



Business Process Design

The Business Process Design document is prepared by the project team during the Business Process Reengineering phase of the IPT process. It addresses the following components:

Business Process Definition

Business Process Definition holds textual information on the process, activity, or task.

Business Process Metrics

Business Process Metrics provide an inventory of the metrics that will be used to monitor and measure processes, activities, and tasks.

Business Process Validation Results

The Business Process Validation Results deliverable documents the results of the validation of workflows. The format of the deliverable will depend on the validation technique chosen by the business process design team.

Business Process Validation Approach

The business process validation approach describes the approach, technique, and methods chosen to validate the business process design deliverable.

Business Process Validation Input Data

Business Process Validation Input Data forms the input for the workflow validation exercise. The format of the input data may vary depending on the technique chosen to validate the business process designs.

Business Process Validation Performance Data

Business Process Validation Performance Data is produced as a result of validating workflow designs. Performance data reflects how well the workflow designs meet the Business Capability Requirements.

Business Process Workloads

Business Process Workloads quantify the items that pass through a process, activity, or task. As workloads can be captured at any level of process design, the workloads can be represented hierarchically. Workloads can be captured using a Process Simulation Tool.

Information Structure Definition

This deliverable describes a structure of information that is contained in process flows, business events, data stores, etc., on diagrams, such as workflows, data flow diagrams, etc.

Store Definition

This deliverable defines the store, a receptacle for items, objects, or data that flow into or out of processes.



Workflow Diagrams

This deliverable represents workflow diagrams which illustrate the tasks within the business process(es) sequentially. There are several different ways to represent processes and workflows. There are no precise standards as to the number of required workflows because this number is dependent upon the level of detail and decomposition required for each business process.

Workflow Scenario

This deliverable describes a specific path through a potential business process or activity (i.e., one of many possible paths through a workflow diagram). A workflow scenario describes the response to a specific business event. It describes the steps completed by the user and the application, as well as the business rules that apply to the situation.

Workflow Variability Matrix

This deliverable describes the drivers or sources of business process variability. It is an intermediate deliverable used to determine how many and which scenarios to document.



Business Process Definition

General

Type: Business Process Definition
Version number: 1.0
Version labels: 1.0
CURRENT

Created: 12/01/97 06:03:52 PM
Modified: 12/01/97 06:03:55 PM
Last modified by: UserX
Created by: UserX

Summary

Name: Receive Order
Title (Description): The processing involved in receiving a customer order

Keywords:

Details

Category: Business
Type:
Class:
Volume:

Link to Owner

Name: Order Processing Department
Type: Organization Definition

Link to Workflow Diagram

Name: Order Processing Workflow
Type: Workflow Diagram



Links

Owner

Name: Order Processing Department
Type: Organization Definition

Workflow Diagram

Name: Order Processing Workflow
Type: Workflow Diagram

Cost

Cost driver:
Fixed cost - minimum:
Fixed cost - average:
Fixed cost - maximum:
Variable cost - minimum:
Variable cost - average:
Variable cost - maximum:
Cost unit:

Time

Total Duration:

Hands on

Distribution: Uniform
Minimum: 2
Average:
Maximum: 10
Std. deviation:
Period:Minute



Child Steps

List of child steps:

Step number	Process
1.1	Collect Order
1.2	Enter Order

Inputs

List of inputs:

Input	Type of Input	Info struct
Call Order	Event Definition	Call Order Structure
Fax Order	Event Definition	Fax Order Structure
Email Order	Event Definition	Email Order Structure

Outcomes

List of outcomes:

Output	Type of Output	Info struct	Probability
Check Credit	Business Process Definition		60
Ship Order	Business Process Definition		40

Effects

List of effects:

Entity	Create	Read	Update	Delete



Resources

List of resources:

Resource	Category	Min	Avg	Max
Customer Rep	Role			
Order Entry System	Application			
Order Processing Center	Physical Environment			

Skills

List of skills:

Skill

Metrics

List of metrics:

Metric	Current	Target

Additional Information

The following section can be used to provide additional information. It is free text only and will not be stored in the associated property pages.



