required to ensure that the documentation remains up-to-date.

The 1 Hour Training Bootcamp

Find your Facilitators

Before you can begin documenting, you must identify facilitators to drive the 2x6 workshops (explained in the next section) where the actual documentation is done. Enlist process-savvy staff from across the unit – ideally green- and black-belts, business analysts, and SME's with previous project experience – which will speed up your delivery, encourage the cooperation of junior management and rank-and-file staff, and create a broader level of expertise and process understanding across the organization.

The 1 Hour Training Bootcamp

The next steps is to level-set and train your team of facilitators. Keep to the top 10 facilitators per process category. If you need more facilitators for your project, these first ten can then turn around and train the next level of facilitators. A one-to-two hour workshop session should be sufficient to provide a summary of the project, its objectives, the project plan, and tools training. It is critical to gel this team with a sense of purpose and excitement! Empower them with the potential benefits to the company and how they will be instrumental in achieving them.

A 2x6 Workshop for Every Process

The Workshop Overview

Armed with a complete list of the processes to be documented, you can now schedule the detailed mapping workshops that should be 2 hours long and have no more than 6 participants. It is recommended to plan for no more than two workshops per day per person to allow some time for any follow-up research if necessary. The facilitator, process owner or supervisor, and the most experienced SME's should attend. The facilitator should not be the process owner or executor but instead is a neutral party who can help move discussions forward and ensure the documentation is understandable to an outside party. In the 2x6 workshop, you must create the process map and workflow diagram during this session. Do not leave creation of the process diagram for afterwards. Your deliverables for a 2x6 workshop are a completed process diagram following the standardized format and approval from the process owner.

The Simple Math Plan

Documenting the process across your objective is now a matter of simple math. The more processes you have, the more 2x6 workshops you will need. The first step is to start at the highest level, your business's Value Chain, with your first 2x6 workshop described in item #4. Next, step down through your process categories to identify the key groups of processes. Finally, step down to individual processes until you get to the level of detail you need. Each step downward should utilize a 2x6 workshop. Based on the number of processes you need to document and sticking to the two 2x6 workshops per day rule, you can determine the time frame and number of participants needed.

Get Immediate Signoffs

At the end of each 2x6 workshop, the process owner must sign off that the process and supporting information has been correctly captured. As groups of processes are documented, they should be signed off by more-senior process owners. It is critical

to capture sign offs immediately at workshop's end. Otherwise, you will be forced to reengage process owners and experts resulting in longer turnaround times.

Sort out the Good, the Bad, and the Ugly

Ensure Consistency

The core team should meet weekly to compare notes, share problems, and ensure consistency of documentation. This discussion will lead to the 30 minute meeting with your executive sponsor. The project manager should check the status of the documentation on daily basis. This check can be quick (about 30 minutes) and seeks to ensure that the standard format is being followed and processes are being signed off on after each 2x6 workshop. Make sure you are watching for consistency and signoff. If this does not happen, you can quickly end up with documentation in dozens of formats with no firm idea about which has been approved on and which has not. Standardization and signoffs are two of the biggest delayers in a large documentation initiative!

Prioritize Continuously

As processes are documented, the results should be analyzed against the objectives of the initiative. Develop a matrix utilizing weighted criteria to create a prioritized list. The weighted criteria should match the objectives of the initiative and be approved by senior management prior to conducting any 2x6 workshops. Prioritization should happen on a weekly basis at the core team meeting. Individually, each member of the team should prioritize their list of processes at least twice a week to ensure any follow-ups are addressed before the weekly meeting. Attempting to collate all this information for hundreds of processes will quickly become a daunting task. Do not wait for the end of the initiative but prioritize continuously.

Organize a Project Completion Day

Present the Outcome

When all the process documentation is completed and the results analyzed, the output should be presented to the executive sponsor and senior managers. Your presentation should include: summary of the initiative & documentation results, recommendations for follow-up activities, the numerous quick wins that will likely have been identified as a result of visually capturing and then analyzing these processes together with the owners, supervisors, and SME's.

Congratulate the Team!

This kind of initiative is not a trivial exercise – make certain to congratulate the team on their success, thank them for their efforts, and encourage their participation in subsequent program activities. The real movers and shakers will be obvious to you and their efforts as change agents can be enormously valuable in the future – these are people who “get” process and speak the vocabulary of change. Celebrate their success – cake is preferable but cookies will also do.

Set the Guidelines for Sustainability

Maintain Your Process Repository

You now have a compilation of process documentation with process diagrams, inputs and outputs, problems, and descriptive information. Now you need to ensure that this documentation is maintained and is easily accessible. Ensure that supervisors and SME's have access to this documentation (which is ideal for staff training) and that the process owners take ongoing responsibility for keeping this information current and useful. The ideal solutions should be:

- ✓ Easily accessible – not requiring additional tools or systems
- ✓ In a central location accessible from anywhere in the company
- ✓ Quickly retrievable to facilitate usage in meetings or business planning
- ✓ Maintainable without continuous effort

Keep the Momentum Going

The combination of having a process view of your organization, current documentation, and raising process awareness will naturally lead to a large number of obvious process improvements. You may find that you've identified suitable candidates for further process education and talent development and have a willing pool of people to get involved. Keep up the momentum, empower staff to realize quick wins, and encourage people to get involved. Good luck!

SIX SIGMA FACTSHEET

WHY SIX SIGMA:

Quite simply because it's very hard to argue against the benefits of making improvements.

Failure to continually strive for improvements will lead to a culture of stagnation and standing still.

While that may make for a peaceful working day – it gives your competitors the chance to leave you behind.

GOAL:

The Six Sigma Objective is quite simply to Minimize Variation. The target of minimized variance is all of the organizations critical processes. Culturally, this means needing to learn how to be nearly perfect in executing key processes because flawless execution is critical to both customer satisfaction and increased productivity.

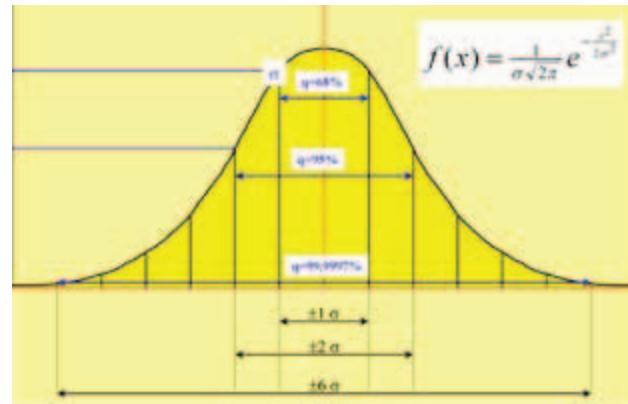
A simple lesson in Statistics:

1. A **defect** is any incident or event that fails to meet the customer's expectations.
2. **Standard deviation** is the measure of variation within a process. It is indicated by the symbol, sigma (s).
3. Typical deviations can be demonstrated by looking at a "bell curve". The distribution of defects on a bell curve shows that:
 - 68% of defects fall within 1 Sigma (s) of the mean (average)
 - 95% of defects fall within 2s of the mean
 - 99.99997% of defects fall within 6s of the mean

Six Sigma may sound mystical, but in reality it's a mathematical formula. "Sigma" is a statistical term indicating to what extent a "process" varies from perfection. The number of potential defects per unit is multiplied by the number of units processed. That answer is divided into the number of defects actually occurring and then is

multiplied by 1 million. The result is the number of defects per million operations. The ultimate goal for Six Sigma is to reach level 6.

Six Sigma level	Number of defects per million opportunities
1.0	690,000
2.0	308,000
3.0	66,800
4.0	6,210
5.0	320
6.0	3.4



The Greek Symbols for Sigma are: Upper Case Σ Lower Case σ

Did you know: Sigma is the 7th last letter in the Greek alphabet

SERVICE INDUSTRIES:

The Six Sigma concept grew from the Motorola organization in the mid 1980's. It is initially fairly simple to picture how defects can be measured in a manufacturing business. However, there are plenty of things to count measure and benchmark regardless of the type of business, whether it's an attorney's office or a car rental company.

NO NEW FUNDAMENTALS:

The concepts of Six Sigma are not to be considered new age. Talk to customers and find out what the defects are. Work on big errors first. Try to decide how they happen and how to correct them permanently.

There are a variety of tools and methodologies that would work in conjunction with such a goal (e.g. ISO Quality standards, Adherence to standards, ITIL in IT Service

Management, Kepner Tregor for Problem Solving).

CERTIFICATIONS (People Power):

There are a variety of recognized levels of proficiency in the Six Sigma philosophy.

The Master Black Belt; has technical expertise in the Six Sigma process as well as statistical methods. Typically an individual from a Six Sigma consulting firm who instructs the Black Belts on the Six Sigma process.

The Black Belt; The Black Belts of the Six Sigma process are the leaders of process change. Where the executive level may decide what needs to be done, the Black Belts decide how to do it. They must have both management skills and technical skill to work with the Green Belts and others to bring the projects to fruition. Because of the importance of this position and the details involved, Six Sigma is their only responsibility.

Green Belts; The Green Belt position works closely with the Black Belts to decide how to complete the project. They are individual who are trained in Six Sigma but are also “close to the action” so they can provide the necessary constructive input to improve the process

HOW TO IMPROVE (Process Power):

Six Sigma defines a 5-step process towards making improvements.

D - **Define** what the problem is (in numerical terms)

M - **Measure** the current levels of performance

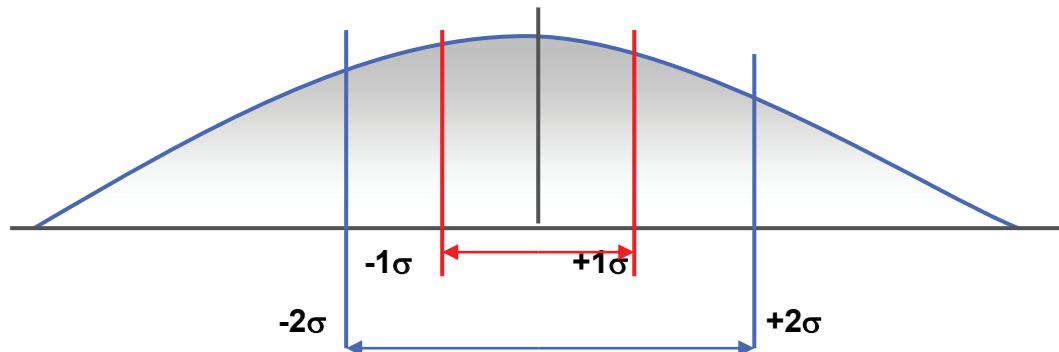
A - **Analyze** and determine where the problem lies

I - **Improve** the situation

C - **Control** the new process to ensure continued better performance

Is anyone using Six Sigma?

Motorola	1986
Allied Signal (Merged With Honeywell in 1999)	1994
GE	1995
Honeywell	1998



Imagine you work in a pizza delivery business. If you deliver pizzas on time 95% of the time you are at a 2 sigma level. If that sounds pretty good, how about on-time deliveries of 99.73%? That's only operating at a 3 sigma level. In order to be at a six sigma level you would have to deliver on time 99.9997% of the time. So that means for every million deliveries made, you would only be late 2 or 3 times. Now that's a good pizza delivery business!!

Bottom Line

Six-Sigma can work for anybody. It's a management philosophy based on FACTS not emotion. Six-Sigma is a known quantity; however for best results an open and safe environment must be encouraged.

SIX SIGMA STARTER KIT DOCUMENTS

Introduction

Are you surprised at the mention of business processes in a strategic context? Then you may be surprised to know that the methodology was developed originally for use at a strategic level. Like so many great ideas, business processes have been relegated to the mundane – suffering from the contempt of familiarity! Everyone is an expert!

However, the term business process is used more often than not to refer to only one of a whole range of techniques for modeling an organization. Many so-called business processes are procedures in disguise.

This document seeks to redress the balance and re-introduce business process modeling as a key strategic tool.

What is a business process?

Firstly let us start with a common understanding of the term business process as used in this document - “a sequence of linked activities that recognizes a need (external or internal to the company), takes the necessary steps to deliver a solution, and instigates appropriate complementary action”. An example can be found at Appendix A together with a list of conventions.

Strategic Planning

The four main stages to the strategic planning process are generally accepted as:

- Analysis
- Strategy creation
- Strategic decision
- Implementation.

These are interdependent and hence tend to be iterative. Planners have a number of tools and methodologies to help them along the route to good strategic decisions.
(Examples at Appendix B)

However, as evidenced by a number of surveys, a major concern is the difficulty of achieving successful implementation and expected benefits. Failure rates between 50% and 75% have been quoted. A dismal situation!

The cause of this problem? Many blame lack of senior management commitment. After several years designing and operating strategic planning processes I blame sheer complexity and lack of enabling structure. On the left are a few examples of factors to be considered. Many are interdependent with values and influence that are dynamic – if not volatile. Forecasting future interrelationships of both internal and external influences is no easy task.

Strategic Analysis

Traditionally, a company reviews at regular intervals its overall strategic competence, using a range of techniques – some examples at Appendix B. These techniques may be applied company-wide or to specific strategic options. In either case, the danger is that the analysis is carried out on too broad a scale, without sufficient focus on implementation issues. The generally poor success rate in achieving planned benefits proves the inadequacy of current methods.

