LOGO

Application Risk Analysis Questionnaire

Date	Application	Function	No. Concurrent Users	Completed By

Disaster Recovery Requirements - Application

Application Name:

Application Service Delivery Manager:

Production Overview

Features

Describe the purpose of the production system and what it provides to the business. What lines of business does it support?

Users

Who will use the system when it is fully rolled out? Include users, clients, and others.

	How Many Will Access It		
Job Function	**From OGP**	**From Home / Traveling**	**From Third Party Locations**

Will users tend to be clustered in a few locations? Describe where, and why:

Service

Detail the days and hours of service.

Disaster Recovery Overview

Functionality

Describe which functions will be required in a Disaster Recovery situation. Differences to production system may include omitting batch interfaces and peripherals.

Users

Describe who will use the recovered system. May be less than production, as infrequent users may be able to workaround.

Impact of Application Outages

The attached Recovery Requirements Worksheet may help determine the answers to the following questions:

1: Does the application have peak periods? If so, when?

Describe:	☐ **Time of day** ☐ **Day of week** ☐ **Time of month** ☐ **Quarter beg./end** ☐ **Year-end**
Concurrent Users:	

Comments:

2: During a system interruption, could any workload be handed off to another application or manual process? If yes, what workload can be handed off and how?

Comments:

3: Do business units have or anticipate Service Level Agreements (SLA) with internal and / or external clients that would be affected by a system failure?

Business or Function	SLA with Clients?			If yes, describe, including financial penalties
	Yes	No	Do not Know	
	☐	☐	☐	
	☐	☐	☐	
	☐	☐	☐	
	☐	☐	☐	

4: Do any federal, state, SEC or other regulatory regulations apply to the function(s) supported by this application?

Business or Function	Federal, state, etc. regulations apply?			If yes, describe, including financial penalties
	Yes	No	Do not Know	
	☐	☐	☐	
	☐	☐	☐	
	☐	☐	☐	
	☐	☐	☐	

5: Once the application is fully implemented, how many users will be idled (unable to do <u>any</u> work) when it is down?

DOWNTIME	NO. INTERNAL USERS IDLED	NO. CLIENTS IDLED
Immediately		
After 2 hours		
After 4 hours		
After 8 hours		
After 12 hours		
After 24 hours		
After 2 days		
After 3 days		
After 5 days		

Please consider your answers to questions 1 – 5 and the attached Recovery Requirements Worksheet in answering the next two questions:

6: Recovery Time Objective: In the event an incident was to occur and the business did not have access to this application, when would the application need to become available? Applications with an RTO fewer than three days will be classed as critical.

2 hours	4 hours	8 hours	12 hours	24 hours	2 days	3 days	5 days	10 days
☐	☐	☐	☐	☐	☐	☐	☐	☐

Comments:

7: Recovery Point Objective: After an unplanned outage, once the application is recovered, how current must your data be?

1 hour	2 hours	4 hours	8 hours	1 day	Other
☐	☐	☐	☐	☐	☐

Comments:

Disaster Recovery Plan Information

The following information may not be available at project inception, but must be provided for inclusion in the DR Plan:

8: List interfaces with other applications

APPLICATION	INBOUND/ OUTBOUND	INTER-ACTIVE	BATCH	FREQUENCY	REQUIRED

9: List shared services and data stores to which the application subscribes

SERVICE NAME	FUNCTION	REQUIRED FOR CORE FUNCTIONALITY

10: List other applications which subscribe to this one

APPLICATION NAME	FUNCTION	REQUIRED FOR CORE FUNCTIONALITY

11: List external third parties whose services the application relies on; for example, banks and information services.

ENTITY	CONTACT NAME	TELEPHONE	SERVICE(S) PROVIDED

12: Describe the processes which must function correctly in order for recovery to take place as planned:

✓	PROCESS	FREQUENCY	ADDITIONAL DESCRIPTION
	Tape Backup		
	Replication		
	Standby Database Replication		
	Other		

13: Topology:

Insert a schematic of the production system showing platforms, peripherals, software, network and interfaces.

Signoff:

The assessment of the impact of application downtime described in this document is accurate, and the recovery objectives specified in questions ##8 and 9 are based on that assessment.

