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HIGH LEVEL REQUIREMENT

Requirements Document

Project: E-PROCUREMENT
Organization: CYBERSPACE LIMITED
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Document Versions

Version Number	Date Published	Author	Summary of Changes
1.0	23/04/2019	Nnenna Okoh	This document is a working draft. Not yet ready for publishing.

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Document Approvals

By signing this document, all parties agree to or ascend to the scope and meaning of the content. Any additional thought or feature shall be subject to consideration of constituted Change Control Board (CCB) or Software Change Control Board (SCCB) – a committee that consists of Subject Matter Experts (SME) and Technical Chiefs, who will make decisions regarding whether or not proposed changes to a software project should be implemented.

Approver Name	Project Role	Signature	Date
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Table of Contents

Document Versions	2
Document Approvals	3
Stakeholders	5
Project Overview	6
Assumptions and Unknowns	7
Current State	8
Process	8
Issues with Process	8
Scope	
.....9	
Business Requirements	10
User Requirements	11
Business Rules	
.....11	
Functional Requirements	12
Nonfunctional Requirements	13
Diagrams and Models	13
Process Flows	15
Process Flows for Quotation	16
High level flow for Quotation	17
System Level Use Case	18
Special Considerations	19
For Training	19
For Development	19
For Testing	19

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For Implementation

19

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Stakeholders

Name	Functional Role	Requirements Role	Version & Date Approved
Nnenna Okoh	Business Analyst	Author	1.0, 04/09/2020
Domini Akpati	Procurement Manager	Approver	1.0, 04/09/2020
Collins Onochie	Procurement Officer	Reviewer	1.0, 04/09/2020
Collins Obuh	Procurement Officer	Reviewer	1.0, 04/09/2020
Austin Etang	Procurement Officer	Reviewer	1.0, 04/09/2020
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Reuben Isibor	Internal Control	Reviewer	1.0, 04/09/2020
Peter Osuere	Procurement Committee	Reviewer	1.0, 04/09/2020
Victor Abulele	Semco/Finance	Approver	1.0, 04/09/2020
Evans Okosodo	Head Software Department	Approver	1.0, 04/09/2020
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Vendor	Vendor	Reviewer	1.0, 04/09/2020
Godwin Agbon	Product Owner	Approver	1.0, 04/09/2020
Beeny Abuah	Project Manager	Approver	1.0, 04/09/2020

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Project Overview

Cyberspace processes transactions now in thousands with about 200 vendors on the database and over 100 of them actively being used. These transactions beginning from vendor registration, vendor evaluation, RFQ, Purchase requisition to issuance of order are being done manually; this in turn breeds huge reliance on human intervention, lots of errors, inefficiencies and lack of transparency. The entire system is not cost effective.

There are several issues with the current manual process, summarized as follows:

- It delays the process of procurement
- The entire process is manually intensive and takes up majority of procurement officers' time
- The system is prone to errors
- Difficult in archiving and tracking of transaction and vendor records for prompt decision making

These issues can all be overcome through automation of certain aspects of the process.

E-procurement solution should provide an interface for the procurement stakeholders, vendors and requestors. It will manage, ease and control procurement activities, create transparency in bidding, vendor reporting and appraisals.

The expected benefits of the system include:

- A single point of reference leading to an effective and efficient supplier/vendor management.
- Stakeholders can centralize and control procurement process objectively.
- Pains associated with communicating with multiple vendors on daily basis will be eliminated.
- Vendor/supplier early assessment and monitoring of supplier qualification which will reduce risks and ensure compliance with standards (CMMI, BSI) and regulatory requirements.
- Ability to manage supplier related issues, thereby leading to cost savings and operational safety.
- Information between Cyberspace procurement and suppliers will be consistent, fast, predictable, flexible and traceable.
- The data collected during procurement process can be further analyzed to predict patterns and produce reports for future planning and informed decision making by stakeholders.
- Manage workflow approval at any time, from any place.

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This document describes the requirements for that automation.