The strategic tools themselves are not at fault. They are extremely effective in providing comparative evaluation of financial and other factors affecting company strategy. Scenario Planning is a particularly popular and useful tool. However, most tools concentrate on the commercial/financial impacts on the whole business or on a significant sector of it. They leave two major gaps: they frequently fail (1) to identify operational nodes that cry out for strategic review, and (2) to define adequately the link between strategy creation and operational implementation. On the one hand significant opportunities for performance improvement may never come to light, on the other; those that are addressed may not deliver expected benefits. Too often excellent strategic plans are not well grounded in the realities of operational practicality.

So what is the answer?

Business Process Modelling

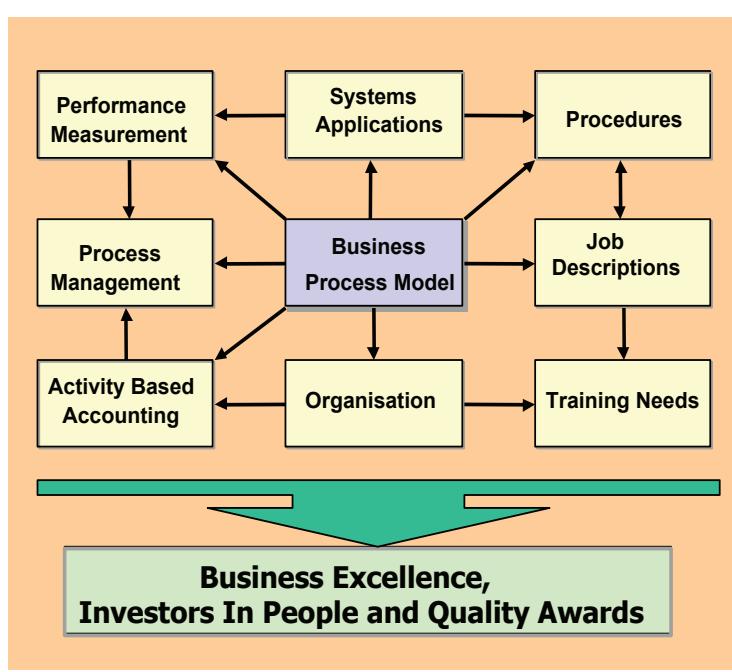
The concept of a business process is described in Appendix A, which includes examples of a business process modeling formats.

Business Process Modelling is the keystone for Business Process Management, which uses process as the common denominator for analysis and control. The

business process model provides a powerful strategic underpinning for all managerial activity.

A business process model provides a *designed* logical structure that enables the optimization of the efficiency and effectiveness of work across the organization. It makes visible all work sequences, interactions, and interdependencies. Thus it supports a discipline, which avoids unnecessary duplication, optimizes workflows through business operations, and ensures the enablement of management and quality controls. Systems and procedures are linked to this framework.

A comprehensive process model will support efficiency optimization both horizontally by business process and vertically by function or department. [In many approaches to change only one or the other dimension is addressed.] As shown left, a process model can be used in several ways:



1. As an aid to designing roles and hence as a basis for job descriptions
2. Through the provision of a comprehensive picture of the business, as a foundation for organizational development and strategic planning
3. With (1) and (2), as a means of identifying skills requirements, skills shortages and training needs

4. As a "road-map" for determining computer systems applications requirements
5. As a framework for operational procedures, for managing human/machine interfaces, and for planning security and anti-fraud measures
6. For identification of key performance factors and the determination of suitable measures by which to control quality and throughput
7. As the fundamental structure for Activity Based Costing/Accounting
8. Combining (6) and (7), as a full process management system

9. As a basis for identifying and testing the means of delivery of new products, as well as providing a structure for the product development process itself
10. With the right process support software, to simulate and test different operational options and scenarios, identifying probable delivery timescales and resource consumption in each case.

The comprehensive use of a process model in these ways constitutes a very powerful business tool. It provides a foundation for Six Sigma, ISO9000 series, European Quality and Investors in People awards, as well as supporting NVQs.

NB Much of the above can be achieved with the aid of a simple drawing tool or flow-charting tool to capture the process diagrams. However, to reap the full benefit of process modeling, specialist tools are required - especially for simulation exercises. Some 300 applications are available to support various aspects of business process development and management.

Business Process Modelling as a Framework for Strategic Analysis

A process model converts business complexity into a series of structured representations that can highlight:

- critical nodes of activity
- opportunities for IT systems rationalization and integration
- the impact of external factors on specific areas of business operation and the knock-on effects,

And enable:

- the focusing of performance indicators (measures, benchmarking)
- the distribution of critical success factors
- realistic comparative appraisal of strategic choices (in the light of predictable impact on operations)
- a check on the comprehensiveness of project implementation plans
- optimum prioritization of action

A process model also provides an orderly approach to strategic planning itself.

Firstly, to dispel any anxiety about the effort required to create a process model, a strategic model does not need great depth of process analysis. Although the ideal would be to use the higher levels of an existing process model, it may be expedient

to create a model specifically for strategic purposes. The time factor need not be prohibitive. In fact investment is likely to improve significantly the speed of response to dynamic situations.

Creating a strategic Process Model

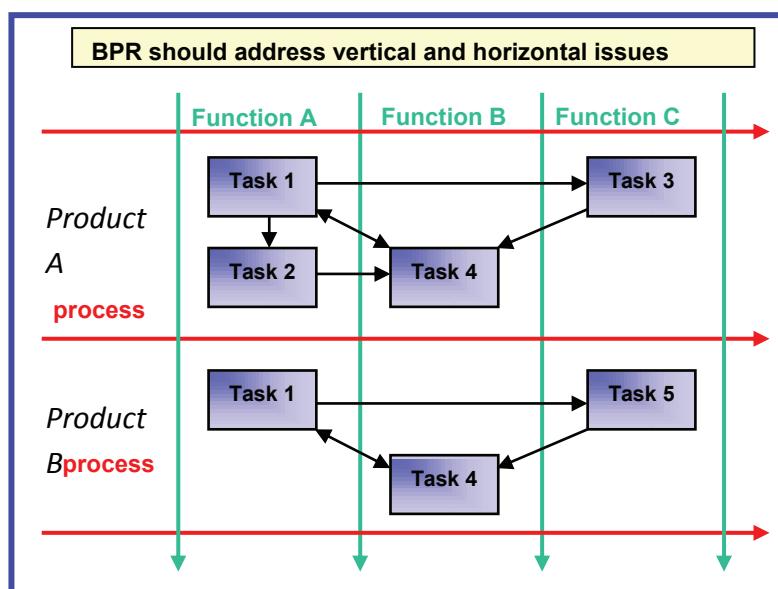
Appendix A includes examples of three types of process diagram: a business process map, a process hierarchy, and an enterprise model. For strategic analysis it is likely that all three perspectives will be required. However, detail is not required and the examples show the correct level of detail for most strategic purposes. In terms of the process hierarchy this is usually to the fourth level of decomposition. A series of business process maps covers activities necessary to achieve key external deliverables (products and services) or internal requirements such as a procurement process. The maps capture the end-to-end activities required to achieve particular objectives and may span the functional organization. They enable the optimization of the horizontal workflow.

An enterprise model presents a comprehensive picture of all interfaces between functions. This gives the vertical perspective for all deliverables and facilitates the optimization of the functional (or vertical) organization.

A process hierarchy provides a view of the overall structure of the model and enables a very logical activity numbering scheme.

The next stage: mapping significant factors

During the creation of the strategic process model, patterns will start to emerge, giving an enhanced understanding of the way the business operates. The next step, mapping significant factors against tasks, will



enrich that picture. For example, mapping IT applications against tasks across the

whole organization will indicate (a) the balance between automated tasks and manual intervention, (b) any unnecessary duplication of systems, and (c) any systems integration issues. (See Appendix C1.)

Mapping staff numbers & costs can produce some surprising insights. Unless Activity Based Accounting has been implemented and aligned with the process model, identifying staff by task may require an element of estimation. Traditionally accounting systems track staff and other costs by functional hierarchy rather than process. Surprises will occur particularly where estimates have been necessary. The exercise will reveal where most effort is being expended and therefore which tasks or processes would yield most benefit if performance could be improved.

Similar principles apply when mapping other aspects such as Critical Success Factors, capital costs, location, performance & quality indicators, and in fact any of the factors mentioned on page 2. The analysis by task will highlight the importance of a factor to business operations or conversely the significance of any particular task. The pattern that emerges is not always what we anticipate.

Further analysis

Any of the strategic analysis tools mentioned in Appendix B can be used in conjunction with appropriate sections of a process model. The analysis empowers and facilitates strategic decision. It enables decision-makers to identify very clearly how their strategies will impact business operations and which business operations are in need of strategic review. The potential for change, the ease or otherwise of its implementation and its benefits can be determined. New products and ventures can be evaluated in the context of their impact on existing business processes and of their inherent process requirements.

The quality of strategic decisions still depends upon the skills and intuition of the decision-makers. However, the value of the information available to them will be much improved. Competing strategies can be appraised with a realistic understanding of resource requirements for implementation and on-going operation. This must improve the odds in favor of delivering success. (Appendix C2 demonstrates one type of analysis.)

Strategy Implementation and Benefits Delivery

Because the strategic decisions have been made with full knowledge of their impact on business operations, implementation planning and prioritization is easier. The processes involved have already been identified. Much of the relevant information about them has been gathered.

Implementation is linked from the start to business processes. Equally, because the impact on business operations has been identified early, it is possible also to determine at an early stage which groups of staff will be affected. Change management practices can be introduced sooner and therefore have a much greater chance of success.

Where it is necessary to re-engineer processes, the task is simplified through the knowledge of existing processes. The transition can be planned with greater precision. The functionality of any new or enhanced computer systems can be checked against process requirements well in advance of going live. Systems or procedures can be changed to accommodate mismatches. Last minute unpleasant surprises can be avoided.

Expectations of benefits too, having been linked to processes/activities, are more realistic. The method of achieving the benefits is better understood and progress against target can be more easily monitored.

Conclusion

From beginnings that were much more management focused, business process modeling has grown into a specialist IT development tool. The proliferation of esoteric systems applications to support process modeling (230 at last count) is evidence of the shift in emphasis. Its value as an IT tool is not in any way disputed. However, the consequent loss of “process thinking” in the general management and strategic development arena is sad and potentially costly.

One major benefit of a process model was its use as an aid to communication between functional specialists. The judicious choice of terminology enabled them to understand each other’s problems and to develop methods of improving the

BUSINESS PROCESS MANAGEMENT

management of “white space” between departments. Now that process diagrams have become so detailed, they are comprehensible only to experts in the field. They have lost that valuable attribute.

Business process modeling can still play a powerful role in strategic management, if we let it. This article has already demonstrated its huge scope as a foundation for management structure and as a framework for strategic planning.

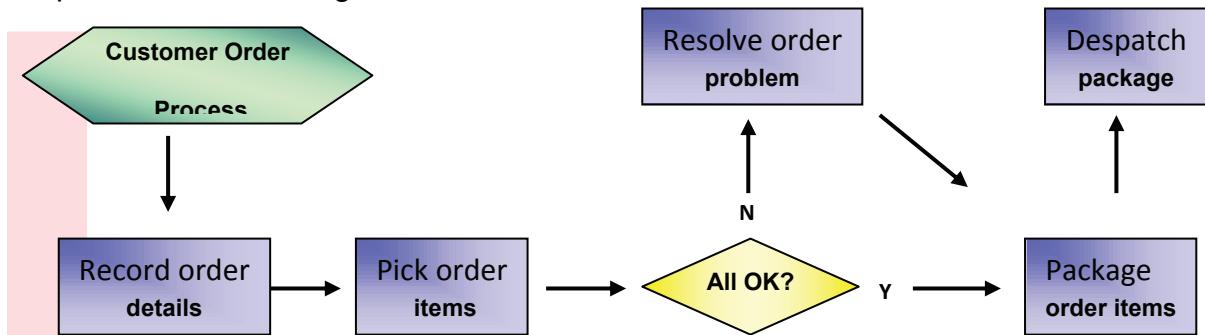
Unless positive action is taken to remedy this trend, strategic management will be missing out. The control of the higher levels of the business process model needs to be returned to the domain of general management rather than IT specialists. The detail required for IT purposes can be added after the strategic structure of the business has been decided.

Appendix A

Definition of a business process + example

A business process can be described as a sequence of linked activities that recognizes a need (external or internal to the company), takes the necessary steps to deliver a solution, and instigates appropriate complementary action.

An example might be a simple provisioning process – it recognizes a need through the receipt of a customer order form; it records details, it picks the ordered items from store, resolves any problems, packages the items, and dispatches the package; it initiates the complementary processes of invoice preparation and customer service follow-up. This could be diagrammed as follows:



A business process describes what needs to happen, not how it is done. It should be comprehensible to everyone. Hence technical terms and jargon are avoided.

Diagram conventions

In preparing business process flow diagrams such as the one above, certain conventions and assumptions are applied.

