

WHITE PAPER

E-PROCUREMENT

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Submitted by



CONFIDENTIAL

Table of Contents

1 INTRODUCTION..... 3

1.1 OVERVIEW.....3

1.2 BUSINESS FLOW FOR STANDARD PRODUCTS AND SERVICES3

1.3 BUSINESS FLOW FOR NON-STANDARD PRODUCTS AND SERVICES5

2 E-PROCUREMENT SYSTEM..... 7

2.1 OVERVIEW OF E-PROCUREMENT SOLUTION TOOL7

2.2 USER PURCHASE REQUISITION MODULE7

2.3 REQUEST ROUTING AND APPROVAL MODULE8

2.4 PURCHASE ORDER CREATION MODULE8

2.5 PURCHASE ORDER TRANSMISSION TO VENDOR MODULE8

2.6 ADMINISTRATION MODULE8

2.7 CONTRACTING MODULE9

2.8 SUPPLIER PERFORMANCE MANAGEMENT MODULE9

2.9 MARKET RESEARCH DATABASE MODULE9

2.10 ASSET MANAGEMENT MODULE.....9

2.11 REPORTING MODULE 10

2.12 FUTURE ENHANCEMENTS..... 10

Table of Figures

Figure 1 Business Flow for Standard Products and Services.....4

Figure 2 Business Flow for Non-Standard Products and Services.....6

Figure 3 Overview of e-Procurement Solution.....7

1 Introduction

1.1 Overview

GTL e-Procurement solution involves the process of end-to-end procurement of all the organization supply requirements whether products or services via electronic channel, which enables increased productivity and improved bottom-line.

GTL recognizes that there has to be a combination of **people, processes** and **tools** for an optimal effectiveness in the deployment of the e-Procurement solution. Therefore, GTL has aligned its strategy by selecting the people with the right skill sets, implementing best practices and customizing an application, to bring valued services to our customers.

1.2 Business Flow for Standard Products and Services

Figure 1 shows the business flow for standard products and services. The system provides end-to-end tracking of Purchase Request to Purchase Order closure. The proposed system is fully electronic including PO acknowledgement upto receipt of Delivery Notes. Closure of the PO shall be done by the purchasers (when the services is delivered) or by the Administrative Clerk (for goods delivered to the store).

