Organizational Learning and Cycle Time Issues in the Procurement Process

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Executive Summary

Fast cycle time and procurement are often at odds with each other in many organizations, resulting in frustration and lost productivity. Often, when people need to procure products or services provided by external vendors, they need them now. The organization's procurement function may increase the time required to complete the procurement process as they try to enforce standards and get the best prices, while following the organization's procurement regulations.

A series of in-depth case studies with procurement users was conducted to explore cycle time issues in the procurement process of a major Fortune 500 corporation. The study was designed to deliver a set of actionable and constructive recommendations for the purpose of reducing the cycle time of the procurement process while controlling for cost factors and providing a way to integrate important procurement activities such as standards or compatibility in a cross-functional manner. Organizational learning is used as a framework for fast cycle time and the assessment of cycle time, cost factors, and standards. Key areas within this organizational learning framework are transformational leadership behaviors, a procurement culture that fosters learning, and the organization's overall learning orientation.

Based on the case studies, the procurement process was found to consist of frequent and infrequent users. Several key implications can be proposed for these two categories of users based on the organizational learning framework. Empowering the frequent user to have more autonomy and decision-making power is proposed to reduce cycle times in the procurement process. Users should also be alerted to opportunities for quantity discounts and issues of standards or compatibility, ideally through prompting via information technology (i.e., work station or PC prompts). Infrequent users, on the other hand, need to be trained just-in-time and updated on the latest procurement rules and regulations. The infrequent users require information about procurement in a timely fashion. The use of cross-functional teams throughout the procurement process is proposed to make the process more efficient for both frequent and infrequent users and allow appropriate tradeoffs between the decision to reduce cycle time, minimize cost, and ensure compatibility or standardization. This cross-functioning includes developing a structured process map that indicates the key stages in the process and the appropriate mix of functional areas and activities for the particular situation. The cross-functional team can design the JIT training programs and the prompts for cost savings and standards.

Introduction

Bill, a newly hired marketing research analyst in the organization, needed a computer and printer for his office. Bill ordered a system following procurement department procedures.
Procurement processed the order for the computer which arrived in two weeks, but held up the order for Bill’s printer until enough printers were needed by the organization to get a quantity discount. Six weeks after his order was placed, Bill received his printer. Procurement received a quantity discount for the organization’s printer order. What procurement did not consider was the productivity loss to Bill during the six weeks he did not have a printer.

The problem Bill encountered is common to most organizations. The procurement culture often does not allow for input from users when it comes to evaluating the importance of cost factors versus total cycle times of the process. Commonly, the procurement department views the cycle time of the process as too intangible to measure. No real benefits and values can be found in the reduction in the procurement cycle. However, as illustrated in this brief example, there is a lot more to procuring a product or service than cost.

The question is, "When are cost factors more important than total cycle times?” Also, "When is it possible to integrate specific purchase orders in a cross-functional manner in the process?" To answer these questions, organizational learning is proposed as a key to success in the fast cycle time environment. A learning organization is an organization skilled at building shared knowledge and at modifying its behavior to reflect new knowledge and insights in a constantly changing environment. This means that as long as the global rate of organizational and environmental change continues to accelerate, the company that not only recognizes these changes but acts on them can achieve a competitive advantage. A key to success in this environment is to reduce the time it takes to perform organizational processes in a manner that reduces cost and/or increases customer service (Wetherbe 1995). The basic objective of cycle time reduction is shortening the total business cycle. The business cycle is typically composed of many subcycles. This study takes a closer look at one of these subcycles—the procurement process—in a series of case studies of user area departments in a major Fortune 500 organization.

As with most Fortune 500 companies, the procurement process of this organization includes the activities and departments involved in the acquisition of products or services from an external vendor. There are four main entities involved in the procurement process: the various user areas, the finance department, the legal department, and the procurement department. The procurement department is seen as the leader and facilitator of the process, while the legal and finance departments provide support functions. Ultimately, these three "control departments" provide a value-added function. The user areas are the people that need the products and services from the external vendor. Within the organization, these users are considered "internal customers" in the procurement process. The procurement process of the organization under study is common to most large organizations. Therefore, implications drawn from this study are widely applicable to other large organizations.