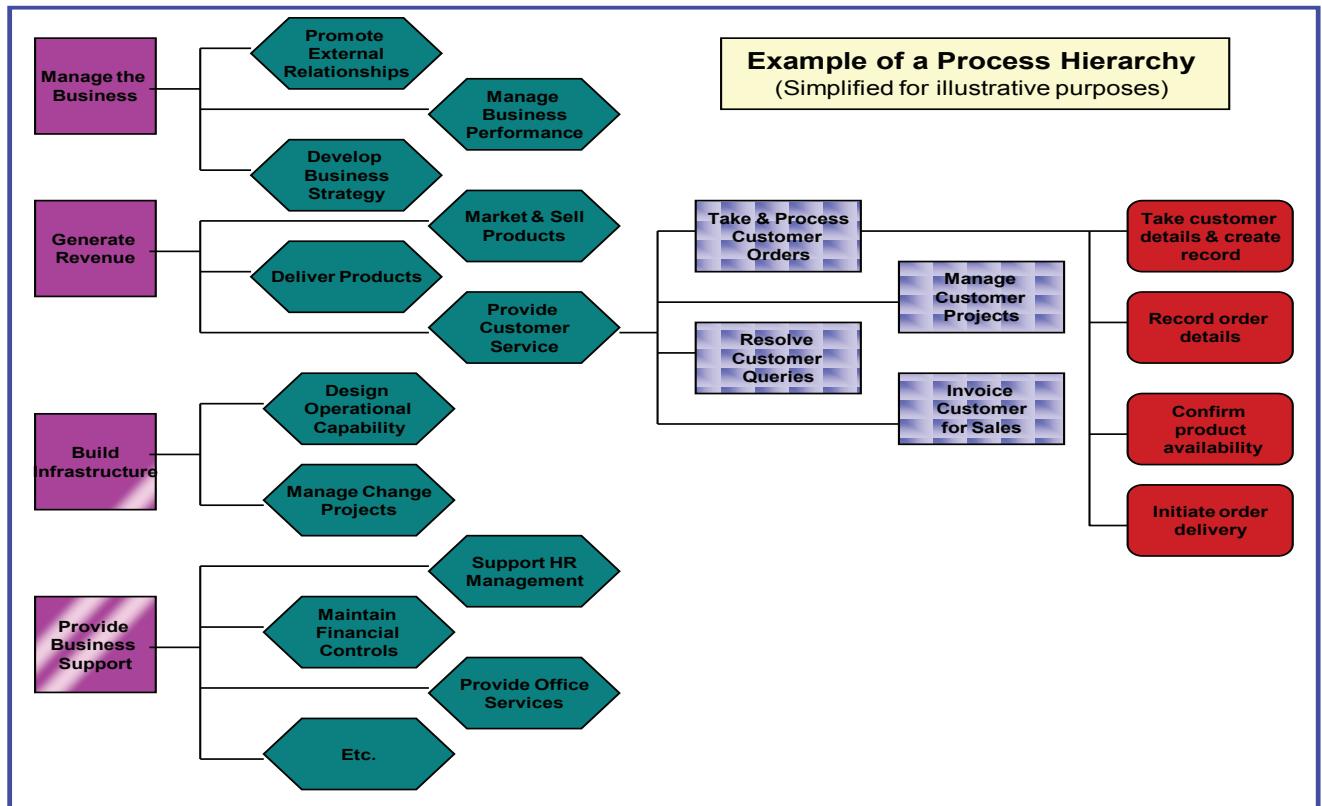
- The diagram covers the end-to-end activity in respect of a specific type of deliverable.
- Information is collected at all appropriate points and is made available to all activities that need it. Recording of or access to information will be shown on the diagram only when the activity represents a key point in the process – generally the instigation of further activity.
- Similarly, management of activities (including environment, resourcing, quality and throughput) is implicit throughout the process. Only key interactions with the Work Management Process will be made explicit.

BUSINESS PROCESS MANAGEMENT

Other Types of Process Diagram

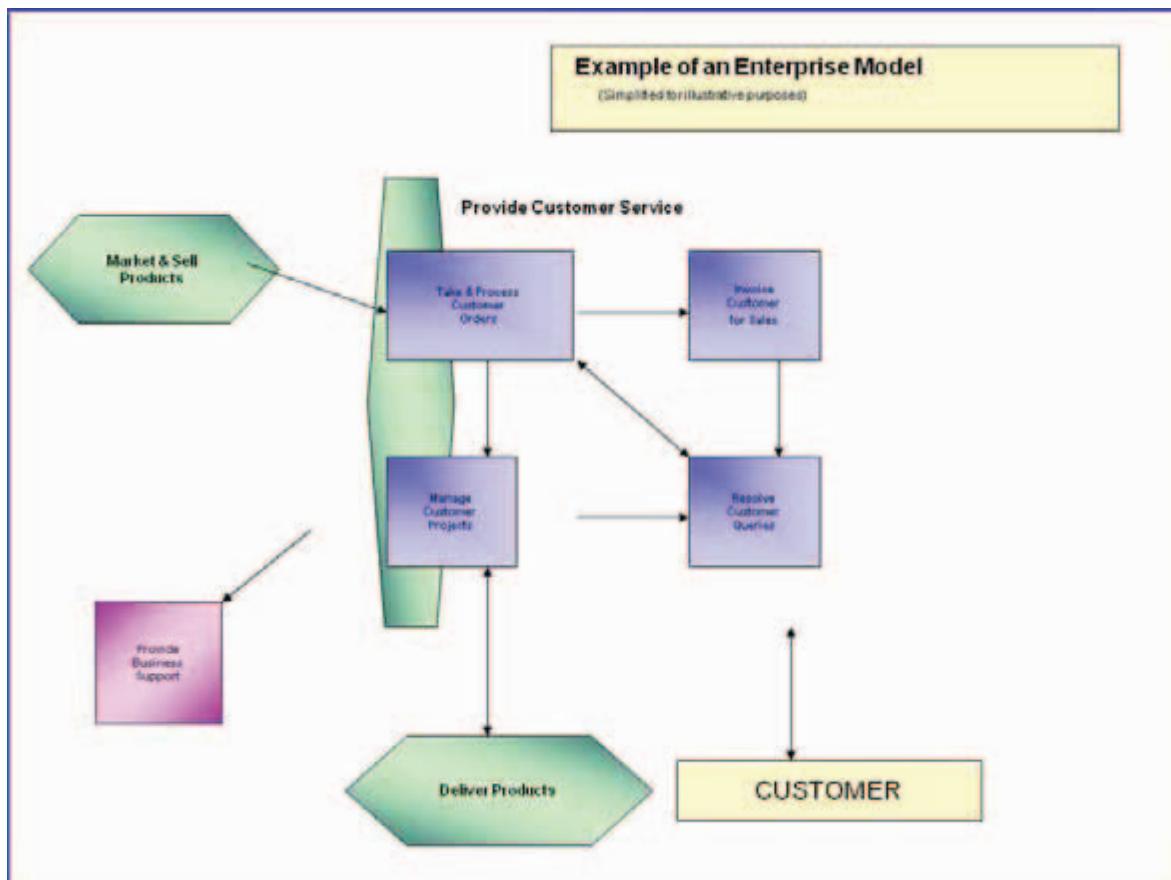
3.1 A process hierarchy shows how business operations can be broken down into finer and finer detail. In order to run the business it is necessary to Manage the Business, Generate Revenue, Build Infrastructure, and Provide Business Support.

To Generate Revenue

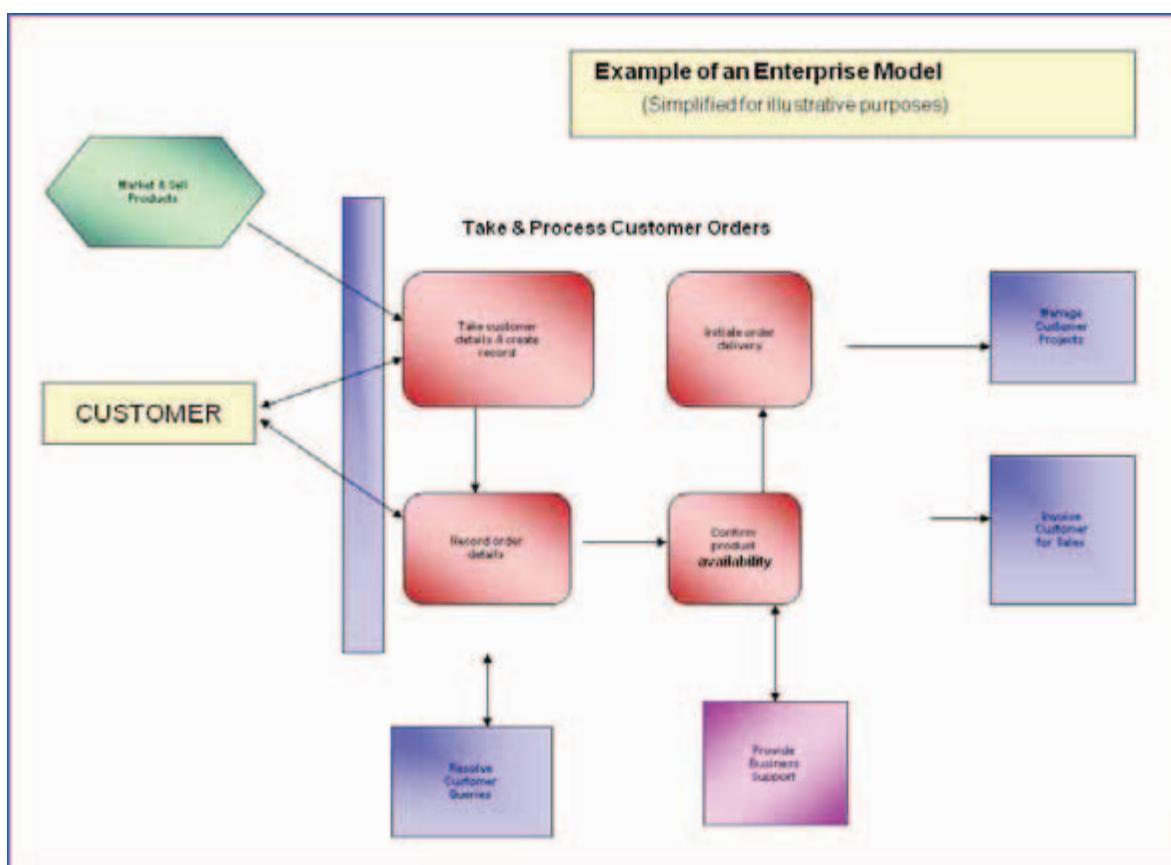


3.2 An enterprise model shows how elements within a given business process interact with each other and with external processes. Its main value is in the analysis of those interactions. The model can be drawn at any level, as demonstrated in the following two examples.

BUSINESS PROCESS MANAGEMENT



3.2 cont. Example of enterprise model at the next lower level of detail.



Appendix B

Tools for strategic analysis

The following is a selection of some of the better known tools used in strategic analysis.

- **SWOT and PEST analyses** may be used in conjunction to evaluate the whole business, a single department, or a particular strategy in terms of its **Strengths, Weaknesses, Opportunities, and Threats** and taking account of the **Political, Economic, Social, and Technological** implications.
- **Scenario Planning** models the answer to the question “what will the financial outcome be if we follow this strategy and these particular conditions apply?”. Usually the financial implications of a series of alternative scenarios will be examined in detail. A variety of analytical techniques may be used for this purpose, including:
 - *relevance tree*: this technique subdivides broad topics into increasingly small subtopics with corresponding refinement of detail. The output is a pictorial representation with a hierarchical structure.
 - *nominal group technique* is a form of multiple voting used to assist expert groups in reaching consensus through progressively reducing the pool of candidate issues or strategies. The aim is to isolate the 3-5 most likely scenarios so that analytical effort can be focused accordingly.
 - *the Delphi method*, likewise, is a tool for group communication. It allows experts to deal systematically with a complex problem or task through the use of questionnaires that elicit and develop individual responses to the problems posed and enable the experts to refine their views as the group’s work progresses. The aim is to overcome the disadvantages of conventional committee action.
 - *cross-impact analysis* aims to track interdependencies between events and conditions. It provides a mechanism for discovering mutually exclusive or conflicting outcomes and for analyzing conditional probabilities: for example the likelihood fulls employment and a low rate of inflation.

- **Balanced ScoreCard** methodology translates an organization's mission statement and business strategy into specific, quantifiable goals and monitors its performance against these goals. It analyses performance in four ways:
 - *financial analysis* includes assessments of measures such as operating costs and return-on-investment;
 - *customer analysis* looks at customer satisfaction and retention;
 - *internal analysis* looks at production and innovation, measuring performance in terms of maximizing profit from current products and following indicators for future productivity;
 - *learning and growth analysis* explores management effectiveness in terms of employee satisfaction and retention, and information system performance.
- **Six Sigma** is a statistically based measure of quality that strives for near perfection (no more than 3.4 defect parts per million). Strictly it is more a business policy than a tool for strategic analysis. However, the tests to gauge the level of compliance with the Six Sigma objective may reveal the need for strategic action to remedy any shortfall.
- **Strategic Gap analysis** evaluates over a given timeframe the difference between (a) the forecast levels of income and expenditure assuming no change to current business plans and strategies, and (b) the levels that the business ought to be achieving if it is to fulfil shareholder expectations. The difference is the gap that needs to be filled by new strategic initiatives.