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Assumptions and Unknowns

ID	Description	Assigned To	Status with Due Date
Unknown-1	Need to find out parameters for vendor selection and setup in the system.	Nnenna Okoh	
Unknown-2	Format of reporting and report parameters	Nnenna Okoh	

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Current State

Process

1. Procurement receives requisition form from Store/Employees
2. Procurement raises RFQ and send to certain number of vendors (configured in the system) that deal on such item.
3. Vendor sends Quote to procurement.
4. If quote is less than or equal to a selected threshold (configured in the system), procurement invites the vendor for negotiation via phone.
5. If Quote is above a selected threshold (configured in the system), procurement invites procurement committee (personnel from different departments, total number is configured in the system) and vendor for negotiation.
6. Vendor sends reversed quote.
7. Procurement raises approval memo to be signed by procurement head if quote met step 4 above.
8. Evaluation form is raised to be signed by procurement committee members if quote met step 5 above.
9. Procurement sends approval memo to Semco for approval.
10. Purchase Order (PO) is raised after approval and sent to vendor.
11. Items are delivered by vendor
12. Check is done at the point of delivery by the following; Store, Procurement, Internal control and requesting department (store checks quantity while others check quality)
13. If item is certified, item is received by store
14. If not certified, item is returned to vendor
15. Store raises Goods received note
16. Requestor is notified of item collection
17. Procurement sends invoice (from vendor), Delivery note (from vendor) and Goods received note (from store) to Internal control
18. Internal control sends invoice, Delivery note and Goods received note to Finance

Note: Vendor selection is based on set parameter, vendor delivery time is on set parameters, Employees should involve in evaluation of vendors.

Issues with Process

- Per Dominic
 - Prone to errors
 - Takes lots of procurement officer time
 - Tracking of transaction status is very difficult
 - Vendor management is very difficult

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- Sourcing of information on past transactions takes lots of time

Scope

The application should capture all activities beginning from vendor onboarding to item delivery to store; involving the following processes:

- **vendors' registration**
- **vendors validation and selection**
- **vendor rating analysis, vendors' categorization**
- **management of validity period of vendors' certification/contracts**
- **Request Notification**
- **submission of RFQ**
- **submission of Quotes**
- **submission of invoices**
- **Approvals**
- **email and SMS notifications**
- **Item Delivery**
- **Procurement Activity Reporting/Reports**

Input sources (From Requisition Application)

- Internal Source: Store/Technical/Software/Business Development
- External Source: External clients through Project Unit

Input (Requisition) Categorization

- Stock Item (Physical items, Administrative items); routed to store
- Service Item (Request for Installations); routed directly to procurement
- Request for Quotation (Item Pricing); routed directly to procurement

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Business Requirements

Req ID	Requirement	Rationale	Source
BR-1	Solution should be able to report on No of transactions processed within 48 hours after meeting with procurement committee or after the request is received by procurement.	To aid Procurement in meeting up with the department KPI.	Dominic Akpati, Procurement Manager
BR-2	Solution will significantly reduce level of manual work performed by procurement officer.	Free up officer's time to handle other work.	Dominic Akpati, Procurement Manager
BR-3	Solution will provide an on-demand report capability for vendor performance, including Suppliers' return of defected goods.	For vendor review and appraisal and for informed decision making by the management.	Dominic Akpati, Procurement Manager
BR-4	Solution will provide an on-demand report listing all transactions status	Important to deliver to accomplish BR-3.	Dominic Akpati, Procurement Manager
BR-5	The solution should be able to indicate the transactions that led to cost saving by 20%.	To assure cost saving and revenue generation.	Dominic Akpati, Procurement Manager
BR-6	Every selected quote must pass through approvals	For checks and control	Dominic Akpati, Procurement Manager
BR-7	Vendor selection must be based on set parameters	To reduce risk and ensure compliance to standards	Dominic Akpati,

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			Procurement Manager
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User Requirements

Req ID	Requirement	Rationale	Source
UR-1	Solution will provide report per transaction	Important to deliver to accomplish BR-3.	Dominic Akpati, Procurement Manager
UR-2	Solution will provide report per vendor	Important to deliver to accomplish BR-3.	Dominic Akpati, Procurement Manager
UR-3	Solution should allow user to set parameters for vendor selection	Important to deliver to accomplish BR-7.	Collins Onochie, Procurement officer
UR-4	Solution should allow user set up notification parameters for approvals	Important to deliver to accomplish BR-6.	Collins Onochie, Procurement officer