In the process of delivering a set of practical and actionable recommendations, this study develops a framework for organizational learning in the procurement process. The focal organization that is used in this study has found that becoming a "learning organization" helped it boost the intellectual capital, agility, and resourcefulness of its sales force. For example, some of its major customers say that the organization’s salespeople are much more attuned to customer needs, do not jump to
conclusions so readily, are more willing to hear a customer out, and understand customer dilemmas better after attending seminars and workshops on organizational learning. Similar benefits are expected in the procurement process when applying the organizational learning framework. Specific issues that are addressed in this study include: (1) general problems and areas for improvement in the procurement process, (2) organizational learning as a framework to improve cycle time performance in the procurement process, and (3) recommendations for cycle time improvement in the procurement process.

General Problems And Areas For Improvement In The Procurement Process

Based on the series of case studies that were conducted in this study, several general problems and areas for improvement were identified. These case studies were based on individual and focus group discussions with users representing various functional areas within the organization. Common problems are discussed below.

► There is a lack of understanding of the activities and steps required to complete the procurement process. Some users do not know the flow of steps that have to be completed in procuring a product or service.

► Both infrequent and frequent users indicated a high level of frustration with the "bureaucracy" of the procurement process.

► Some users had difficulty identifying their "contact person" in the procurement department. Each user is assigned a specific procurement contact that is responsible for guiding the user through the procurement process. Infrequent users had the most difficulty identifying their contact person, but several frequent users also seemed to be unaware of their procurement contact.

► The users perceived the finance and procurement departments to add little value to the process. The feeling was that these departments focused too much on their various rules and regulations instead of the idea of providing a value-added function in the process.

► Several concerns were raised with regard to the amount of time a user had to devote to "educating" the finance, legal, and procurement departments regarding specifics of a given purchase. This was especially true if these departments were not represented throughout the key phases of the procurement process. Frequent users perceived this to be a major obstacle in the process.

► Parts of the procurement process are conducted in a serial mode when they could be conducted in parallel. For example, most larger purchases have to be approved and signed by several managers. The structure of the procurement process calls for the signatures to be signed in a prescribed order. Most of the time the user has to fill out the appropriate forms and send them. Procurement looks over the purchasing application, signs the document, and sends it to the finance department. After it is signed in the finance department, it is then sent to the legal department. A delay in one or more departments causes problems.

► The users feel that the financial planning horizon and long lead times for capital equipment are not accounted
for in the current structure of the procurement process. For example, lead times greater than one year can result in duplication of efforts (i.e., securing financial approval) to complete the procurement process.

- There is a lack of technical expertise within the procurement department. The users feel that the procurement representatives are not knowledgeable enough to handle all the various procurement situations and different products and services that are requested by the various users. This often lengthens the procurement cycle. One reason for this lack of technical expertise was believed to be the career progression of the buyers within the procurement department. For example, shortly after an assistant buyer gets "up to speed" to support a specific user area, a buyer position opens up in another area. The assistant buyer then moves to the new position and the user area has to "train" the next assistant buyer.

- Frequent users indicated that sometimes too much time is devoted to coordinating activities with their procurement contact person. These users suggest that communication between the frequent users and the procurement personnel could be enhanced if each of the frequent users had a procurement contact located in their department or department building.

- The users feel that there is a great deal of inconsistency in the time required for various parts of the process. The specific time required varies from purchase to purchase, but can become excessive, particularly in more complex purchase situations. Some of these problems are caused by the lack of a real measurement system set up to measure the various cycle times within procurement process. Similarly, neither the users nor the control personnel have a clear understanding and knowledge of the total cycle time for the procurement process for the various purchasing situations.

- There is a perception among the users that they lose control over the procurement process once the finance and procurement departments become involved. The users are aware that both the finance department and the procurement department have to perform their function in the process, but they feel that the idea of the user as the ultimate customer in the process is lost on these control departments.

- The users think that the procurement department does a reasonably good job in the purchase of tangible products, but may not be as capable in the purchase of services. There seems to be a lack of evaluation criteria for services. This often results in an increased procurement cycle time.