Appendix C1

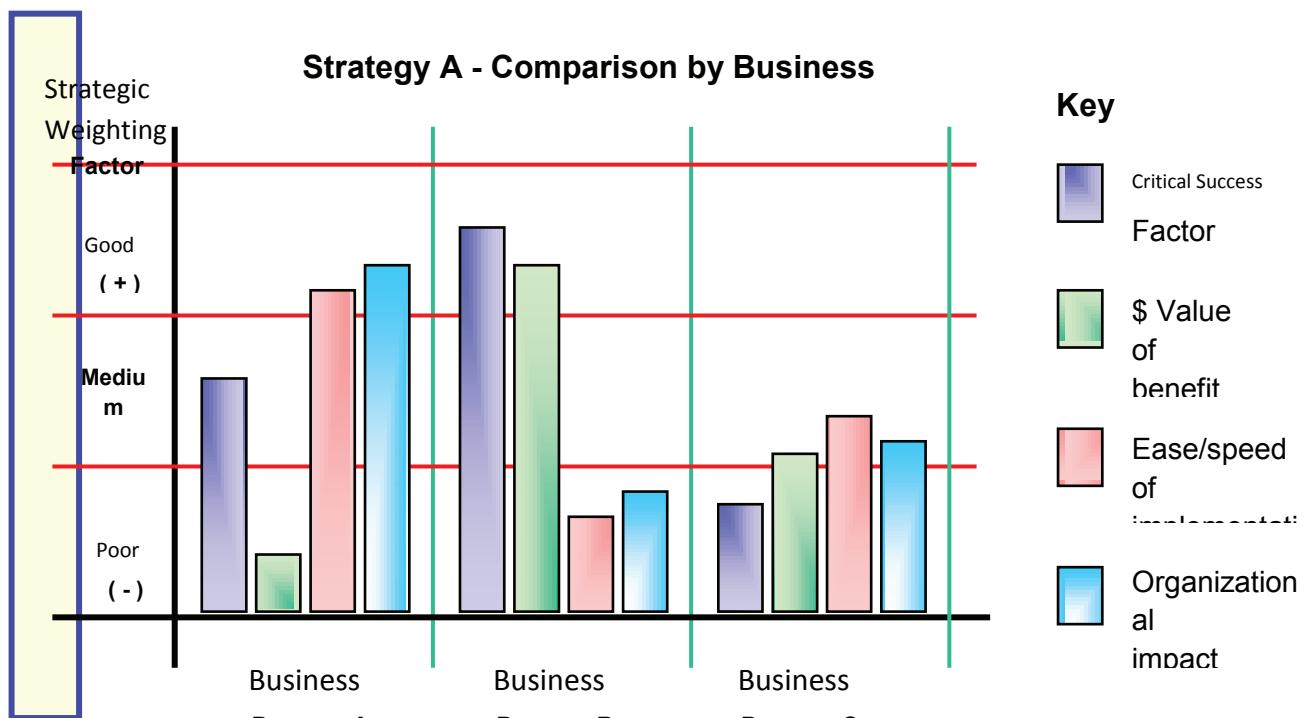
This analysis reveals a number of points:

Systems to Process Analysis														Total systems	Total versions
Location	1				2				3						
Product	A	B	C	D	A	B	C	D	A	B	C	D			
Process item															
Take & Process Customer Orders														4	6
Take customer details & create record	m/a1	m/b1	m/a1	a2	m/d1	m/b1	m/d1	a2	m/b2	m/b2	m	m	3	5	
Record order details	m/a1	m/b1	m/a1	a2	m/d1	m/b1	m/d1	a2	m/b2	m/b2	m	m	3	5	
Confirm product availability	m	m/c1	m	a2/c1	m/c1	m/c1	m/c1	a2/c1	m	m	m	m	2	2	
Initiate order delivery	m	m	m	a2	d1	m	d1	a2	m	m	m	m	2	2	

Key: m = manual; a1,a2, b1, b2 = versions of a systems applications

- systems support for the 4 products in 3 locations ranges from nil (totally manual) at one extreme to fully automated at the other
- for this one process the company uses 4 different systems applications in 6 different versions
- there is no consistency across locations even for the same products
- Standardizing to best practice could reduce costs substantially by eliminating manual intervention in operations and by removing the need for IT staff to support so many applications and versions.

Appendix C2



BUSINESS PROCESS MANAGEMENT



SIX SIGMA SHORT OVERVIEW

Six Sigma – In A Nutshell!

A discussion document

Six Sigma is a process-focused methodology designed to improve business performance through improving specific areas of a strategic business processes.



Key Concepts

Six Sigma is different from Quality Programs of the past:

- Six Sigma is customer-focused. The customer's needs are the primary focus and top priority.
- Six Sigma projects produce major (measurable) returns on investment. For example, at GE the CEO, Jack Welch, reported, "that in just three years, Six Sigma had saved the company more than \$2 billion."
- Six Sigma changes how management operates. Through the introduction of new tools and new approaches, management is challenged towards new thinking.

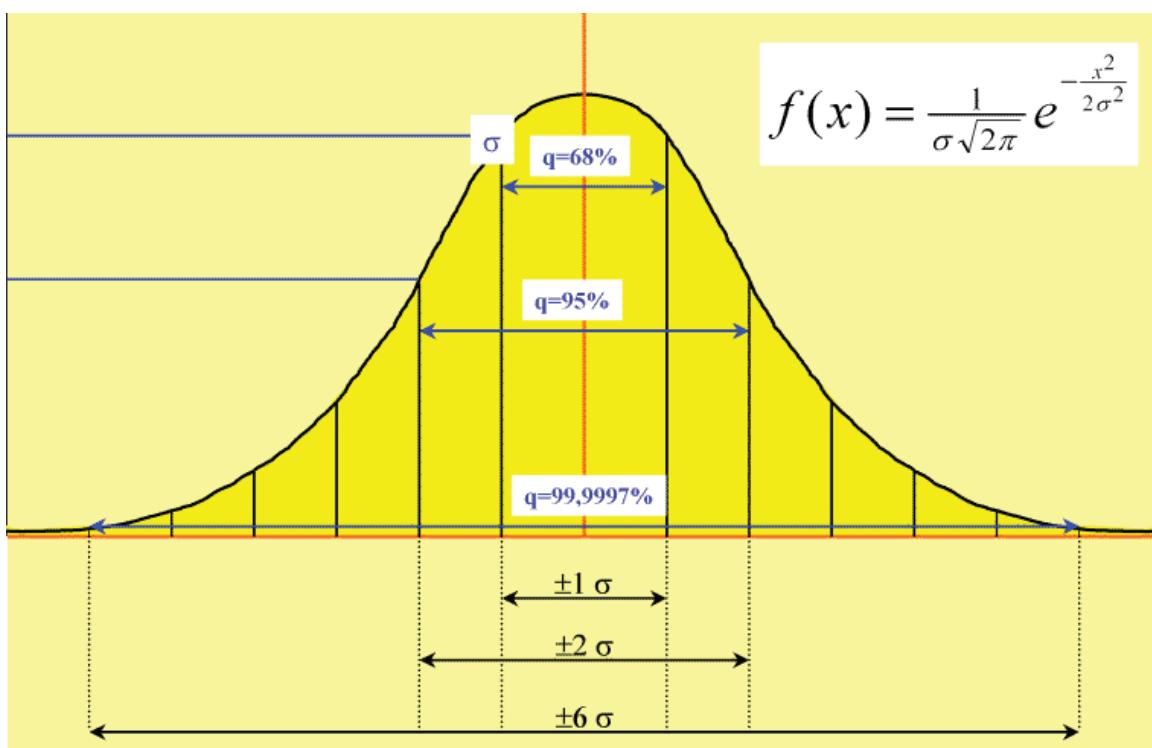
There are some basic fundamentals that must be understood at this early stage:

Critical-to-Quality Characteristics	Attributes that are most important to the customer
Defect	Failing to deliver what the customer wants
Process Capability	What your process can deliver
Variation	What the customer sees and feels
Stable Operation	Ensuring consistent, predictable processes

The Statistics Behind Six Sigma

A brief discussion of the statistics behind Six Sigma will help us understand why it is such an effective measurement tool and what it means to the bottom line (i.e. profit).

Sigma (σ) is a symbol meaning how much deviation exists in a set of data. It is sometimes called a “bell curve.” In statistics, this is called a standard normal distribution, but the idea is the same. In a bell curve, 50% of the values lie above the mean (average) and 50% of the values lie below the mean. In Statistics we take it a step further and delineate certain data points within that timeline.



The Bell Curve may look tricky to read. But in simple language if you run a pizza delivery business and you set a target of delivering pizza's within 25 minutes of receiving the order. If you achieve that 68% of the time, you are running at 1 Sigma, if you achieve it 99.9997% of the time then you are at 6 Sigma (or you are late on average only 3.4 times out of every one million orders).

So what is all the fuss about and the desire to get to Six Sigma – if my Pizza Shops delivers all Pizza's within 25 minutes, then we are there... BUT ... imagine your Pizza competition

has a program in place to reach Six Sigma based around a target delivery time of 20 minutes.

You have to make a business decision whether you will make improvements, rely on other areas to compete or simply do nothing and see what happens (the last choice is not generally considered good business practice).

Measure the Variance, don't rely on the Mean

All too often businesses base their performance on an average and average-based measures of the recent past. However, customers don't judge businesses on averages; they feel the **variance** in each and every transaction. Customers value consistent, predictable business processes and products that deliver world-class levels of quality. *Six Sigma* focuses first on reducing variation and then on improving process capability.

The Six Sigma Objective: Reduce Variation

Our goal with a Six Sigma program is to minimize variation within all of our critical processes.

Examples of key processes include:

- Invoicing/Billing customers
- New product development
- Processing customer orders
- Managing human resources (including payroll, holiday applications, etc.)
- Hiring employees
- Budgeting
- Paying bills
- Evaluating vendors
- Improving distribution of products
- Inventory Management

Quantitatively, this means working towards *Six Sigma* quality, or fewer than 3.4 defects per million “opportunities.” An **opportunity** is defined as a “chance for non-conformance” (or put another way not meeting required specifications). So the business must adjust its culture towards accepting a near perfect operation in executing key processes. Such a cultural change will directly contribute towards **customer satisfaction and increased productivity**.

Six themes of Six Sigma:

1. **Focus on the Customer – first and foremost.**

Simply understanding your customer can lead to monumental improvements. Six Sigma improvements are measured by customer satisfaction and value.

2. Fact-Driven Management, not estimating

Six Sigma clarifies key metrics that gauge business performance success. Then problems can be effectively defined, analyzed and resolved, permanently.

3. Focus on Process.

Six Sigma focuses on the process rather than the end result. By analyzing and fixing the process itself, it enables a much higher quality rate. The most powerful part of Six Sigma is: by mastering the process, companies are able to build competitive advantage in delivering value to customers.

4. Proactive Management.

Being proactive is the opposite of being reactive. Instead of reacting to change, management shifts to being proactive by defining ambitious goals and reviewing them frequently, setting clear priorities, focusing on problem prevention rather than “putting out fires,” and questioning why we do things instead of doing them because “that’s the way we’ve always done it.”

5. Boundaryless (no borders) Collaboration.

A term coined by GE's CEO Jack Welch. All parts of the organization including vendors and partners need to keep their focus on the customer in mind. If everyone works towards the same goal, the boundaries will disappear. Organizational leaders need to work to break down the barriers and improve teamwork between all parts of the organization (up, down and across).

6. Strive for Perfection, Tolerate Failure:

Nothing new ever comes without risk. If people are afraid of the consequences of mistakes, then they'll never try. Tolerate failure by learning from those mistakes and continue your goal towards perfection.

A new view on the Sigma Levels – Competitive Position

Sigma	Parts per million out of specification	% out of specification	Comparative position
6	3.4	0.00034	World leader
5	233	0.0233	Best in industry
4	6,210	0.621	Industry average
3	66,807	6.6807	Under Industry average
2	308,537	30.8537	Non competitive
1	690,000	69	Out of business!

And it must be remembered that the capability applies equally to manufacturing, service and support processes.

What are the roles?

Champions

Suggested names: _____

These are senior managers who are responsible for the various business processes. Champions select and approve projects, provide resources, and facilitate the teams while working on projects. Champions are in a position to resolve any issues that arise among people, priorities, and resources. They can make decisions.

The number of Champions should reflect the number of processes that need to be improved. Champions must meet regularly with the Black Belts to review project status.

Master Black Belts

Suggested names: _____

Master Black Belts are “teachers”. They review and mentor Black Belts. Selection criteria for Master Black Belts are quantitative skills and the ability to teach and mentor. In larger organisations this is generally a full time role.

Black Belts

Suggested names: _____

Black Belts are the process/project subject matter experts. They lead process improvement teams that are responsible for using the *Six Sigma* methodology to improve business processes that influence customer satisfaction and/or productivity growth.

Green Belts

Suggested names: _____

Green Belts are individuals trained in the *Six Sigma* methodology and tools. They are team members. They also use the techniques to achieve improvements within their own current work environments. They support the goals of the project, typically in the context of their existing responsibilities. Green Belts are the operational force behind the cultural change.