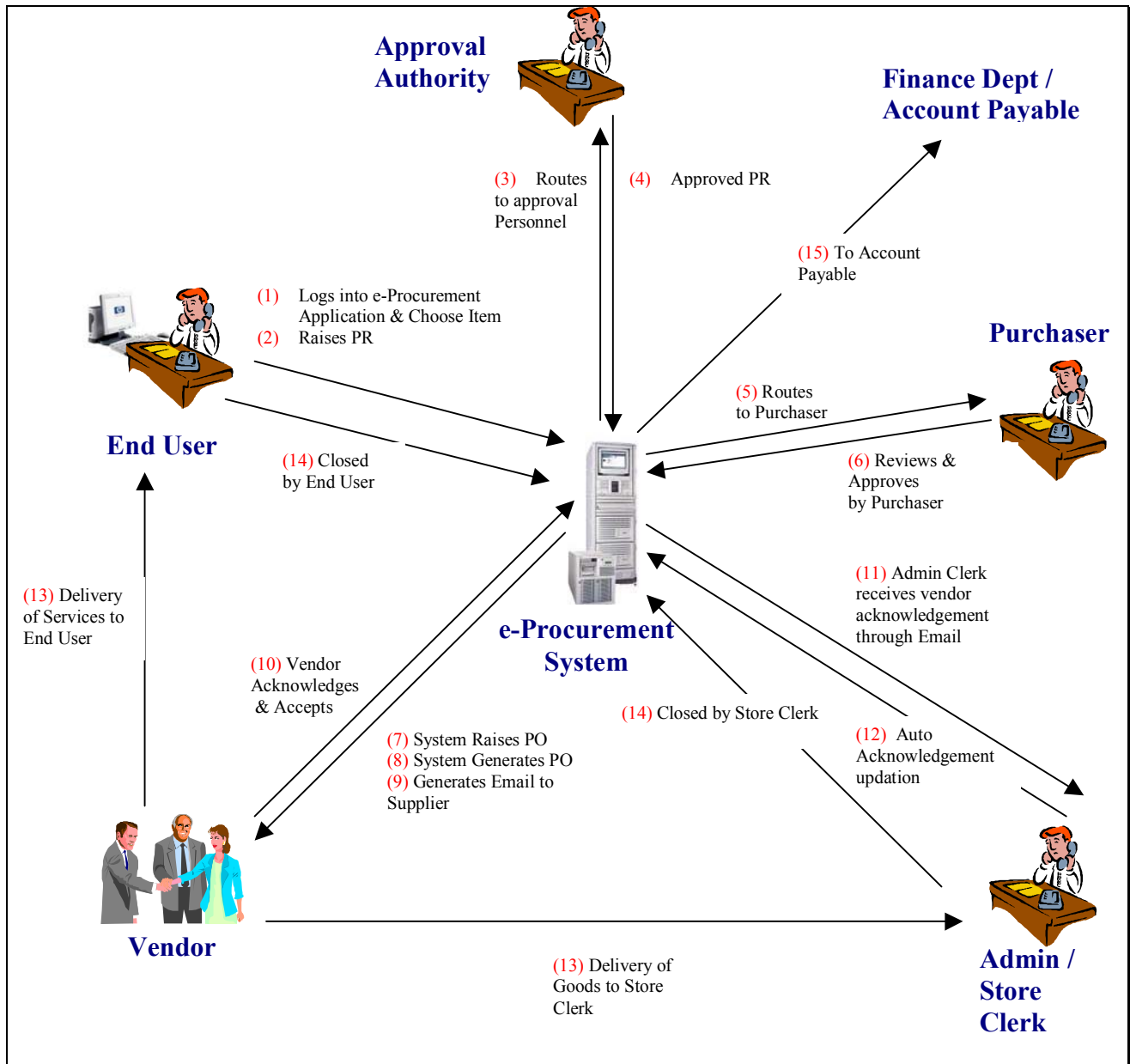


Figure 1 Business Flow for Standard Products and Services

1.3 Business Flow for Non-Standard Products and Services

Figure 2 shows the business flow for non-standard products and services. The system provides end-to-end procurement tracking from Request of quotation, to negotiation to the closure of Purchase Order. The proposed system is fully electronic including recording of the vendors' acknowledgement of PO (via Email) into the e-Procurement system and the filing of the Delivery Notes. Closure of the PO shall be done by the purchasers (when the services is delivered) or by the Administrative Clerk (for goods delivered to the store). It also supports negotiation process and contains a depository to contain vendor related information needed to assist in decision making. There also exist a Request for Quotation facility used in consolidating suppliers' quotation.