Business Process Metrics

Reference Key:

First digit = Category (i.e., Customer Service = 1, Quality of Outcomes = 0, Cost of Care = 3, Learning = 4)

Second and third digit = Objective (see list of Objectives)

Fourth digit = Scope (i.e., Firmwide = 1, PRCC = 2, Team = 3, Individual = 4)

Fifth Digit = Status (i.e., 1 = current, 2 = proposed)

Category	Objective/Value	Scope	Reference	Proposed Indicator	Baseline	Benchmark	Target	Proposed Method	Proposed Accountability



Business Process Validation Approach

Introduction

New Processes, as with a new system implementation, should be thoroughly tested. This document outlines the objectives, scope and benefits of validation and an overview of how the validation approach and steps required.

Objectives of Validation of Workflows for Process, Activities and Task

Validating the Processes, Activity and Tasks, provides and opportunity to try out the new processes to see if the paper based version of the Workflows for Processes, Activities and Tasks will indeed work in reality. A validation also helps ensure involvement and control over the new Processes, which will help reduce resistance to new processes and gain crucial buy in.

The overall objectives of a validation are as follows:

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Scope of Validation

Validation Technique Selection

Approach – Overview

The chosen approach to validate Workflows for Process, Activities and Tasks is to undertake *** (insert chosen validation techniques, such as simulation, conference room pilot etc.).

Benefits of *****

Weaknesses:

Risks of Validation Approach

Risk

Consequence

Action

Data Collection Approach

Approach

Benefits



Weaknesses

Example Data Collection Template

Analysis of Results

Validation Sign off Procedure

Plans and Timescales

Validation Schedule

Team Roles and Responsibilities



Business Process Validation Input Data

1.3 Process or activity to be validated

1.4 General information:

Document the validation technique to be used.

Document if the information is based around either:

- Assumptions
- Historical data
- Demand Planning
- Future forecasts

1.5 Workload

Capture assumptions, future forecasts, or demand planning depending on level of detail and objectives.



1.6 Time to process each task

Document time to process each task and indicate whether this time is based on assumptions, best case, worst case and most likely case scenarios. Document how this information was obtained, a suitable method of obtaining this is from group facilitation with subject matter experts.

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1.7 Resource types and amounts used

Document whether this is based around assumptions, specific activity/task assignments, or specific resource assignments to activities/tasks.

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1.8 Resource teams or cross competency groups

Makeup of teams by resource class, relative productivity of each resource class, rules for allocating workload.

1.9 Alternative paths/routes through the Workflow

All relevant and specific paths at the desired level of detail.

1.10 Business rules that control Workflow paths

Complete specification of routing rules and workload attributes that trigger alternative paths.



1.11 Costs of resources

Wage rates for HR classes, time-based costs of IT and other equipment, from company data or estimates.

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Business Process Workloads

Business Process	Workloads	Assumptions
1.0 Research and Development		Workloads have been calculated on the basis of quantity processed per month.
1.1 Develop Idea		
1.2 Market Research		
1.2.1 Identify Target Market		
1.2.2 Determine Product Demand		
1.2.3 Determine Price Sensitivity		
1.2.4 Produce Final Report		
1.3 Product Engineering		
1.6 Release Eng. Specs		
1.7 Manufacture Product		
1.8 Refine Engineering Specs		
1.9 Obtain Mgmt Approval		
2.0 Marketing and Sales		
3.0 Manage Supply		
4.0 Produce Product		
5.0 Distribution		
6.0 Human Resource Management		
7.0 Accounting		
8.0 Regulatory Compliance Management		
9.0 Information Systems Management		



Information Structure Definition

General

Type: Info Structure Definition
Version number: 1.0
Version labels: 1.0
CURRENT

Created: 12/01/97 06:03:52 PM
Modified: 12/01/97 06:03:55 PM
Last modified by: UserX
Created by: UserX

Summary

Name: Contact Details
Title (Description): Information that accompanies the "Contact Received" event

Keywords:

Sub-components

List of sub-component:

Sub-component	Type of Sub-component	Min	Avg	Max
Customer Id	Attribute Type Definition	0	1	1
Customer Name	Attribute Type Definition	0	1	1
Customer Tel Number	Attribute Type Definition	1	1	1
Contact Id	Attribute Type Definition	1	1	1
Contact Time Stamp	Attribute Type Definition	1	1	1



**Department of Education
Student Financial Assistance**

Contact Reason	Attribute Type Definition	0	1	1
Order Details	Information Structure Definition	0	10	5

Additional Information

The following section can be used to provide additional information. It is free text only and will not be stored in the associated property pages.