How Does Six Sigma Work?

The *Six Sigma* process can begin once a project has been identified that has definable and measurable benefits. Master Black Belts would typically educate Black Belts through the *Six Sigma* approach: Define, Measure, Analyze, Improve and Control.

Define

Identify and rank the business process and their key input variables and the key output variables. Decide which process or group of processes will be targeted.

Measure

Review and confirm as accurate the measurement systems used in the process. Establish the baseline performance for the process. The end of this phase occurs when the Black Belt can successfully measure the defects generated by the current process and establish the baseline capability of the process.

Analyze

The objective of this stage is to begin to understand why defects occur. The output of this phase is the identification of those variables that are most likely to create a deviation from the expected.

Improve

During the improve stage, the root cause analysis or “cause and effect” relationship between is established. This phase concludes when targets and acceptable ranges are established (i.e. the tolerance is set).

Control

This is the operational phase of delivering improvements. During this stage, process control plans are developed which reflect the new targets. Operators are trained on statistical process control charting. The objective of this phase is to ensure the variables stay on target and within the acceptable ranges.

The Training Process

Six Sigma Green Belt Training

Green Belts are a vital component to any successful Six Sigma program. Many organizations begin Six Sigma deployments by training Champions and Black Belts and quickly realize the need to involve a larger critical mass of people to achieve breakthrough level results from their Six Sigma initiative.

Green Belt training is an excellent way to enhance the effectiveness of both process owners and team members as they learn to apply the tools and methods used in the Six Sigma methodology.

Green Belt training is typically conducted during two 5 day sessions taken a month or six weeks apart.

Six Sigma Black Belt Training

Black Belts are at the core of every Six Sigma Implementation. These individuals will continually work towards institutionalizing the effective use of these tools throughout the corporation, its customers, and its suppliers.

Black Belt training follows a standard model of four weeks of training spread over four months. Between one-week sessions, Black Belt candidates return to their business environments to apply the tools and methods studied in class.

Other Six Sigma Training

Many vendors offer a variety of Six Sigma awareness, Executive Overview and implementation workshops and courses. The Master Black Belt program is also offered, but completion of the MBB program is linked to your personal experience. Some vendors offer the lower levels as e-Courses.

Reference Material

These are some of the excellent texts you can look for to build your Six Sigma library.

- Black S and Porter L J, "Identification of the Critical Factors of TQM", Decision Sciences, Vol.27, No.1, 1996
- Blakeslee, J.A. Jr., "Implementing the Six Sigma Solution," Quality Progress, July 1999
- Harry M J and Schroeder R, Six Sigma: The Breakthrough Management Strategy Revolutionising the World's Top Corporations (New York: Doubleday, 2000).
- Harry M J, "Six Sigma: A breakthrough Strategy for Profitability," Quality Progress, May 1998
- Howell, D, "At sixes & sevens," The Professional Engineer, May 2001
- Maguire M, "Cowboy Quality:Mikel Harry Riding High as Six Sigma Makes its Mark," Quality Progress, October 1999
- Oakland, J.S., Total Organisational Excellence (Butterworth Heinemann, Oxford, 1999)
- Porter L J & Parker A, "Total quality management – the critical success factors," Total Quality Management, Vol.4, No.1, 1993

SIX SIGMA DEFINING REQUIREMENTS

Product description:	Service Level Requirements
Product number:	
Date:	
Status:	Version number/Draft/Final

Introduction

The objective of this document is to be a standard for the development of Service Level Requirements. The development of Service Level Requirements is the first step to quantify the desired service delivery. To guarantee that all expectations (explicit and implicit) are quantified it is necessary that these Service Level Requirements are developed in close consultation with the client. If aspects from this document have already been described in other documents (e.g. Norm sheets) than these can be referred to. However, the client will need to be aware of these.

If aspects are mentioned here that do not apply to described service delivery then this must be explicitly stated.

The format of the template is as follows:

- General Information
- Definition Service delivery
- Content Agreements
- Service Windows
- Glossary
- Modifications form
- Procedure descriptions for relevant procedures

Template Service Level Requirements

Compiled by:

Date:

Version:

Status:

Filename:

Author:

General Information

This chapter describes general information required for the specification of the service delivery and the development of the SLA based on these Service Level Requirements.

General information

Date compilation Service Level Requirements	
Version of Service Level Requirements	
Status Service Level Requirements	
Reference number/code Service Level Requirements	
Replacement of existing Service Level Requirements (Yes, i.e./ No)	

Persons involved

Name	Role	Phone number	E-mail address

--	--	--	--

The completed roles must be known in any case. In addition to this it makes sense to involve a number of specialists in the compilation of agreements to guarantee that both implicit and explicit expectations within the shortest achievable time-frame are known.

Duration1

Date from which these requirements applies	
Date to which these requirement applies	

Conditions with regard to extension of these current requirements:

Defining service delivery

In most improvement initiatives there may be new services introduced. These new services must be clearly identified and metrics put in place that allows them to be defined in terms of availability.

1

Requirements change. What are requirements today may be inappropriate next week, next month or next year. This is why the requirements for the initiative must be dated.

Availability is the core factor regarding customer satisfaction. Failure to make required services available that support the initiative starts the journey towards “doom”.

BUSINESS PROCESS MANAGEMENT

This section of the template can be reproduced for multiple new services.

This chapter describes the service in a language understandable to the client as well as the requirements stated with regard to the availability of the service.

Description of service and desired availability

Describe the service as it will be delivered to the client here. This description must be worded in clear language with a minimum of technical terms. Unavoidable technical terms must be explained in a Glossary.

Service to be delivered

Description of the service to be provided:

Availability of the service

The availability of the service depends on the aspects listed below:

- The definition of unavailability. i.e. under which circumstances can the client indicate that the service is not available;
- The business hours. i.e. during which times will the service be provided; and
- The availability metrics. I.e. how do we measure the availability?

With regard to these an answer will need to be provided here to measure and present the availability unambiguously.

Definition of unavailability

A Service is unavailable if any of the required functionalities cannot be used at any point of delivery (where the equipment is still owned by the supplier and also maintained by the supplier), while the conditions for availability (business hours,

BUSINESS PROCESS MANAGEMENT

service window etc) are met. These conditions imply that errors made by the client are not taken into account when downtime is calculated.

Business Hours:

The business hours for the service:

Day	From	To	24-hours (y/n)
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Saturday			
Sunday			

The approach to official holidays:

Other days when the service varies not mentioned before:

Which procedures must be followed if, at the request of one of the parties, the business hours are to be adjusted temporarily?

If for some components of the service delivery different arrangements apply than discussed before these must be mentioned separately in an appendix. The exceptions must be described unambiguously, that is they can only be interpreted in one way (e.g. Consider the differences between batch and on-line).

Availability metrics:

To eliminate differences in interpretation and measurements consideration should be given to the following points:

The availability metrics can be sub-divided as follows:

- The duration periods of downtime (availability-ratio, mean-time to repair);
- The frequency with which periods of down-time occur (mean-time between failures); and
- Fluctuations in the above.

Selection:

In addition to this they can be presented in several ways:

- Percentage;
- Hours/minutes/days per period;

Selection:

There are also three alternatives for representation:

- Average values;
- Minimum and/or maximum values; and
- Percentages.

Selection:

Lastly, various methods exist to measure:

- During a fixed period (by specified day, week, month etc);
- During a sliding period (e.g. The sliding average over the recent quarter).

Selection:

The final calculation however consequently assumes the following formula:

$$\text{Availabilityratio} = 100\% * \left(1 - \frac{(\text{Downtimeduring businesshours})}{\text{Businesshours}} \right)$$

If there are aspects of availability for which different arrangements apply than are explained above, these should be mentioned separately in an appendix. Exceptions should be described unambiguously i.e. they should only interpretable in one way only.

Support for the service

Description of the support we provide to the client when providing the service (such as on-site support, phone helpdesk, training, access to skilled/qualified people, etc), as well as the requirements to be met for the availability of this support. If there are different levels of support, depending on the day of the week, this should be mentioned explicitly.

Support to be provided

Describe the support to be provided:

BUSINESS PROCESS MANAGEMENT

Availability of support

Business Hours:

The Business Hours for support:

Day	From	To	24-hours (y/n)
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Saturday			
Sunday			

The approach to official holidays:

Other days when the service varies not mentioned before:

Which procedures must be followed if, at the request of one of the parties, the business hours are to be adjusted temporarily?

If for some components of the service delivery different arrangements apply than discussed before these must be mentioned separately in an appendix. The exceptions must be described unambiguously, that is they can only be interpreted in one way.

Response-times:

The response-time is the time between the detection of down-time and the commencement of the diagnosis.

Response-time:

Time	Time-unit

If various response-times are involved than these must be mentioned separately.

They must be described unambiguously, i.e. they can only be interpreted in one way.

Reinstatement of service delivery:

If a service is not available for any other reason than a calamity. Which measures must be undertaken to per cause to reinstate the service delivery as quickly as possible (consider the stocking of spare parts, both by the service provider and the client). Both parties also need to carefully consider the possible causes of disruptions of the service delivery (e.g. the breakdown of components/parts, inability to gain access to qualified people).

Possible cause	Measure	Responsible party

If classification based on the possible causes with maximum recovery-times is possible than this should be indicated below. They must be described unambiguously, i.e. they can only be interpreted in one way.

Class/Category	Description	Maximum recovery-time (hour)

BUSINESS PROCESS MANAGEMENT

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Reliability

In this context reliability involves the arrangements with regard to making a required service (re) available after failure.

Describe below which entities are important with regard to the service delivery:

Service name or component of service	Associated entity

Indicate which party is responsible for the effort involved with assessing requirements for ensuring continued availability:

Service name or component of service	Efforts required	Responsible party

Indicate per relevant service/component how and with which period a restore must be performed (in case of more than three relevant services or components it is preferable to record this in an appendix).

Data: <Name relevant service>

When is restore possible	How to apply for restore	What is the lapse time for availability	What is the consequence

Data: <Name relevant service>

When is restore possible	How to apply for restore	What is the lapse time for availability	What is the consequence

BUSINESS PROCESS MANAGEMENT

--	--	--	--

Data: <Name relevant service>

When is restore possible	How to apply for restore	What is the lapse time for availability	What is the consequence

Describe below how to deal with the aspect of reliability during a major failure or calamity.

Security

Describe below how service, is guaranteed and to what level the guarantee goes to.

Describe below how to deal with the confidentiality of the data both from client towards the service and from the service towards the client:

Describe below how to deal with the aspect of confidentiality during a major failure/calamity:

Content agreements

An accurate definition of content agreements requires a good insight into all entities involved with the service delivery. Specifically because content agreements are usually based on these entities that will be mentioned by name.

Schema with all relevant entities and their mutual relationships:



The following paragraphs contain a number of concrete aspects. These aspects are not necessarily relevant and/or comprehensive, but they are intended to indicate how this should be completed/complemented. Concepts used in this chapter must be explained. They may be included in the Glossary in appendix A.

Types of Q-attributes

Q-attributes are used to identify a product or a service during the compilation of service requirement.

Below is a list of the most frequently used Q-attributes, accompanied by their definitions, to be used when compiling service requirements.

This list is not comprehensive.

Q-attribute	Definition
Accuracy	: % of the total that complies with
Completeness	: % of the total
Timeliness	: absolute or relative time unit
Achievability	: % responded calls of the total calls per time unit
Readability	: print quality (% blackness)
Neatness	: folded straight, not wrinkled up, not torn
Answer-time	: absolute time unit, i.e. for a % van the total

BUSINESS PROCESS MANAGEMENT

Availability	: % of a total period
Response-time	: absolute time unit, i.e. for a % van the total
Expertise	: % of all questions that can be resolved immediately

Service delivery

All aspects related to the service deliver are discussed below.

Q-attribute service delivery

Aspect	Content description
Q-Attribute	
Q-Unity	
Q-Norm	
Q-Control	
Q-Frequency	
Q-Rapport	
Q-Controller	
Q-responsible	

Miscellaneous Agreements

Contacts

Contacts (Service related):

Name	Role	Phone number	E-mail address

BUSINESS PROCESS MANAGEMENT

Contacts Client:

Name	Role	Phone number	E-mail address

Organisational Charts

Indicate below what the organizational charts both for the client and for service look like, from the point of view of the other party

Consultation structures

BUSINESS PROCESS MANAGEMENT

The consultation structures required described here ensures that correct communications are conducted at a strategic, tactical and operational level. Indicate clearly which roles are involved and what the frequency is. Also clearly indicate who the chair person is:

Strategic consultation:

Relevant roles client side	Relevant roles in service provide side	Frequency & duration

Chairperson:

Tactical consultation:

Relevant roles client side	Relevant roles in service provide side	Frequency & duration

Chairperson:

Operational consultation:

Relevant roles client side	Relevant roles in service provide side	Frequency & duration

BUSINESS PROCESS MANAGEMENT

Chairperson:

Escalation

Below, describe in which cases escalation takes place (by whom and who to).

Preferably in the format of an escalation tree:

If escalation takes place, which reaction times apply with regard to taking action?

