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ProcureZone.com

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PROCUREZONE.COM

THE NEED

Under the current procurement system, the facility owner employs -- or more often, contracts with -- a team of design professionals. This group consists of a large number of individual engineers and architects. Their function is to develop unique specifications for each engineered product on every new project they perform. The purchasing department of the owner or contractor then issues these specifications to prospective suppliers as part of a request for proposal (RFP), which includes commercial terms for every procurement. Suppliers respond to the purchasing department, which then routes the proposal along parallel tracks: the technical response goes to the design professionals, while the commercial response stays within the purchasing department. The purchasing department links the two tracks together at the eleventh hour just before awarding the bid.

We estimate that the process cost associated with procurement of an engineered product -- consisting of items such as specification, search, workflow, and transaction costs -- is approximately 10% of the total cost of that product through completion of construction. The cost of the product itself -- i.e., the price paid to the supplier -- makes up the remaining 90%.

Limitations in the current system include inefficient communications, idiosyncratic specs, redundant specs, inefficient product comparison, inefficient supplier searches, bad incentives, and lack of management control.

THE TECHNOLOGY

TProcureZone.com is a comprehensive procurement system. On-line functions include: estimating the cost of a purchase; preparing and issuing detailed specifications and complete requests for proposals; requesting bids from selected suppliers; communicating with bidders; receiving, comparing, and evaluating bids; negotiating offers and conducting auctions; issuing purchase orders with all required attachments; making payment; and monitoring schedules and deliveries. The core of the system is our library that will initially contain specification templates for all major types of engineered equipment and commodities. These templates are flexible so parties in all



market segments can use them, but use standard specifications that are familiar to buyers and sellers alike and permit rapid turnaround of bids. Because certain details may vary for different applications, the templates permit buyers to modify typical parameters through drop down menus. The system uses similar templates to tabulate and compare the electronic bids submitted by suppliers.



FIGURE 1 PROCUREZONE.COM

THE BENEFITS

Under current practice, a buyer engages design professionals -- architects and engineers -- who develop unique specifications for each engineered product on every new project they perform. These specifications can run to hundreds of pages.



This approach has numerous limitations that are solved by ProcureZone.com as follows:

TABLE 1 BENEFITS OF PROCUREZONE.COM

Limitation	Solution
Phone, fax, paper-intensive and error-prone communication	Internet Hub
Unnecessary customization of Specifications	Standard Specification Templates (with options)
Different buyers reinventing same specification	Standard Specification Templates (with options)
Manually prepared bid comparison	Automatic tabulation into standard comparison templates (with options)
Supplier searches limited to the project engineer's personal knowledge	Internet hub and database of suppliers available to all buyers
Manufacturers' sales reps influence procurement	Internet hub, supplier database, supplier web pages on our site
Decentralized and personalized process lacks management control	Revision audit trial combined with management control



FIGURE 2 2 BENEFITS OF PROCUREZONE.COM

The efficiencies introduced by ProcureZone.com drastically reduce search and transactions costs, allowing participants in the construction industry to find and transact with many more potential partners. In addition, current practice for procurement of engineered goods uses one round of bidding, negotiated bids,



or even sole source procurement. By contrast, ProcureZone.com makes possible real-time, on-line auctions of engineered products.

STATUS

ProcureZone has built a comprehensive e-procurement system for engineered equipment. The site has recently gone live and is fully operational for both buyers and sellers with real-time procurements taking place online.

BARRIERS

The market for engineered equipment and commodities is estimated to be \$140 B in the US and \$600B worldwide. However, the community of buyers and sellers have typically been slow to adapt new methods of procurement. The industry has also been a historically low margin business. All participants must have necessary hardware and Internet connection.

REVIEWERS

Peer reviewed as an emerging construction technology

DISCLAIMER

Purdue University does not endorse this technology or represents that the information presented can be relied upon without further investigation.

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