VALUE PROCUREMENT

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Abstract

Like their commercial counterparts, military users expect the best value for their purchase dollar. This value includes meeting specifications and price requirements, as well as less quantified needs in product support and cost-of-ownership.

Reputable commercial suppliers are conscious of these needs with respect to their markets. These needs must be fulfilled on a daily basis in order to survive. The procurement process, which actually starts before any product is delivered, is tailored in the commercial world to effectively match the requirements of suppliers and users.

This paper will discuss methods in which the procurement process which matches the needs of commercial suppliers and military users may also be tailored to the increased satisfaction of both groups.

INTRODUCTION

Planning and writing specifications is part of what Hewlett Packard considers to be the establishment of mutual performance expectations and measures between supplier and buyer. This is the essence of a "working" vs. "adversarial" relationship, and what we consider to be critical to procuring value from our vendors.

We believe that any further clarification with regard to writing specifications which support procurement of our products by our customers should be preceded by first establishing this same type of procurement process; one which allows a buyer to truly purchase lasting value through the establishment of mutually beneficial, long-term relationships with its vendors. This paper addresses, in outline fashion, how HP is solving the problem of procuring value from its vendors, in the hope that the concepts presented may assist our customers in doing the same.

TQRDC&F

Results HP seeks from its suppliers do not occur from random sourcing or selection of suppliers based solely on specifications and competitive bid prices. They result from making the correct selection of suppliers and then working closely with them to improve quality and productivity. Thus, the strategy of establishing "working relationships" with suppliers involves the following general strategy:

1. establish mutual performance expectations and measures (of which specifications are a part),

2. feed back results,

3. initiate corrective actions to ensure continuous performance improvements, and

4. continue to reward the best performers with more business.

By setting supplier expectations, we:

* maximize customer satisfaction,

* maximize profitability for all contributors in the system,

* maximize responsiveness to change,

* provide a framework for effective communications.

To accomplish these objectives, we set out to do the following with each vendor interested doing business with us:

* establish and maintain long-term commitments,

* promote effective communications,

* obtain mutual agreement on expectations and goals,

* treat their processes as extensions of our own,

* utilize a team approach to achieve performance improvements in a proactive/cooperative manner.

The success of this program is rightfully shared with our suppliers who specifically contribute to our commitment to excellence. Successful supplier performance is measured in the areas of technology, quality/ reliability, responsiveness, delivery, cost of ownership, and financial stability, or **TQRDC&F** as we call it, and will always have rewards of repeat business, increased sales, and profitable growth.

An effective procurement process, constructed using the strategy outlined above, enables the customer to obtain far greater value from products than that obtained by purely meeting the "letter of the law" specifications.

COMMON PROCUREMENT OBJECTIVE

"Maintain a competitive advantage by providing materials of the highest quality and lowest cost, with the best delivery, responsiveness and technology available, by selecting fewer but better suppliers."

TQRDC&F MEASURES

TECHNOLOGY

Hewlett Packard competes on the basis of its strength in design and manufacturing technology. Likewise, HP expects its suppliers to be technological leaders in their respective fields of design and manufacturing. Suppliers are expected to participate in mutual engineering throughout HP's products' life cycle to enable timely introductions and continuous quality and cost improvements. Suppliers are graded on three key areas:

● New Technology - suppliers must be prepared to:

    − * provide leading edge technology,

    − * introduce new products in a timely fashion.

- Mutual Engineering — participate with HP in continually redesigning for reduced cost, as well a providing design and application assistance on existing and new products.

- Commitment to R&D — strength of management commitment to R&D funding is a prime indicator of present technical innovation and capability to respond to change.