Resources

How we deal with costs of the below mentioned additional resources:

Resources	Expenses included to maximum	Per period

Service Windows

Describe below during which times the service deliver is not available as a result of planned or known periods of maintenance/ holidays and/or changes (e.g. the 1st Sunday of each month, weekends, after 5:00pm):

Appendix A GLOSSARY

Appendix B CHANGES FORM

Appendix C RELEVANT PROCEDURES

From this point include the relevant procedures. Consider the following:

- Change procedure;
- Reporting procedures incidents;
- Specific procedures of the client

FURTHER INFORMATION

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BUSINESS PROCESS MANAGEMENT

INDEX*

24-hours 289, 292

A

Aberdeen 96, 105, 110
ability 25, 54, 70, 76, 81, 92, 109, 118, 166, 177, 186, 202-7, 281
 organization's 207
Absenteeism 244
accountabilities 36, 42, 44, 55, 191, 194, 198-9
accounts 183
actions being, completeness of 192
addition 10, 86, 155, 231-3, 287, 290
adjustments, processed 40-1
administration 25, 232-3
administration location 151
agility 81, 202
agreements, content 296
aid 10-11, 195, 263-4, 267
Align Roles and Responsibilities to Make BPM Work 10, 55, 64
alignment 198, 215, 225, 239
Amazon 3
American National Insurance Company 40-1
analysts 28, 31, 204, 218
annotation 186
appendix 290-2, 294, 297
Appendix 261-2, 265-6, 302
Appian 108
application development projects 65, 89
applications 10, 16, 23-4, 31, 35, 83-7, 94, 107, 155, 165, 167-8, 204, 206, 264-5, 274
architecture options 232-3
arrangements 173, 190, 290-2, 294
Art of Service 303
artifacts 185-6
as-is 62
assessments 7-8, 101, 156, 273
assets 198, 235, 242
assignment 209-10
authority 177, 184
automate 54
availability 108, 287-8, 291, 294-5, 298
availability metrics 288, 290

B

base measure 74-5
BC/DR 203-7
BC/DR discipline 203, 206
BC/DR planning 203, 205, 207
BC/DR plans 203-7
BC/DR tools 204-6
behaviors 237-8, 240
bell curve 257, 278
benefits 2-3, 5, 7-8, 10, 32, 73, 79, 94, 102, 104, 173, 189, 201, 215-16, 248, 266-7 [5]
 expected 261-2
 hard" 102
BI (business intelligence) 108
billing disputes 40-1
binders 61
Black Belts 259, 281-3
black line 185
Board 194
bonus documents 10-11, 116
book 2-3

BUSINESS PROCESS MANAGEMENT

boxes 181
BPD (Business Process Diagram) 8, 185
BPM (Business Process Management) 5, 7-10, 15-16, 27-8, 31-3, 39-41, 54-5, 62-3, 84-6, 93-5, 105, 107-8, 127-8, 203-6, 215, 221-4 [23]
BPM Analyst 65, 67-8, 227
BPM components 232-3
BPM consumers 28
BPM Culture 223-4
BPM deployment 80, 104, 107
BPM Director 227
BPM Engine 232-3
BPM implementations 7, 110, 212, 216-17, 231-2
BPM Program lifetime 228
BPM Programs 10, 221-5, 227-30
 long-term 223-4, 229
 multi-project 225
BPM project deployments 70, 106
BPM Project Track 225
BPM Project □ Value 7
BPM projects 10, 58-9, 61, 63, 72, 89, 93-6, 100, 105, 110, 209, 211, 215-16, 222-5, 229
BPM Projects 221, 228
BPM projects, deployed multiple 217
BPM Projects to BPM Programs 221
BPM software 18-19
BPM software tools 203, 207
BPM solution 79, 84, 86, 225, 231, 233
BPM systems 103, 109
BPM tools 10, 203-7, 222, 231-3
BPMN (BUSINESS PROCESS MODELLING NOTATION) 5, 8, 49, 108, 132, 185-6
BPMS (Business Process Management Suite) 22, 76, 88, 109, 221, 224
budget 110, 227, 232, 235, 242
 organization's 207
business 61-3, 69-71, 132, 166, 173, 175-6, 189-90, 215-18, 221-3, 228, 239, 262-3, 270, 272-3, 275, 279 [22]
 aligning 215
 long-term 167
 managing 169
 manufacturing 258
 operating 120
Business Activity Monitoring 25
business analysts 164, 167, 185, 252
business applications, mission-critical 167
business areas 62, 176, 198
business case 7-8, 44, 94, 191, 211
business-case approval process 217
business case development 216
business change management 216
business complexity 264
business context 55
Business Continuity 10, 54
Business Continuity and Disaster Recovery capabilities 10, 203
business decision 279
business entity 156, 186
business environments 283
business events 16, 25
Business Excellence 263
business executives 216
 senior 217
business flow 169
business functions 155, 175
business groups 40-1
business hours 288-9, 292
business indicators 25

BUSINESS PROCESS MANAGEMENT

business intelligence (BI) 108
business involvement 61, 72
business isn't 14
business justification 172-3, 189
business leaders 215-16
business-level requirements 44
BUSINESS MANAGEMENT 5, 203
business managers 17
business metrics 18-19
Business Objectives 9
business operations 203, 263-4, 266-7, 270
 daily 95
business-oriented architecture 21
business owners 25, 61, 203-4
business pain forces 224
business people 130, 185
business performance 114, 218, 270, 277
business performance metrics 216
business perspective 37
business philosophy 135
business planning □ Maintainable 255
business plans 273
business policy 273
 translating 167
business policy changes 165
business practice 279
business problems 100
 complex 204
business process analyst 215, 218
business process architect 215
business process development 264
Business Process Diagram (BPD) 8, 185
business process engine 25
business process improvement 14
business process interact 270
business process knowledge base 36
BUSINESS PROCESS MANAGEMENT 2-8, 11-15, 24-8, 37-41, 52-6, 59-63, 97-104, 131-5, 137-41, 143-8, 190-8, 220-7, 239-46, 253-62, 274-81, 283-303 [47]
BUSINESS PROCESS MANAGEMENT See Align Roles 64
BUSINESS PROCESS MANAGEMENT See BPM 49
BUSINESS PROCESS MANAGEMENT See Business Process 121
Business Process Management, see BPM
BUSINESS PROCESS MANAGEMENT Definition 42
BUSINESS PROCESS MANAGEMENT activities 158
BUSINESS PROCESS MANAGEMENT Appendix 269, 272
BUSINESS PROCESS MANAGEMENT availability of key staff 249
BUSINESS PROCESS MANAGEMENT AVOIDING DISASTER 57
BUSINESS PROCESS MANAGEMENT Black Belts 282
BUSINESS PROCESS MANAGEMENT boundary 164
BUSINESS PROCESS MANAGEMENT BPM 21, 47, 58, 96, 127, 130
Business Process Management Bpm Architecture Considerations 231
Business Process Management Bpm Continual Improvement 113
BUSINESS PROCESS MANAGEMENT BPM DESIGN 155
BUSINESS PROCESS MANAGEMENT BPM Distilled 16
BUSINESS PROCESS MANAGEMENT BPM Governance Implementation 45
BUSINESS PROCESS MANAGEMENT BPM Governance Impletation 44
BUSINESS PROCESS MANAGEMENT BPM initiatives 105
BUSINESS PROCESS MANAGEMENT BPM Trends 108
BUSINESS PROCESS MANAGEMENT BPMS 29
BUSINESS PROCESS MANAGEMENT BRMS 166
BUSINESS PROCESS MANAGEMENT BUSINESS PROCESS MANAGEMENT 247
BUSINESS PROCESS MANAGEMENT business process model 263
BUSINESS PROCESS MANAGEMENT BUSINESS PROCESS MODELLING 175, 185

BUSINESS PROCESS MANAGEMENT

BUSINESS PROCESS MANAGEMENT Change 32
BUSINESS PROCESS MANAGEMENT Common Areas of Cost 91
BUSINESS PROCESS MANAGEMENT Companies 93
BUSINESS PROCESS MANAGEMENT Conclusion 169
BUSINESS PROCESS MANAGEMENT Cost 86
BUSINESS PROCESS MANAGEMENT CPI Methods and Tools 128
BUSINESS PROCESS MANAGEMENT Defining 142
BUSINESS PROCESS MANAGEMENT Design & Architecture 167
BUSINESS PROCESS MANAGEMENT Designing 184
BUSINESS PROCESS MANAGEMENT Director of business process management 218
BUSINESS PROCESS MANAGEMENT effectiveness 207
BUSINESS PROCESS MANAGEMENT Efficiency 79
BUSINESS PROCESS MANAGEMENT Eriksson-Penker Business Modelling 188
BUSINESS PROCESS MANAGEMENT Examples 23
BUSINESS PROCESS MANAGEMENT Expanding Scope 85
BUSINESS PROCESS MANAGEMENT Explanation 181
BUSINESS PROCESS MANAGEMENT Figure 157, 160, 162
BUSINESS PROCESS MANAGEMENT Gartner reports 36
BUSINESS PROCESS MANAGEMENT History 136
BUSINESS PROCESS MANAGEMENT Idea 180
BUSINESS PROCESS MANAGEMENT Immaturity 87
BUSINESS PROCESS MANAGEMENT Implementation Playbacks 71
Business Process Management Introduction 13
BUSINESS PROCESS MANAGEMENT Justifying cost 95
BUSINESS PROCESS MANAGEMENT Key Performance Indicators 237
BUSINESS PROCESS MANAGEMENT management 268
BUSINESS PROCESS MANAGEMENT MEDICARE CASE STUDY 149
BUSINESS PROCESS MANAGEMENT misalignment 199
Business Process Management Notation 108
BUSINESS PROCESS MANAGEMENT order templates 189
BUSINESS PROCESS MANAGEMENT Organizations 126
BUSINESS PROCESS MANAGEMENT organization's boundaries 204
BUSINESS PROCESS MANAGEMENT PERFORM BUSINESS CONTINUITY 203
BUSINESS PROCESS MANAGEMENT Prioritize and Trade 69
business process management process 7
BUSINESS PROCESS MANAGEMENT Process 18-19
BUSINESS PROCESS MANAGEMENT Process analysis 77
BUSINESS PROCESS MANAGEMENT Process improvement frameworks 117
BUSINESS PROCESS MANAGEMENT projects 252
BUSINESS PROCESS MANAGEMENT RACI 210
BUSINESS PROCESS MANAGEMENT RACI Chart 211
BUSINESS PROCESS MANAGEMENT responsibilities 213
BUSINESS PROCESS MANAGEMENT Risk of Adoption 84
BUSINESS PROCESS MANAGEMENT Scenario 151
BUSINESS PROCESS MANAGEMENT See 51, 119
BUSINESS PROCESS MANAGEMENT SMART KPIs 238
BUSINESS PROCESS MANAGEMENT standards 178
BUSINESS PROCESS MANAGEMENT Start 251
BUSINESS PROCESS MANAGEMENT Starting 228
BUSINESS PROCESS MANAGEMENT Strategy Implementation and Benefits Delivery 267
Business Process Management Suite, see BPMS
BUSINESS PROCESS MANAGEMENT Swimlanes 186
BUSINESS PROCESS MANAGEMENT TABLE of CONTENTS 5
BUSINESS PROCESS MANAGEMENT Tactical Guidelines 219
BUSINESS PROCESS MANAGEMENT Time to Market 89
BUSINESS PROCESS MANAGEMENT Traditional Application Development 88
BUSINESS PROCESS MANAGEMENT VALUE 73
BUSINESS PROCESS MANAGEMENT vocabulary 216
BUSINESS PROCESS MANAGEMENT VP 212
BUSINESS PROCESS MANAGEMENT Workflow Client Applications 163
BUSINESS PROCESS MANAGEMENT Workflow Systems Overview 156
BUSINESS PROCESS MANAGEMENT □ Project Support 159
BUSINESS PROCESS MANAGEMENT □ Workflow Enactment 161

BUSINESS PROCESS MANAGEMENT

BUSINESS PROCESS MANAGEMENT □ 206
BUSINESS PROCESS MANAGEMENT □ Balanced ScoreCard 273
BUSINESS PROCESS MANAGEMENT □ Example Common 9
BUSINESS PROCESS MANAGEMENT □ KPIx201fs 10
BUSINESS PROCESS MANAGEMENT □ Supply link 172
BUSINESS PROCESS MANAGEMENT □ Three-tiered 233
business process managers 31
business process maps 265
business process metrics 25
Business Process Model 8, 40, 49, 171, 176, 182, 188
BUSINESS PROCESS MODEL 5, 153, 171, 176, 263, 268
business process modeling 175, 184, 261, 267-8
business process modeling formats 262
Business Process Modelling 262, 264
Business Process Modelling Notation 5, 49
BUSINESS PROCESS MODELLING NOTATION, see BPMN
Business Process Modelling Overview 5, 49
business process operations 8, 185
business process rules 25
Business Process Study 176
business processes 7-8, 10, 14-16, 25, 29-30, 47, 156-8, 169, 171-6, 185, 188-90, 203-5, 215-16, 261-3, 269, 281-2 [14]
activity 173-4
best-orchestrated 215
company's 98
consistent 175
core 130-1, 156, 169
existing 5, 9, 51, 119, 191, 193, 266
external 36
higher-level 25
improving 97
key 109
level 24
orchestrating 215
organisation's 42
planning 206
strategic 277
term 261
business processes being 25
business requirements 61
business resources, right 70
business result 173, 190
business rule management 166
business rules 109, 164, 166-7, 216
business rules calls 169
business rules change 165
business side 215-18
business stakeholders 71, 225, 229
business strategy 198, 215, 273
Business Support 270
business targets 44
business tasks 223
business tool 264
Business Unit Approval 180
business units 10, 20, 180, 215, 217, 219, 248, 251
business unit's processes work 218
business users 155, 185, 249
business value 217
potential 225
business value years 222
business vocabulary 217
businesses base 279
Businessho 291