Store Definition

General

Type: Store Definition
Version number: 1.0
Version labels:

Created: 12/01/97 06:03:30 PM
Modified: 12/01/97 06:03:30 PM
Last modified by: UserX
Created by: UserX

Summary

Name: Customer Product Store
Title (Description): The storage for customer products

Keywords:

Details

Information Structure Definition

Name: Store Structure

Volume

Minimum: 100,000
Average: 1,000,000
Maximum: 5,000,000

Cost

Input cost: 250,000
Carrying cost: 10,000



Cost unit: USDollar
Carrying cost period: Day

Updates

Add

Frequency: 35,000
Period: Day

Modify

Frequency: 1,000
Period: Day

Delete

Frequency: 30,000
Period: Day

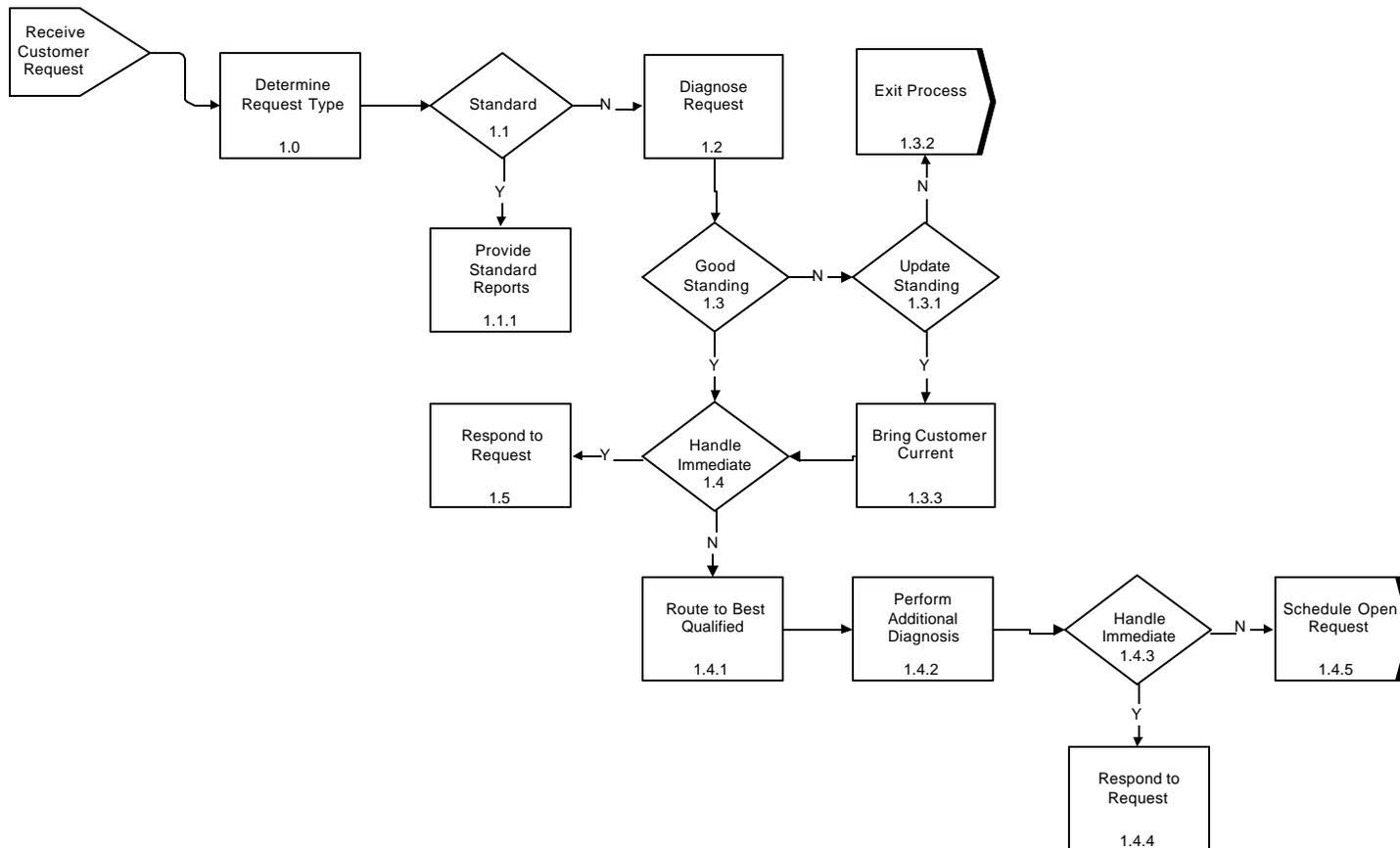
Additional Information

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Workflow Diagram

Workflow Diagram	Author: UserX	12/1/97
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Workflow Scenario

Business Practice: [1] Obtain Free-form Loss Facts

Scenario Description [2]

A customer service rep obtains loss facts from a customer after an auto theft.

Scenario Steps

# [3]	Step Name [4]	Actor [5]	Triggers [6] (Events and Rules)	Data Inputs (Information) [7]	Step Description [8]	Data Outputs [9] (Information)
1.	Determine if Loss Should be Diagrammed	Applica tion	CSR Begins loss facts	Auto Total Theft loss	A customer has called in to report that her car has been stolen. The application determines that this auto loss cannot be diagrammed.	Loss is not diagrammable
2.	Enter loss location information	CSR	Non diagrammable loss; loss location info is incomplete	Vehicle parked at Woodfield Mall	The CSR asks the customer where the vehicle was parked. The customer explains that the vehicle was parked at Woodfield Mall. The CSR captures the vehicle location.	Displayed location information



Workflow Scenario Description

- [1] **Business Practice**---The business practice for which the scenario is written.