QUALITY/RELIABILITY

HP expects zero defective products for electrical, mechanical, cosmetic and administrative reasons. Quality and Reliability are expected to be achieved through superior design, process control and continuous process improvements. Suppliers are graded according to:

- Process Control — using HP-qualified processes and SQC (Statistical Quality Control) methods to control/improve them, vendors will hold to the basic tenet in HP that quality is a result of the suppliers internal process, not external quality control. Specifically, suppliers must continually demonstrate:
  * * that they can meet or exceed HP specification requirements,
  * * Q/R improvements through application of SQC and TQC methods,
  * * that outgoing quality verification is high enough make incoming inspection unnecessary.
- Demonstrated Product Reliability by Test — provide reliability data to HP when requested.
- Documentation — accurate manufacturing documentation, including tooling information, is willingly supplied by vendors to HP, along with a commitment to give:
  * * advance notice of major process & product changes
  * * Responsive To Alerts And Corrective Action Requests — suppliers work quickly and effectively with HP to resolve reported Q/R problems.

RESPONSIVENESS

Suppliers are expected to be responsive to swings in demand with short cycle time, appropriate inventory management, while maintaining flexible capacity capabilities to successfully resolve and improve worldwide service. Suppliers are graded in four areas:

High Level Management Commitment to HP — the suppliers management should understand HP's expectations, develop strategic/tactical plans to address them, strive to resolve problems quickly, and provide effective two-way communication of these needs in the organization. Important parameters:
  * * responsive to changing needs
  * * initiate communication on potential problems
  * * timely response and resolution to inquires
  * * support of sole sourced parts

Effective Worldwide Factory and Field Support for All HP Entities — our suppliers must understand the requirements of doing international business and HP's expectations for equity, consistency and support.

Long Term Product Support — committed to supplying parts through the discontinuance phase of HP product sales and support life.

Flexibility to Changes — HP views suppliers manufacturing process as an extension of its own, and commits to minimizing operational problems by sharing forecasts of needs.

DELIVERY

HP expects deliveries to be 100% on time all the time with a window of -3/+0 days. To achieve this expectation, there must be continuous improvement in overall delivery performance and our suppliers must be prepared to meet commitments worldwide. Lead times must be short by industry standards, reliable and decreasing over time.

On–Time Delivery — 100% on time delivery is expected. HP will assist with forecasts and freight clusters where appropriate.

Lead Time — HP expects high performance with respect to lead times as well as continued improvement, and provides forecast information to support this performance. Important parameters:

* * stable lead times, decreasing over time
* * progressively shorter manufacturing cycle times
* * progressively shorter order processing times
* * assurance of material in market upturns

Packaging — must be done to HP expectations.

Backup Shipment Strategy — must have a mutually agreed upon plan.

COST OF OWNERSHIP

HP must have low–cost, high quality products on a worldwide basis. Supplier performance is measured by how well cost reduction techniques and improvements are being put in place.

Cost Reduction — suppliers enter into cost analysis discussions with HP on specific parts, with the purpose of establishing mutually beneficial prices. Programs to reduce cost must also be implemented. Important parameters:

* * continuous price reductions through process improvements
* * two–way feedback on opportunities for improvement
* * leadership toward standard parts and processes

FINANCIAL STABILITY

Part of establishing long–term business relationships with suppliers is the verification of financial stability, to ensure ability to grow financially as well as technically. Measures include:

* * D&B credit ratings
* * financial questionnaires
* * output from financial stability models

SUMMARY

Planning and writing specifications is an important part of setting supplier/buyer expectations. However, it is only a small part of the relationship which is formed in the procurement process. Much more central to the issue is the establishment of a win–win working relationship through a whole set of mutual performance expectations and measures, including specifications. The extent to which this is done and results are fed back, and corrective actions are initiated, will ensure that continuous performance improvements will occur and provide for the procurement of real value.

CREDIT

HEWLETT–PACKARD SUPPLIER PERFORMANCE EXPECTATIONS, June 1989
ELECTRONIC BUSINESS, October 16, 1989

QUESTIONS AND ANSWERS

JOHN VIG, AETDL: How do you control improvements? I know that some people are very afraid of having things change because that some innocent change that is supposedly an improvement can result in nasty problems later on. How do you control these?

MR. YOUNGBERG: That does happen from time to time and what we will do is to go back to the vendor, after we have made tests, and work with them on a solution to that particular problem. I am thinking of one that we had recently, a connector, where we went back, since we have a long term relationship, and try to help them understand their process and how they can change it and make it work for us.