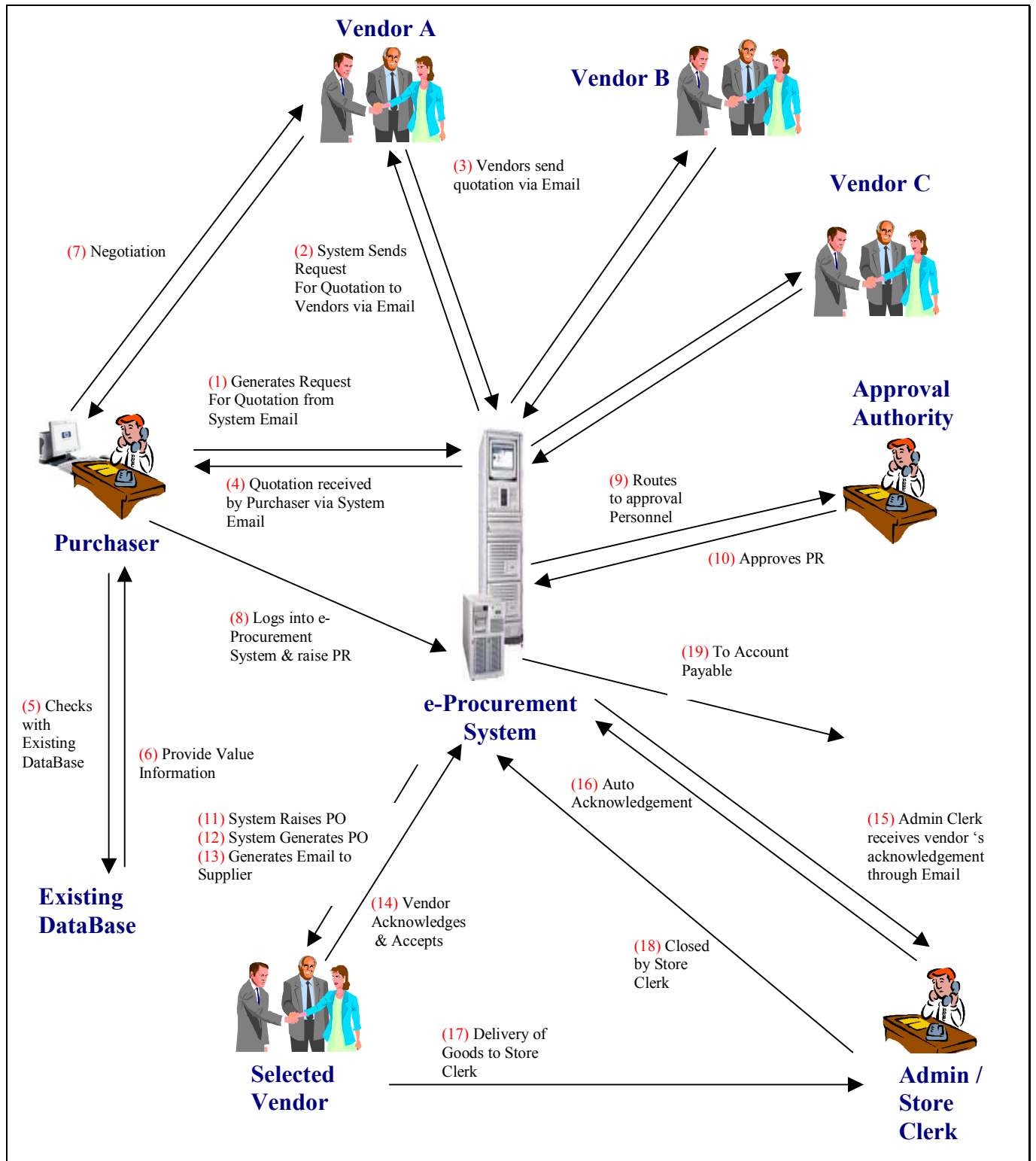


Figure 2 Business Flow for Non-Standard Products and Services

2 E-Procurement System

2.1 Overview of e-Procurement Solution Tool

GTL's e-Procurement Solution Tool is configured to incorporate modules that will perform the necessary functions to enable a smooth and efficient purchasing business flow. In addition, this customized solution tool will also bring to the Customer, a suite of value-added services that will complement the business flow, as well as enhance the effectiveness of this solution. The below diagram depicts the modules and their brief descriptions:

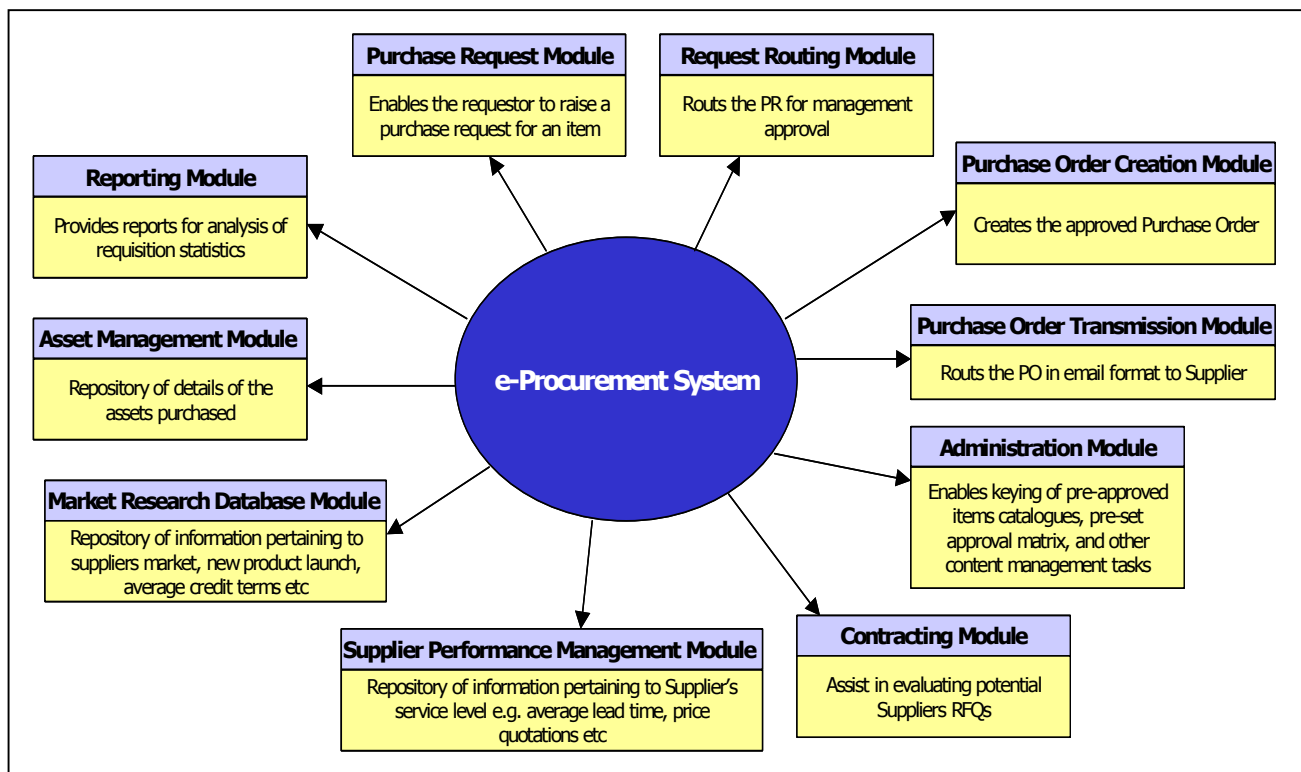


Figure 3 Overview of e-Procurement Solution

The following sections will expound on the features of each of the modules mentioned above.

2.2 User Purchase Requisition Module

When the end user has a purchase need, he will login into the e-Procurement application to raise a Purchase Requisition (PR). He will experience the following features of the PR module:

- Accessed via company intranet, with single signon feature
- Security access governed by login name and password
- Shopping cart feature to allow pre-approved items to be selected
- Standard PR templates to ensure friendly interface

- Specify priority of request to determine cycle time of procurement
 - Retrieval of previous request information to quickly register new purchase request
 - Ability to track request
 - Email workflow routing for approval per pre-set rules
-

2.3 Request Routing and Approval Module

Once the PR is being routed to the approving party, the application will exhibit the following:

- Security access governed by login and password to ensure legitimate approving parties
 - System can route to "n" number of approval level depending on pre-set parameters
 - Periodic email alerts if no action taken by approver
 - Approver has department budgetary details for validation
 - Approver has information on past requisitions of the requestor
 - Feature to approve or reject the request, and to add comments
 - Approver can view list of approvals and requisitions in his department
 - Email workflow routing to requestor and Purchasing department for action
 - If rejected, feature to send request back to the requestor for amendments and re-submission
-

2.4 Purchase Order Creation Module

The approved PRs will be routed to the Buyer as per pre-defined rules. For example, "Services" PRs will be routed to Buyer 2, "Equipment" PRs will be routed to Buyer 1. This module will have:

- Security access governed by login and password to ensure legitimate Buyers
 - Allow Buyers to review that PRs have been approved
 - Automatically translate the PR details from one or various PRs to create new Purchase Orders (PO)
 - Feature to amend the PO
 - Routes the PO for approval within the Purchasing department (if necessary) – see module description in section 4.3
 - Email workflow routing to Supplier
-

2.5 Purchase Order Transmission to Vendor Module

Once the PO is being sent from the application,

- Copy of PO created in electronic format as an email to the Supplier
 - Feature to modify, amend and re-submit PO
 - Details of changes, revision, date of change and other details are captured for future references
-

2.6 Administration Module

This module is needed to administer the content and the pre-defined rules for the business processes. Content Management includes additions, amendments and deletion of:

- Product items, product prices and other product Information
 - Suppliers Information
 - Approving parties & authorized amount
-

- Email information
 - etc
-

2.7 Contracting Module

For new non-approved items, an RFQ process will be set in place. The system will then complement this process by having the following feature:

- Electronic RFQ facility to obtain latest quotation
 - Consolidate the quotes in the system
 - Provide a summary report for analysis
-

2.8 Supplier Performance Management Module

This module enables the procurement team to track the performance of the supplier through quantifiable measurement of the supplier's performance. The information that can be captured in the database include:

- Reliability
- Cost
- Responsiveness
- Quality
- Delivery
- Technology

GTL will work with the Customer to quantify these measurements.

2.9 Market Research Database Module

A depository is set up to consolidate information collected by the Customer or other sources in order to perform the following functions:

- Negotiation with Suppliers
 - Benchmarking of products and services
 - Budgeting
-

2.10 Asset Management Module

Upon purchase of items classified as "assets", the details of the PO will be transferred into the Asset Management Database. GTL will work with the Customer for the asset tag. For every asset, an asset tag will be generated by the system. The physical tagging of the asset is assumed to be done by the deployment party.

Hence, the Customer would be able to generate reports on the assets by:

- Department
- Products
- Value of Assets
- Brands

2.11 Reporting Module

Reports can be provided based on Customer's information requirements, such as:

- Analysis of requisitions on numbers, value, users, sections, type of item etc.,
- Procurement cycle time analysis end to end, within a section/department, between users etc.,
- Comprehensive analysis of Procurement process (e.g., Orders posted, requisitions raised , On time deliveries, Quality of deliveries, Supplier performance, cycle time, cost savings)

2.12 Future Enhancements

As this e-Procurement Solution Tool is structured in a modular manner, GTL can provide further value by adding features such as

Reminder Features

- "Time to request" reminders to users by analyzing user requisition patterns and cycles
- Escalation mechanism to trigger speedy action
- Auto confirmation of transactions between you and your supplier and maintaining a history of past transactions
- Multi-channel intimation (e.g., via e-mail, Paging, SMS, voice mail to mobile, voice mail to a landline, fax, e-mail to PDA.)
 - Via e-mail
 - Paging
 - SMS
 - Voice mail to mobile -
 - Voice Mail to landline , fax -
 - E-mail to PDA

Integration Features

- A module to integrate with Payment Gateway for Electronic Fund transfer
- Invoice document transfer from Vendor as a base document for payment
- Integration with Logistics Provider (e.g., Transporter) system for end to end tracking
- Online validation features –
 - Check for Budgetary limits
 - past record of suppliers and other factorsFor e.g. , if a supplier has not delivered good quality material or delivered late in the past, we can offer functionality to analyze such patterns and highlight while placing future orders
- EDI based document transfer mechanism can be implemented instead of an Internet based (optional).
- Scheduled transfer of purchase orders (say at end of the day, every two hours etc.,)
- Differentiate between inventory and non-inventory items (not in stock). This is since each of them might require varying order cycles. This requires integration with Inventory system (if any) of the client.

Reporting Features

- Reporting based on VER model (Vendor effectiveness ratio (VER) is an index combining Quality, Quantity and Delivery parameters)
- Cost Savings and time savings tracking features
- Decision Support Tools to award orders e.g., Rating engine, analysis engine etc.,