- [2] **Description**--- A 1-2 sentence description of what happens during this scenario.
- [3] **Step**--- The scenario step number.
- [4] **Step Name**---A brief description that captures the essence of the scenario step.
- [5] **Actor**---Answers the question: Who performs this step?
- [6] **Triggers**---The events and/or business rules that cause this step to happen. Explains what causes the actor to perform this step.
- [7] **Data Inputs**---The data inputs required to perform this step.
- [8] **Step Description**---Describes what happens within this step.
- [9] **Data Outputs**---The data outputs produced by this step.

You may also decide to gather the following additional information for each scenario step (not shown in the sample):

Performance Requirements---Expected volumes, cycle times, etc.



Workflow Variability Matrix

		Sources of Variability [3]										
Scenario Category [1]	Scenario [2]	Customer	- Post-bill	- Pre-bill	- Preferred	- Not Preferred	Product	- No substitute	- Substitute	Inventory	- Primary w/h	- Alternate w/h
Mass Merchandise Order	Baseline Scenario		➡[4]		➡			➡			➡	
Mass Merchandise Order	Pre-bill, product substitute ...			➡					➡			
Mass Merchandise Order	Customer not preferred, ...		➡			➡						➡
Mass Merchandise Order	Maintain order ...				➡							
Consignment Order	Consignment order...		➡		➡							



Workflow Variability Matrix Description

[1] Scenario Category---Type of scenario referenced.

[2] Scenario---Name of the workflow scenario (may be a link in BI Designer).

[3] Sources of Variability---A factor or condition that causes a change in the way a business process is executed. You may also decide to use variability categories to group sources of variability into categories.

[4] Checkmark---Indicates that a particular scenario will address a particular source of variability (Noted as a 0 or 1 in BI Designer).