Business Rules

Rule ID	Rule	Owner	Controller
Rule-1	Procurement committee is notified for negotiation when quote is above selected threshold (configured in the system).	Procurement Committee	Dominic Akpati, Procurement Manager
Rule-2	Quote that is above selected threshold (configured in the system) must be approved by procurement committee.	Procurement Committee	Dominic Akpati, Procurement Manager
Rule-3	RFQ should be sent to only vendors that met set selection criteria.	Procurement	Dominic Akpati, Procurement Manager
Rule-4	Only Vendor with selected quote should receive notification for negotiation.	Procurement	Dominic Akpati,

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			Procurement Manager
Rule -5	Only selected vendor should be able to upload goods delivery note.	Procurement	Dominic Akpati, Procurement Manager
Rule-6	Service Request does not go through approvals	Procurement	Dominic Akpati

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Functional Requirements

Req ID	Requirement	Rationale	Source	Parent
FR-1	Solution should be able to report on No of transactions processed within 48 hours after meeting with procurement committee or after the request is received by procurement.	To aid Procurement in meeting up with the department KPI	Dominic Akpati, Procurement Manager	
FR-2	The solution should indicate vendors not meeting up with delivery time; it should capture status of transactions per time.	For vendor review and appraisal and for informed decision making by the management	Dominic Akpati, Procurement Manager	
FR-3	The solution should be able to indicate the transactions that led to save of cost by 20%.	To assure cost saving and revenue generation	Dominic Akpati, Procurement Manager	
FR-4	Solution should route approvals and vendor selection notifications based on set parameters	For control and risk management	Dominic Akpati, Procurement Manager	

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Nonfunctional Requirements

Timeliness

Req ID	Requirement	Rationale	Source	Parent
NF-1	The solution should significantly reduce the level of manual work done by procurement; it should be fast and readily available.	To free up procurement staff time to handle other jobs	Dominic Akpati, Procurement Manager	BR-2
NF-2	Timely reporting of transaction details; The solution should indicate vendors not meeting up with delivery time; it should capture status of transactions per time.	For vendor review and appraisal and for informed decision making by the management	Dominic Akpati, Procurement Manager	BR-3

Process Flows

Store	Procurement	Vendor	Committee	Semco
<p>Start</p> <p>This input is from Requisition Application</p> <p>Raises Requisition to Procurement</p> <p>Sends RF</p> <p>RF</p> <p>Receives Item</p> <p>Invoice/ delivery note from vendor and GRN is sent to Internal control and to Finance</p> <p>End</p>	<p>Raises RFQ</p> <p>Sends RFQ</p> <p>RFQ</p> <p>Receives Quote</p> <p>Is Quote \leq 1M</p> <p>Yes</p> <p>Alerts Vendor for negotiation</p> <p>No</p> <p>Receives Reversed Quote</p> <p>AM</p> <p>Raises Evaluation Form (If Quote > 1M)</p> <p>PO</p> <p>Manual check by Proc. store, Internal control, Requesting dept.</p> <p>Initials check</p> <p>Item ok</p> <p>Yes</p> <p>No</p> <p>Return item</p>	<p>Receives RFQ</p> <p>Sends Quote to Procurement</p> <p>QF</p> <p>Negotiation done manually</p> <p>Sends Reversed Quote</p> <p>QF</p> <p>Receives approved memo</p> <p>Sends PO</p> <p>Receives PO</p> <p>Sends Item</p> <p>Receive returned item</p>	<p>Alerts Procurement Committee for negotiation with Vendor</p> <p>Approves Memo</p> <p>Approves Evaluation form</p>	

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RF: Requisition Form; RFQ: Request for Quotation; QF: Quotation Form; EF: Evaluation Form; AM: Approval Memo; PO: Purchase Order; GRN: Goods Received Note



Illustration 2: High level process flow

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E-PROCUREMENT PROCESS FLOW(REQUEST FOR QUOTATION)

