VHTender™

Technical Paper

VHTender™ - Electronic Tendering System (ETS)

1. Current Situation

Nowadays, large organizations usually have to handle multiple procurement needs by applying different kinds of information systems developed by various suppliers. Such process will become inevitably long and cumbersome in conventional tendering systems when the categories of products are not well sorted out.

2. How to improve?

In order to realize better cost savings and increase efficiency, replacing the manual paper-based tender procedures by electronic-facilitated system has become an essential element in process re-engineering. With a highly automated e-Tendering system, tender specification, advertising, tender aggregation as well as the evaluation and placing of the contract can be prepared at ease.

3. Who should use e-Tendering System?

- Builders
- Civil & Mechanical Contractors
- Construction Managers
- Custom Manufacturers
- Public Works Agencies
- Retail Chain Stores
- Specialty Contractors
- Subcontractors

4. Why VHTender?

VHTender is an Electronic Tendering System (ETS) developed by VHSoft Technologies from best practices equipped with a suite of integrated tools to obtain **more profitable contracts** with:

4.1 Increased Efficiency

- **Shorten the procurement cycle** when processes are automated with tender analysis, allowing users to allocate resources and time for other critical issues.

- **Automate the entire tendering lifecycle for procurement of goods and services** starting from creation of a purchase requisition through to the award of contract with strict control.

- **Budget template** is applied where historical data can be used for conducting the budget preparation, results in reduction of manual input in tender-in data.

- **Streamline last minute tender changes**

[SB] Coffee Shop Co. Ltd. > [SB001] Airport Gate 28門面 > [EU100] Seating Area > **Addendum**

Tender Addendum   Edit   Cancel

Project:	[SB001] Airport Gate 28門面	Type:	Tender
Tender Code:	EU100	Currency:	HKD
Tender Name:	Seating Area	Closing Date:	20/2/2005
Tender Status:	Tender Out		
Addendum Name:	Addendum 6	Creation Date:	7/2/2005
Remarks:		Publish Date:	21/2/2005

Addendum Content   Publish Addendum

Preliminaries   Seating Area   Demolition Item

Seq.	Description	Remarks	Qty	Unit	Type	Associating Budget Item
P.1	To supply and lay 300x800mm quarry tiles on 20mm THK cement/sand bedding on all tea < Associating to SID009 > AC Pipe - GI	-	1	lm	Works	
P.2	Erect hoarding panel with 4 coats of emulsion paint and 5000mmW access doors along shop front < Associating to SID019 > AC Pipe - PVC	-	1	sum	Materials plus Works	

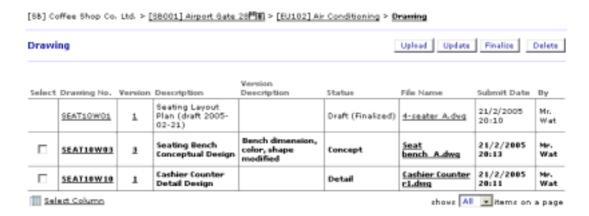Goto page 1 of 1   shows 4 items on a page

- **Faster response** to questions and points of clarification during tender period

- **Remote office operation** is made possible as all authorized parties can access VHTender via a secured channel.   Cross border tendering process can be achieved.

- Better **communications between departments**, as the **alerting system** would remind users about critical issues and tasks that have been completed by different teams, minimizing human errors, as well as to route documents to appropriate parties or alerts individuals of actions in the system.

- **Single point of access** for both vendors and purchasers to do business efficiently in a convenient and user-friendly manner.
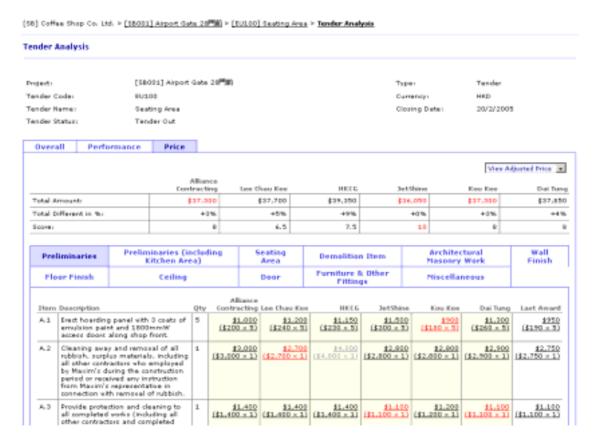
4.2 Reduced Cost