C

calamity 293, 295
call centre 177, 182-3
can't 69, 223
capabilities 84, 88, 90, 107, 155, 196, 198, 203-4, 206, 218, 221, 229, 281
 real-time 203
capacity 74-5, 235
 increasing workload 40-1
catalog 3
Centres of Excellence (COE) 36, 93
CEO 212, 277
certificates 149
Chairperson 300-1
Champions 281
changed process 116, 122
chart 211
checklist 8, 44-5, 177, 201, 247
Checklist Item 248-9
CIOs 14
client 164, 176, 211-12, 285, 288-9, 291, 293, 295, 299, 302
COE (Centres of Excellence) 36, 93
commitment 42, 74-5, 114, 247
commitment organizations 31
communication 164, 216, 248-9, 267
companies 2, 10, 20-1, 35, 69, 72, 74-5, 79, 88, 91-4, 101-2, 106, 215, 221-4, 237, 250 [8]
completed processes 247-8
compliance 99, 108, 195, 273
compliance officer 43
components 155, 160, 283, 290, 292, 294
 core 99, 102
 functional 159-60
conditions 113, 272, 287-9
confidentiality 295-6
configuration 9, 116, 230-1
confirmation 192
congratulate 255
conjunction 203, 206-7, 258, 266, 272
Connections 171, 173-4
consistency 249, 254, 274
consultation structures 299-300
contacts 177, 182, 298
context, organizational 18-19
continuous business process improvement 47
continuous process improvement 62, 93
contracts 106
contrast 84-6, 96, 171, 188
control 16-17, 36, 126, 185, 259, 262, 268, 282-3
 version-level 216-17
cost of doing business 103
cost reduction 97, 99, 102
costs 9, 86, 91, 99, 102, 191, 196, 235, 239, 241-2, 251, 266, 274, 301
 incremental 103
 material 242
 reduced 100, 102
CPI 114, 116, 122, 124, 127, 132
CPI methodologies 114, 116
CPI practices 115, 118
criteria
 pre-defined business 192
 weighted 254
CRM (Customer Relationship Management) 23
cross-organizational processes 117

BUSINESS PROCESS MANAGEMENT

customer order form 269
Customer Order Process 269
customer orders 172-4, 189-90
 stock 240
 □ Processing 279
Customer Projects 270
customer queries 176, 270
Customer Relationship Management (CRM) 23
customer satisfaction 37, 60, 99, 102, 104, 244, 257, 273, 279-80, 287
customer satisfaction ratings 223
customer service processes 40-1
customers 81, 89, 97-8, 100, 102, 114, 133, 142, 164, 171, 176-7, 183, 188-9, 191-2, 277, 279-80 [8]
customer's 198, 277
Customized Products and Services 166
cycle
 business process life 218
 business rule 165
 business rule life 164

D

dashed line 185
Data objects 186
Database Sizing 9, 231, 233
databases 195, 197
date 177, 285-7
days 39-41, 61-2, 177, 201-2, 253, 257, 289, 291-2
decisions 25, 123, 166, 177, 185, 193, 195, 227, 231, 281
 strategic 261, 266-7
defects 133, 140, 257-8, 277, 279, 282
deliverables 226, 248, 253, 265
Deliverables Create Urgency 247-8
departments 77, 79, 100, 177, 182, 212, 216-17, 237, 250, 263, 268
deploy 33, 39, 155, 167, 194
deployment 9, 86, 107, 164, 217, 221, 227, 231-2
Description 180, 263, 288, 291, 293
design 9, 124, 164, 167, 182, 184, 203-5, 218, 228
Design for Six Sigma (DFSS) 124
designations 2
developers 164, 167, 224, 228, 231
development
 organizational 263
 traditional application 88
development tools 11, 86, 267
 traditional application 90
DFSS (Design for Six Sigma) 124
diagrams 149, 178, 181, 185-7, 269
 preparing business process flow 269
differentiators 196-7
disaster 7, 203, 207
Disaster Recovery 5, 10, 203
disciplines 196, 203-4, 263
dispute 40-1
disruptions 203-5, 293
 organization's 205
distribution 158, 164, 175, 257, 264
dock 243
documentation 177, 184, 206, 229, 248, 251-6
documents 5, 7-11, 13, 147, 177, 182, 211, 249, 253, 261, 277, 285
don't 20, 52, 58, 61-2, 69, 248, 279
downtime 289-91
drive process improvement 82, 87, 94
driving process improvement 72, 76

BUSINESS PROCESS MANAGEMENT

duration 249, 287, 300

E

EA 203-5
EAI (enterprise application integration) 24, 132
eBook 3
effectiveness 114, 155, 201, 203, 239, 263, 283
efforts 58, 118, 166, 225, 247, 255, 264, 266, 294
employees 37, 60, 74-5, 85, 223-4, 237-9
enablers 24, 196-7
 organization's 196
Enforces 67-8
enterprise 114, 118, 128, 166, 222, 224-5, 228, 230
enterprise application integration (EAI) 24, 132
Enterprise Architect's Business Process Model 188
enterprise architecture 10, 203
enterprise information systems 117
enterprise model 265, 270-1
Enterprise Resource Planning (ERP) 23, 108
entities 2, 31, 172, 185, 189, 294, 296
environments 105, 113, 167, 193, 231-2, 269
ERP (Enterprise Resource Planning) 23, 108
error rates 39, 102, 244
escalation 77, 301
estimate 99, 102-3, 266
events 149, 169, 185, 187, 192, 257, 272
exceptions 155, 290-2
execute 37, 48, 50, 60, 156, 206
execution 156, 161, 228
executive sponsor 247, 249, 254-5
executives 97, 104, 166, 218
experience 74-5, 176
expertise 67-8, 252
experts 183, 206, 254, 261, 268, 272
 business process management 204
 knowledgeable business 164
exploit 192, 199
extensions 165, 168, 287

F

facilitators 252-3
factors 104-5, 232, 262, 265-6, 275
failure 58, 131, 175, 191-2, 239, 257, 280, 287, 290, 294-5
feature set, comprehensive 167
feedback 45, 100, 207, 238, 249, 252
format 176-7, 182, 254, 285, 301
 standard 250, 254
foundation 59, 228, 263-4, 268
frame 94-5, 99, 104
freedom 192, 199, 248
frequency 249, 290, 300
FTEs (full time equivalents) 102
full time equivalents (FTEs) 102
Function Heads 194
functionality 108, 149, 161, 231, 267
functions 156, 160, 167, 175, 183, 196, 198, 218, 263, 265
funding, release of 192, 194

G

gaps 27, 204, 211, 262, 273
Gartner 87, 96, 105, 110
Gateways 185
gauge business performance success 280

BUSINESS PROCESS MANAGEMENT

GE 74-5, 260, 277
Generate Revenue 270
goal link 172-3, 189
goals 10, 21, 155, 171-3, 175, 188-9, 205, 222-3, 237, 241, 247-8, 257-8, 273, 279-80, 282
governance 7, 42, 116, 226, 228, 232
graphical models of business process operations 8, 185
Green Belt training 283
Green Belts 259, 282-3
groups 43, 70, 109, 163, 186-7, 231, 247, 251, 253, 267, 282
guidance 101, 147, 193, 198, 225
guide 7-8, 11, 13, 40, 47, 49, 51, 53-5, 64, 73, 83, 111, 116, 119-21, 135, 141-2 [5]

H

hardware 91, 99, 103, 233
Harry 74-5
He/She 209
hierarchy, organization's 218
highlight 199, 240-1, 264, 266
holidays, official 289, 292
Honeywell 260
host 163-4
Hour Training Bootcamp 247, 252
human resources 54, 155, 175, 212, 279

I

icons 8, 171, 181, 185, 188
idea 52, 178, 180, 254, 278
identification 263, 282, 284
implementation 7-9, 11, 58, 70, 90, 125, 209, 215, 218, 224-8, 231-2, 261, 266-7
individuals 127, 131, 177, 191, 193, 206, 212, 237, 282-3
industries 15, 28, 113, 203-4, 215, 217, 235, 281
industry average 281
information 2, 5, 10, 15, 94, 106, 116, 172-4, 176-7, 181-6, 188-90, 193, 253-5, 266-7, 286, 303 [4]
Information items link to Business Processes 189
information systems teams 130
infrastructure 31, 232-3, 270
Initial business unit approval 180
initiative 9, 215, 247-9, 254-5, 287
 business process improvement 221
 business process management 10, 215
input link 172, 174, 189-90
inputs 171, 174, 180, 188, 190, 255
intellectual asset management 199
intellectual assets 199
interfaces 9, 155, 159, 161, 182, 196, 204, 265
intermediate events 185, 187
introduction 7-8, 11, 13, 171, 188, 277
Inventory 242-3
investment 93, 96-7, 99, 103-4, 110, 114, 265, 277
invoice 39, 173, 176-7, 190
isolation 240
items 69, 250, 253, 269
iterations 62, 69, 76
it's 99, 104, 108, 116, 124, 257

K

key 38, 70, 199, 215, 251, 261, 265, 274-5
 organization's 198
key owners 251
key participants 212-13
key performance indicators 10, 18-19, 66, 120, 198
Key Performance Indicators, see KPIs

BUSINESS PROCESS MANAGEMENT

KM 193
know how 10, 221, 225, 229
knowledge 9, 11, 13, 15, 43, 86, 166, 182, 191-4, 196-9, 209, 225, 229, 267
 business-process-related 218
 organization's 191-2
 share 191, 194
knowledge assets 191, 194-5, 198
 organization's 198
knowledge criteria 192
knowledge management 191, 193, 195, 197-9
 organization's 198
knowledge management tools 191-2
Knowledge Mapping 5, 9, 51, 119, 191
knowledge plan 192
knowledge strategy 195-7
KPIs
 delivery of 67-8
 organization's 192
KPIs (Key Performance Indicators) 10, 18-19, 50, 66, 120, 194, 198, 237-41

L

lane 186
language 86, 114, 217, 278, 288
Lean 124, 126-7
leverage 109, 127, 131, 229
liability 2
LIFE CYCLE of BUSINESS PROCESSES 120
Limitations of Business Process 176
link 3, 177, 228, 262
 supply 172-4, 188-9
list 211, 249-51, 254, 261, 297
loans 223-4
locations 206, 255, 262, 266, 274
lodges data 149

M

machine 237, 240
management 10, 95, 191, 195-6, 199, 216, 224, 259, 263-4, 267-9, 277
Management-How, □ Business Process 9
management processes 191, 196
management systems, business rule 167
Manager of Managers (MOM) 203
managers 20, 54, 155, 164, 166, 216
 senior 248, 251, 255, 281
mapping 265-6
margin improvement 74-5
markets 28, 88-9, 131, 133, 171, 188, 204
Master Black Belts 259, 281-2
matrix 211, 254
Maximum recovery-time 293
Medicare Australia 5, 40, 149-51, 153
meeting 247-9, 254-5, 279
mentoring 226
methodologists 130
methodology 9, 11, 74-5, 139, 143, 209, 258, 261, 273
 sigma 11, 136, 282-3
metrics 66, 155, 198, 241-2, 244, 287
 operational 18-19
million 78, 80, 258, 273, 279, 281
minutes 39, 201-2, 247-8, 254, 278-9
model stage 52
modeling 90, 126, 155-6, 176, 216, 218, 261
models 30, 48, 124, 159, 169, 182-3, 265, 270

BUSINESS PROCESS MANAGEMENT

abstract 159
generic 160-1
moderate BPM deployments 232
MOM (Manager of Managers) 203
momentum 32, 96, 256
Monday 289, 292
monitor 48, 50, 79, 107-8, 155, 185, 192, 194, 237, 242, 273
Most organizations' business operations 204
Motorola organization 258
myths 206

N

name 183, 286, 294-6, 298-9
New Idea Generated 181
number 74-5, 78, 96, 108, 158-9, 171, 175, 177-8, 183, 224, 242-5, 247-8, 253, 257-8, 261, 281 [6]
large 225, 247, 249, 256
phone 286, 298-9
product 285