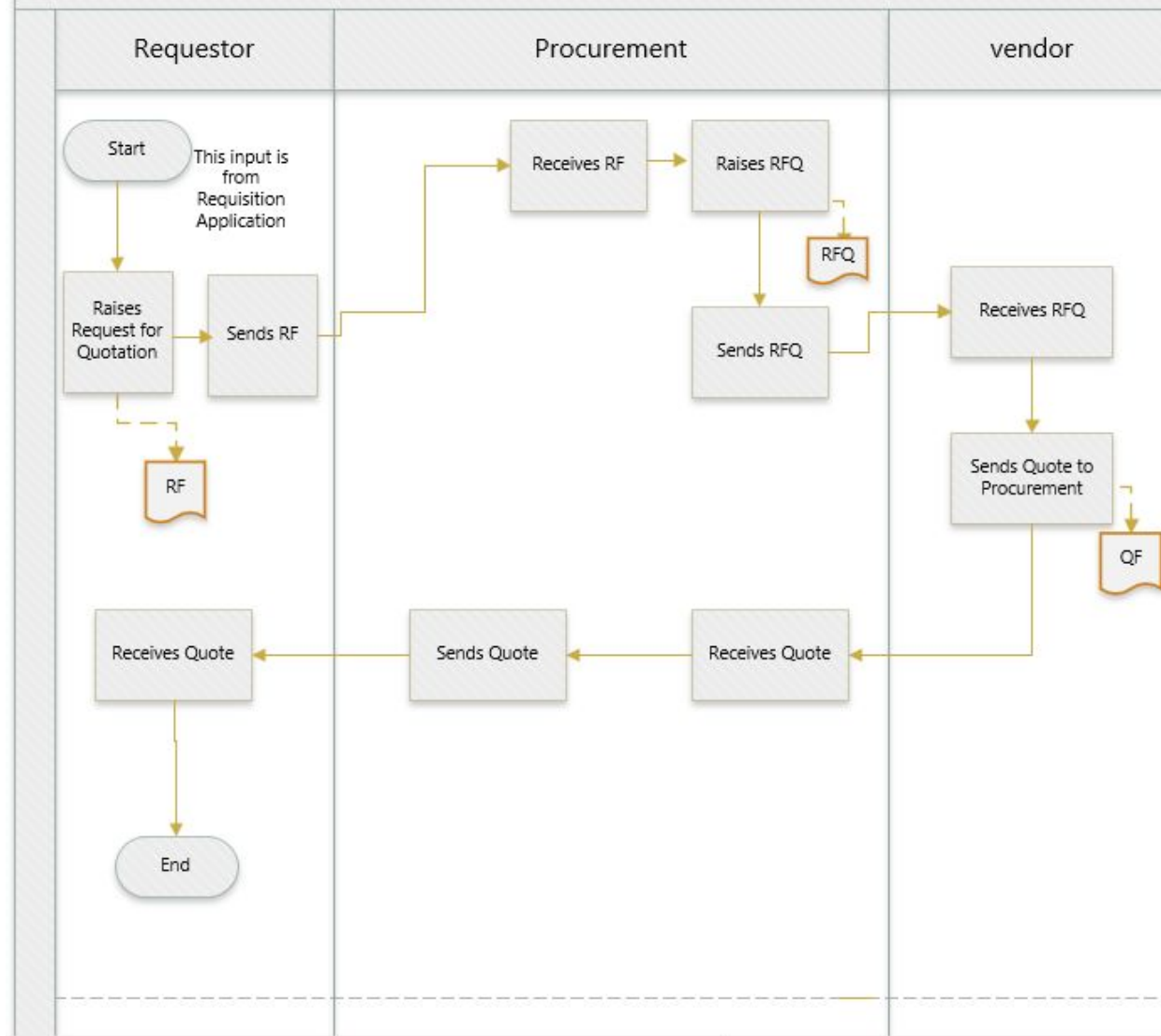


Illustration 3: Request for quotation process flow

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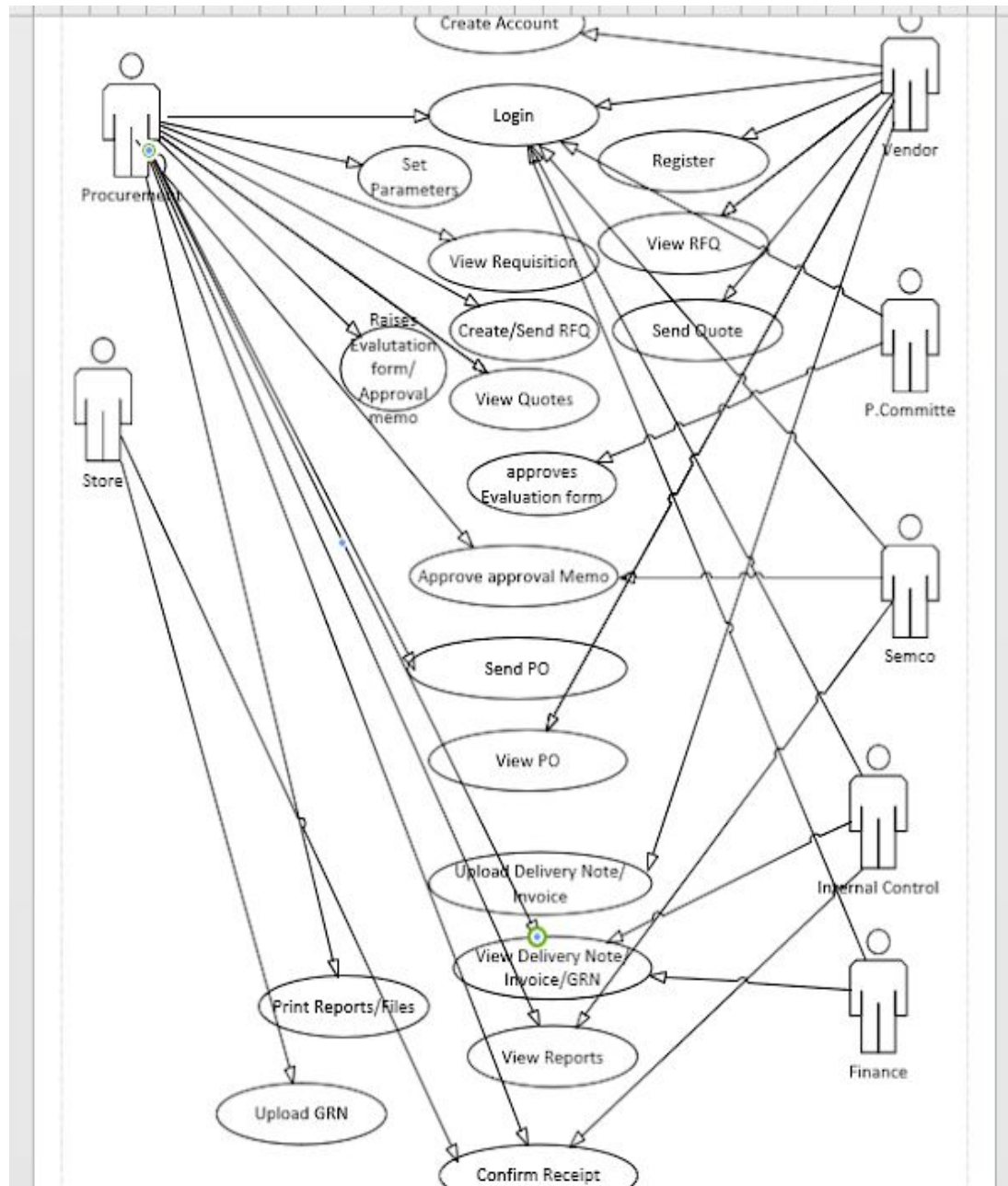


Illustration 4: High level process flow for Quotation (Request for Quotation)



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System Level Use Cases



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Illustration 5: system use case

Special Considerations

For Training

All stakeholder must be trained on the use of the solution.

Vendor should also be trained.

For Development

Solution should be developed in phases: Approval system first before implementation of vendor interface.

For Testing

N/A

For Implementation

N/A