Achieve *economy of scale* by aggregation of requirements:

- **Reduce various kinds of cost**:
  o Takeoff costs and errors with direct digitizer input
  o Costs of participation for purchasers and vendors
  o Fulfillment and rework costs
  o Advertisement cost

[BB] Coffee Shop Co. Ltd. > [BB001] Airport Gate 28門前 > [EU102] Air Conditioning > **Drawing**

Drawing

					Upload	Update	Finalize	Delete

Select	Drawing No.	Version	Description	Version Description	Status	File Name	Submit Date	By
	SEAT10W01	1	Seating Layout Plan (draft 2005-02-21)		Draft (Finalized)	4-seater A.dwg	21/2/2005 20:10	Mr. Wat
☐	SEAT10W03	3	Seating Bench Conceptual Design	Bench dimension, color, shape modified	Concept	Seat bench A.dwg	21/2/2005 20:13	Mr. Wat
☐	SEAT10W10	1	Cashier Counter Detail Design		Detail	Cashier Counter r1.dwg	21/2/2005 20:11	Mr. Wat

Select Column   shows AL items on a page

- Obtain **detailed analysis** of costs and markup

[SB] Coffee Shop Co. Ltd. > [SB001] Airport Gate 28門閘) > [EU100] Seating Area > **Tender Analysis**

Tender Analysis

Project:	[SB001] Airport Gate 28門閘)		Type:	Tender
Tender Code:	EU100		Currency:	HKD
Tender Name:	Seating Area		Closing Date:	20/2/2005
Tender Status:	Tender Out			

Overall **Performance** **Price**

View Adjusted Price ▾

	Alliance Contracting	Lee Chau Kee	HKCG	JetShine	Kou Kee	Dai Tung
Total Amount:	$37,300	$37,700	$39,350	$36,090	$37,300	$37,850
Total Different in %:	+3%	+5%	+9%	+0%	+3%	+4%
Score:	8	6.5	7.5	10	8	8

Preliminaries	**Preliminaries (including Kitchen Area)**		**Seating Area**	**Demolition Item**		**Architectural Masonry Work**		**Wall Finish**
Floor Finish	**Ceiling**		**Door**	**Furniture & Other Fittings**		**Miscellaneous**		

Item	Description	Qty	Alliance Contracting	Lee Chau Kee	HKCG	JetShine	Kou Kee	Dai Tung	Last Award
A.1	Erect hoarding panel with 3 coats of emulsion paint and 1800mmW access doors along shop front.	5	$1,000 ($200 × 5)	$1,200 ($240 × 5)	$1,150 ($230 × 5)	$1,500 ($300 × 5)	$900 ($180 × 5)	$1,300 ($260 × 5)	$950 ($190 × 5)
A.2	Cleaning away and removal of all rubbish, surplus materials, including all other contractors who employed by Maxim's during the construction period or received any instruction from Maxim's representative in connection with removal of rubbish.	1	$3,000 ($3,000 × 1)	$2,700 ($2,700 × 1)	$4,000 ($4,000 × 1)	$2,800 ($2,800 × 1)	$2,800 ($2,800 × 1)	$2,900 ($2,900 × 1)	$2,750 ($2,750 × 1)
A.3	Provide protection and cleaning to all completed works (including all other contractors and completed	1	$1,400 ($1,400 × 1)	$1,400 ($1,400 × 1)	$1,400 ($1,400 × 1)	$1,100 ($1,100 × 1)	$1,200 ($1,200 × 1)	$1,100 ($1,100 × 1)	$1,100 ($1,100 × 1)

- **Reduce labour intensive tasks** of receipt, recording and distribution of tender

- **Minimize paper trail** on tendering exercises

- **Less manual forms** filling on tender preparation and data re-entry when upon receiving the tender

- Reduce hassles involved in communication and administration, achieving higher accuracy

4.3 Improved Quality

- Users can visualize the status on each tendering process by the **comprehensive progress tracking function**, reducing time for keeping track of status.

- **Streamlined workflow** is realized with faster drawing and document submission; hence improved information distribution is achieved.