O

object 172-4, 188-9
attached 172-4, 189-90
object Information 172, 188
objectives 38, 205, 237, 248-9, 252, 254, 265
common business 5, 9, 111, 235
organizational 9, 175
OM (Order Management) 23, 155
one-sigma shift 74-5
online 3
optimization 67-8, 216, 263, 265
order 25, 28, 77, 99, 139, 156, 171-2, 174-5, 183, 185, 188-90, 213, 222-5, 229, 231, 269-70 [3]
new 172-3, 189
order delivery 270, 274
Order Management (OM) 23, 155
order templates 172-3, 189
organisation's business goals 42
organization changes 237
organization chart 213
organization culture 237
organization goals 237
organization guidelines 250
organization hasn't 206
organization KPIs 237
organizational alignment requirements 218
organizational charts 250, 299
organizational consolidation 248
Organizational leaders 280
organizational nuances 30
organizational structure 177
organizations 7-10, 13-16, 31-3, 35-7, 62-3, 113-14, 175-6, 188-9, 191-3, 195-7, 203-7, 211-13, 215-19, 224-5, 237, 250-2 [34]
degree 204
functional 265
large 8, 197
process-driven 213
process-managed 218
organization's activities 215
organizations budget 206
organizations Business Process Management understanding 10
organizations responsiveness 155
organizations start 62

BUSINESS PROCESS MANAGEMENT

organizations systems 22
organization's 203, 231
organization's culture 213, 250
organization's knowledge map 197
organization's knowledge portfolio 191
organization's knowledge strategy 193
organization's mission statement 273
organization's policy 194-5
organization's policy framework 195
organization's progress 237
outputs 171, 173-4, 182, 188, 190, 239, 255, 272, 282
overhead 232-3
Overtime 242
owners 2, 221, 247, 250-1, 255
ownership 251

P

package 269
page 40, 47, 49, 51, 53-5, 57, 64, 73, 83, 111, 119-21, 135, 141-2, 266
Page 2-303
part 2, 10-11, 87, 115-16, 156, 160-1, 172-3, 181, 189, 192-3, 205, 221, 223, 225, 280
participants 84, 164, 180, 186, 233, 250, 253
parties 239, 253, 289, 292-4, 299
partition 186
payback 96, 100
perfection 257, 273, 280
PERFOM BUSINESS CONTINUITY 5
Perform Business Continuity and Disaster Recovery 10, 54, 57
performance 98, 124, 167, 198, 216, 223-4, 237-8, 240-2, 259, 266, 273, 279
person 2, 43, 177, 183, 209, 211, 253
phase 89, 282-3
 start up 181
phones 183-4
pizza delivery business 260, 278
pizza's 278
plan 8, 203, 205-6, 248-9, 253
 local knowledge 194
planning 8, 10, 203, 249
 strategic 261, 263-4, 268
platforms 81, 87, 94, 158-9, 161, 228
policy managers 164-5, 167
pools 185-7, 205, 256, 272
potential projects, relative risk-reward of 100-1
practice
 best 36, 216-18, 221, 225, 230, 274
 communities of 195, 197
presentations 7-8, 15, 95, 255
principles 13, 126, 128, 194-5, 266
priorities 97, 212, 281
prioritize 69, 71, 224, 229, 247, 254
process definition 157, 229
process analysis 61, 65, 227, 264, 274
process categories 251-3
process chart 250
Process Customer Orders 274
process decomposition 67-8
process design 155, 216, 227-8
process diagrams 181, 228, 253, 255, 264-5, 268, 270
process documentation 61, 229, 250, 255
Process Documentation Initiative 5, 121, 247
process hierarchy 265, 270
process improvement efforts 67-8
process improvement methodologies 35, 127

BUSINESS PROCESS MANAGEMENT

process improvement requirements 85, 90
Process Instance 161, 233
Process Management, enterprise Business 9, 231
process model 177, 263-4, 266-7
 strategic 265
process modeling 178, 182, 264
process owners 21, 38, 211, 227, 249, 251, 253, 255, 283
process performance information 43
process performers 131
process requirements 266-7
process roadmap 69, 71
processing phase 172-3, 188-9
processing procedure 172, 174, 189-90
production 103, 165, 167, 226, 230, 232, 273
productivity 90, 99, 102, 139, 166, 235, 273
 increased customer call centre 40-1
productivity improvements 102, 110
products 2, 9, 28, 87, 108, 131, 133, 136, 159, 161-2, 164, 191, 196, 250, 264-6, 273-4 [9]
professionals 132, 203-5, 218
programs 5, 10, 57, 96, 166, 203, 206-7, 221, 223, 279
 organization's BC/DR 207
 sigma 279, 283
Project Completion Day 247, 255
project management 38, 110, 116, 196
Project Management Body of Knowledge 209
project manager 212, 249, 254
project organization 70
project plan 248, 252
project team 84, 180, 212
projects 5, 59, 67-71, 96, 99-100, 191-6, 199, 212, 215-16, 221, 223-5, 227-30, 242, 252, 259,
 281-2 [9]
 early 222
 sigma 277
Proposal Process 181
provider, global integrated communications 40-1
publisher 2
Pulte Mortgage 223-4

Q

Q-attributes 297
quality 7, 55, 99, 102, 135, 198-9, 235, 243, 266, 269, 273, 279, 284, 297
quarter 39, 78, 80, 201-2, 291

R

RACI 209, 211
RACI chart 209-12
RACI Chart 210-11
RACI methodology 209, 212-13
RACI Methodology 9, 209
RAM (Responsibility Assignment Matrix) 209
range 191, 196, 222, 261-2
ranked priority 98
Real-time collaborative editing of process documentation 229
reap 10, 215-16, 264
recognition 239, 241
rectangle 186
reduction 74-5, 102, 192, 201, 241
 capital 74-5
Reference number/code Service Level Requirements 286
reliability 167, 235, 294-5
Repeatable Business Functions 175
repository
 database 232

BUSINESS PROCESS MANAGEMENT

shared business process 25
request 289, 292
requirements 66, 69, 71, 88, 167, 203-4, 224, 248-9, 265, 287-8, 291, 294
resources 8, 52, 65, 102, 171-4, 182, 188-90, 206, 209, 212, 248, 250-1, 281, 301
unique 172, 174, 189-90
Resources link to Business Processes 190
responsibilities 5, 9-10, 42, 44, 55, 64, 109-10, 175, 177, 183-4, 199, 209-12, 215-16, 218, 251, 255 [2]
share 216, 219
Responsibility Assignment Matrix (RAM) 209
Responsible party 293-4
restore 294-5
retention 196, 273
return 95-7, 110, 235, 242, 283
Return on Investment, see ROI
revenue 97, 176, 235, 239, 242, 270
review 3, 8, 10, 198, 201, 237, 249, 252, 281-2
rewards 239-40
Right Documentation Tool 247, 249
ROI (Return on Investment) 5, 7, 67-9, 95, 99, 106, 108, 110
roles 5, 10, 28, 42, 44, 65, 160, 177, 186, 198, 209-12, 215-16, 218, 227, 268, 298-300 [2]
identifying 9, 209
new 215, 217, 219
supportive 209
roles client side 300
Rule engines 166
rules 166, 169, 211, 215, 217

S

sales 100, 176, 223, 242, 270
scale 5, 10, 35, 121, 221, 224-5, 228-9, 247, 262
scenario 149-50, 162, 164, 264, 272
scope 99-100, 104, 203, 217, 222-3, 227, 232, 268
scoping 67-8
scoreboards 67-8
screen 181, 183
selection 207, 232, 239-40, 272, 290-1
senior management 198, 248-9, 251, 254
sequence flows 185
server 25, 232
service delivery 11, 196, 285-6, 290, 292-4, 296, 298
Service Level Agreements, see SLAs
Service Level Requirements 285-6
development of 11, 285
service name 294
Service Oriented Architecture, see SOA
Service Oriented Architectures 81, 108, 132
service resource 174, 190
Service Windows 289, 301
services 2, 9, 97-8, 131, 133, 149, 151, 191, 193-6, 199, 235, 287-9, 291-3, 295, 297-300, 302-3 [9]
component of 294
customer 100, 251, 269
daily train 174, 190
relevant 294-5
required 287, 294
workflow enactment 158, 163
Shared Model 228
shipments 77
sigma 257
Sigma 11, 35, 74-5, 114, 116-17, 126-7, 135-6, 143, 257-9, 264, 273, 277-81, 284
sigma approach 144, 282
Sigma Defining Requirements 5, 11, 285

BUSINESS PROCESS MANAGEMENT

Sigma DMAIC project 124
Sigma Fact Sheet document 135
SIGMA FACTSHEET 5, 257
Sigma Levels 258, 260, 280
Sigma Objective 257, 279
sigma process 259, 282
SIGMA SHORT OVERVIEW 5, 277
Sigma Short Overview document 141
SIGMA STARTER KIT DOCUMENTS 5, 261
sign 209, 252-3
signoffs 253-4
simulation 90, 124, 155, 216
Six-Sigma 260
skill-sets 204
skills 109, 177, 182, 184, 206, 263, 266
SLAs (Service Level Agreements) 50, 66-8, 224, 230, 286
SMEs (subject matter experts) 203, 227, 249, 282
SME's 252-3, 255
SOA (Service Oriented Architecture) 81, 108, 132, 218
software 91, 99, 103, 156-7, 159
integrated 149
workflow enactment 161
software components 160-1
software development cycle 164
software packages 203-4
software tools 5, 10, 54, 57, 203, 207
solutions 66, 82, 117, 155, 169, 207, 221, 231-2, 261, 269
specialists 166, 267-8, 287
Sprint 40-1
staff 11, 13, 132, 175, 177, 182, 184, 205, 240, 243, 256, 267, 274
stage
early 231, 267, 277
initial 11, 67-8
stakeholders 194, 211-13
standards 44, 86, 124, 132, 217-18, 239, 258
start 37, 52, 175-6, 206, 215, 225, 250, 253, 261, 265, 267
stateflow link 172, 174
statistics 11, 257, 278
steps 9-11, 48, 100, 102, 176-8, 183-4, 211, 221, 228-9, 252-3, 261, 265, 269, 278, 285
strategic analysis 262, 264-5, 272-3
strategic management 268
strategic purposes 265
strategies 59, 191, 195, 197-9, 216, 218, 266, 270, 272-3, 275, 284
Structured System Design Tools 159
style 172-3, 189, 249
Subject Matter Expert 203, 227, 249-50
subject matter experts (SMEs) 203, 227, 249, 282
Success rates on BPM projects 72
Successful BPM projects 97
Suggested names 281-2
suites, crafting business process management software 217
Sunday 289, 292, 302
supervisors 155, 253, 255
suppliers 114, 180, 187, 192, 241, 262, 283, 288
external 180
support 25, 81, 95, 104-5, 114, 156, 160, 175, 182, 213, 218, 224, 228-9, 247-8, 251, 291-2
[5]
Support New Business Models 202
surprises 266-7
survey 14, 96, 105
systems 23, 25, 108, 115-16, 125, 155-6, 160, 175, 177, 182, 184, 194, 198, 201, 206, 266-7
[1]
systems applications 263, 274

T

team members 282-3
team metrics 242-4
teams 93, 127-8, 212, 227-9, 242, 248-9, 252, 254-5, 281
 core 249, 254
techniques 127-8, 218, 261-2, 282
technology 22, 24, 35, 86, 95, 132, 158, 185, 215, 222, 225
templates 7-8, 172-3, 181, 189, 217, 285, 288
terms 8, 10, 97, 99, 102, 104, 139, 173, 189, 217, 221, 238, 250, 265, 272-3, 280 [1]
 technical 269, 288
that's 97, 260, 280
time 40-1, 83-4, 87-8, 102, 118, 176-8, 182-3, 211-12, 222-3, 225-6, 228-9, 242-4, 247-9,
 260, 278, 293 [13]
 lapse 294-5
 real 155, 206
time unit Readability 297
timeline 165, 278
timeliness 106, 297
tools 24-5, 31, 84, 114, 116, 124, 126-8, 167, 177-8, 182, 206-7, 225, 249, 261-2, 272-3, 282-
 3 [11]
 application 156-8
 strategic 261-2
top business priority 14
track 182, 215, 223, 225-6, 241
trademarks 2
train 252
training 84, 99, 103, 184, 216, 239, 263, 283, 291
transformation 209, 218
transition 169, 221, 223, 225, 267
Tuesday 289, 292

U

UAT stages 67-8
UML (Unified Modeling Language) 188
unavailability 288
understanding business requirements 167
Unified Modeling Language (UML) 188
units
 absolute time 297-8
 organizational 171, 173, 188-9
urs businessho 291
users 50, 84, 157, 163, 217, 224, 229, 233
utility 197-8

V

value 3, 5, 37, 61-3, 66, 72, 76, 83, 97, 100, 104, 171, 243, 266-7, 278, 280 [9]
 customer demands 133
value chain 122, 250-1
 business's 253
value stream 116, 118, 218
variance 279
variation 175, 195, 209, 257, 277, 279
vendors 28, 108, 159, 222, 280, 284
 large 87
visibility 16, 28, 54, 69, 107, 109, 191, 199, 223, 228
vision 66, 126, 195, 211, 221-2, 240
 organization's 237
vocabulary, more-business-oriented 217
VP 212

W

website, browses 149

BUSINESS PROCESS MANAGEMENT

WFM systems 156
what's 131, 225
who's 211
workflow 5, 47, 90, 132, 155-6, 158, 172, 223, 263
workflow engines 161, 163-4
workflow processes 156
workflow system 159-60, 169
worklist 163-4
worklist handler 163-4
worksheet 104
workshops 247, 250-4
www.emereo.org 3