	TIG Application Owner	Disaster Recovery Planning Officer	TIG Director
Signature:			
Print Name:			
Title:			
Date:			

Note: The IT *Application Owner* is the project manager responsible for developing the application.

Recovery Requirements Worksheet

Recovery Time Objective

The Recovery Time Objective is the point at which the continued use of a workaround has a sufficiently negative business impact to justify the recovery resources required to achieve the objective.

In order to determine the RTO, describe the actions to be taken by system users during an unplanned system outage.

From (hour/day)	To (hour/day)	Action	Detail
Outage		**None**	**No action required – wait for repair**
		Initial workaround response	Detail the first steps required to go to a workaround procedure, such as notification of clients, or verifying access to alternative technology or materials required for a manual process.
	This time is the RTO	**Workaround**	Detail the procedures to be used while the system is down. The "To" time is the point at which continued reliance on the workaround has a significant negative business impact. Negative business impact includes: • Direct revenue impact. • Brand/Reputation impact • How many employees will sit idle if the application Y is not available • Cost of work around/manual processes while the system is unavailable
		Resume normal operations	Detail any steps required to resume normal operations, such as the entry of manually recorded transactions.

Recovery Point Objective

The Recovery Point Objective is the maximum amount of data which can either be permanently lost or recaptured without causing a sufficiently negative business impact to justify the resources required to protect it from potential loss.

Most business is conducted on a workday cycle, and most systems take advantage of the nighttime and weekend processing lulls to make and protect copies of data. This service is provided for all systems, with no project-related cost. Therefore many business owners set an RPO of one business day, even if they could theoretically withstand a much greater data loss.

An RPO of less than 24 hours will incur a significant cost to the project. It is appropriate when the cost of permanent data loss or data recapture is unusually high. If you believe this to be the case, the attached spreadsheet may help you to determine the approximate costs associated with data loss.

Based on these considerations, the RPO should be set to the **lesser** of one business day, or the point at which, as shown below, the cost of lost data justifies significant additional expense.

Cost of lost data at different Recovery Point Objectives:

The Recovery Point Objective is

☒	One	Business Day
☐		hours

Guidelines for completing the RPO Spreadsheet and updating this document

Please enter values on the “Process Description” tab. You will see the results on the “Cost of Data Loss” tab.

Transaction value

When the risk that a transaction can not be reconstructed from available data is high, it is important to determine the value of each transaction, in order to set the correct RPO. For example, if a system accepts online requests for quotes from clients, the value of the transaction is the average revenue generated by a request for a quote. Its value may be increased by regulatory penalties, or a negative impact a data loss would have on future sales. If the value of the transactions processed per hour is high enough, then a short RPO is indicated. If the transaction value or volume is low, then a longer RPO is justified.

The value of a transaction is usually much more difficult to quantify, such as when a “transaction” is a collaborative update to a client presentation, or recording the outcome of a planning meeting. Fortunately in most such cases the transaction is not at risk: it can usually be recreated from existing sources. In those cases, you can safely enter zero.

No. Transactions/hour

The number of transactions entered per hour. This spreadsheet assumes they are spread evenly across a 24-hour period, which would reflect global distribution of the application.

Cost to research lost transaction information

If a transaction is lost, it may not be possible to re-enter it using the same process used to create it. For example, the original documents may have been filed. In that case there is a cost associated with determining which records are missing, locating the necessary information to recreate them in the files or by some alternative means, such as running a report from another system, or calling to request that a vendor re-issue an invoice.

Cost to enter a transaction

Lost transactions must be re-entered. The cost of re-entry is typically the personnel cost associated with the transaction entry.

Transactions entered more than yy hours ago cannot be recreated

Usually at some point it becomes impossible to re-create transactions. Necessary detail information may be purged from upstream systems, accounting periods are closed, or an opportunity may no longer be available. When does that typically happen for your system?

Transactions entered between xx and yy hours ago must be researched to be reentered

There is a relatively long period of time in which transactions can be re-entered, but only at the cost of performing research as described above. When does the original information used for transaction entry become unavailable?

Transactions entered between 0 and xx hours ago can be re-entered without research

Some transactions do not require any research; the original material is readily available on the user’s desktop.