- **Better integrity** of goods, services, works and contractors information as a provision of quality management of **centralized repository** facilitates instant access to both current and historical tender information
    - Detailed purchase history for efficient negotiation with vendors
    - Real time updating, eliminate obsolete information
    - Share latest information, including:
        o Account codes
        o Qualification of contractors
        o Detailed budget breakdown
        o Tender analysis criteria

- **Historical awarded tenders with quick comparison** on different aspects e.g. shop size and locations, as well as to highlight the maximum and minimum value of each trade item

- **Automatic rejection** of suppliers that fail to meet the tender specification

4.4 VHTender – Competitive Advantages

With VHTender, you can manage your business contacts, ensure deadlines are met, track requisitions submitted to your vendors and generate purchase orders.

Security

- Build-in security measures that ensure safe data transmission by using digital certificates, digital signatures and Public Key Infrastructure (PKI), coupled with the application of passwords, user profiles and permissions.

- Security is defined in different levels of permission on modular access, which means, unauthorized access to data and functions held within the system are strictly controlled during all stages of the tender lifecycle.

Confidentiality

- Provision of role and/or time based access to data held within the system.

- With authentication & non-repudiation to identify and authenticate user entities to negate activity denials.

Integrity

- Maintain the flow of data through the system from source to destination, and record exceptions.

Flexibility

- Accommodate various kinds of tendering formats and requirements.

Repository

- Capability to archive and retain data to enable recall and analysis.

Audit trails

- Carry date and time stamp features to provide a trail of systemic activities by users.

Reliability

- Manage continuous and sustained traffic with high scalability for future increase of loading.

Integration

- Users can leverage existing technology investments by integrating VHTender with existing applications.

Ease of use

- Enforcing minimum user requirements in the usage of computers and Internet technology.

4.5 VHTender Key Features

VHTender **maximizes your savings potential** through optimizing supplier selection and making dramatic efficiency improvements in the administrative processes of preparing tenders and requesting supplier quotations.

4.5.1 Contract Register module

The **Contract Register module** bridges the gap in moving your organization from decentralized control of contracts to fully integration within a central repository of tenders and contracts, with comprehensive search, management reporting and data export capability.

4.5.2 Central Knowledge Repository

With this powerful knowledge, one-stop access to tender information and documents 24 hours a day is made possible!

The system maintains a complete cross-reference of all the vendors. The repository archives the purchase history of every item you bought with full details. You can leverage this information while negotiating with existing or new vendors to get the best possible price.

4.5.3 Bid and Tender management module

The Bid and Tender Management module provides a market-leading e-tendering facility for preparing and publishing tenders online. It helps to identify tender short-lists, control pre-qualification processes, create evaluation matrices, and administrate the return & opening of electronic sealed-bid submissions. Paper-based tenders can be well managed within the same system.

4.5.4 Strategic Reporting modules

Strategic Reporting module provides all the tools you need to implement and control your procurement, whilst leaving authorized purchasers to make their own operational purchasing decisions.

4.5.5 RFQ module

The complete guidance in the Request for Quotation [RFQ] module helps to handle the manually time-consuming process of requesting quotes from suppliers with full details.

4.5.6 Administrative Tools

A comprehensive set of **administrative tools** for framework and project-based contracts enables users to control document management, workflow planning, contract variations, interim payments and contract security levels, allowing you to focus on the strategic management of contracts.

The fast and user-friendly **search, report and export data facility** allows authorized users to share contract information freely across every corner of your organization. The built-in XML-based integration

capability enables users to link up seamlessly with other contract systems of your organization.

4.5.7   Others Features:

- Linkage between conceptually identical items for tender price analysis and price negotiation
- Multi-currency for complex international tenders
- Flexible determination of report formatting and layout
- User defined cost types
- Apply User's Organization Name in Report Headings
- List of current tenders display in user interface

5. VHTender System Requirements

Client Requirements

Windows 95/98/NT/2000/ME/XP

<u>Minimum Recommended Hardware</u>

400 MHz Pentium

128 MB RAM

<u>Software Recommendations</u>

Microsoft Internet Explorer 4.01 or later (preferred)

Netscape Navigator 6.0 or later

(Some earlier version of Netscape may work with VHTender, but are not fully tested.)

Microsoft Excel 2000 Viewer or Open Office 1.0 or above for report viewing and printing

Solaris1

<u>Server Hardware Recommendations:</u>

Pentium IV – 2 GHz or above

512 Mbytes of memory

100 Mbit Ethernet (or other network) interface