- The users say that the procurement department almost always operates on a lowest cost basis and has a hard time understanding the potential benefits of one product or service over another. A specific example from the case studies was the purchase of computer software for our friend Bill from the opening vignette. The procurement department had a difficult time understanding the differences between various word processing software packages. To Bill, a $400 word processing package meant more value and productivity since this software also included a graphics component, but to the procurement
department it simply meant an increase in cost of $200 over the other software package.

In summary, the case studies identified a number of major obstacles in the procurement process. Broadly stated, these obstacles are: (1) the users must spend an inordinate amount of time to procure products or services, (2) the users do not have the knowledge required to initiate and complete the procurement process, (3) and the users are not generally satisfied with the structure of the procurement process. In this study, the concepts of organizational learning are explored as a means to overcome these obstacles.

Organizational Learning In The Procurement Process

In this section, the use of organizational learning as a framework for reducing cycle time is explained. Every time an organization completes a full cycle of activities in the procurement process, it accumulates raw data about the relationship between user areas and the control departments. How fast this data is transformed into learning determines the rate at which an organization can adapt and change its behaviors to reflect the new operating environment (Argyris 1993). Learning is at the heart of sustained competitive advantage in the fast cycle time environment (Meyer 1993). The learning organization is also seen as an extension of total quality management (TQM) and business reengineering (Tobin 1993). TQM creates a more effective organization in the short run, and reengineering drastically changes the makeup of an organization’s structure (Hammer and Champy 1993). Organizational learning is a complementary concept that facilitates change at all levels in the fast cycle time environment. Organizational learning also enforces the idea that an organization needs to focus on market-perceived quality relative to its competitors rather than quality as defined internally by the organization (Gale 1994).

For example, fast cycle time organizations are fast not because they handle complexity better than their competition, but because they consistently strive to learn and eliminate complexity whenever possible. Shortening the cycle time in the procurement process is a matter of removing barriers and using the knowledge generated in previous procurement cycles to streamline the task at hand. Fast cycle time companies work better and smarter, not harder or longer. While it is conceivable that all organizations learn, some do not learn fast enough to survive. An important element of the procurement process is therefore the degree of learning that it facilitates. In the future, organizational learning will replace control as the dominant responsibility and test of senior management and leadership. Speed, global responsiveness, and the need to innovate constantly or perish, means that learning will become the only viable alternative to corporate extinction.

Generative vs. Adaptive Learning

What sets a learning organization apart? Senge (1990) says that learning organizations generally place emphasis on generative learning. Generative learning emphasizes continuous experimentation and feedback of knowledge related to the ways organizations define and solve their problems. Managers in these organizations are learning oriented, which means that they advocate and demonstrate behaviors such as shared vision, team learning, learning utility, and accessible memory (Hult 1995).

In essence, being learning oriented implies that people within the organization put aside their old ways of thinking about details and adopt a broader perspective of how the organization really works (learning utility), learn to be open with each other (accessible memory), form a strategy everyone can agree on (shared vision), and then work together to achieve that strategy (team learning). By contrast, adaptive learning only focuses on solving problems as they arise,
often in a piece-meal and fragmented manner, without examining the appropriateness of these behaviors.

**Frequent vs. Infrequent Users**

Our case studies revealed two types of users involved in the procurement process. These are classified as frequent and infrequent users. The average cycle time of the procurement process in the fast cycle time organization under study was found to be about seven weeks. In our study, we classify users that go through the procurement process fewer than once every month to be infrequent users. Frequent users were those users who go through the process at least twice monthly.

Frequent users operate within the schema of the learning organization while infrequent users are involved in a transactional type of procurement process. This means that infrequent users together with the three control departments focus on adaptive learning and solve and "work through" problems as they arise. In essence, the infrequent user's relationship with the control departments focuses on control behaviors rather than learning behaviors. This is often the case for most of the institutions in our society. The focus is on controlling rather than learning, rewarding individuals for performing for others instead of cultivating their natural curiosity and impulse to learn.

However, there is a tradeoff between investment and outcomes of learning. Procurement learning may not be an alternative for the infrequent users since the investment is high but the increase in effectiveness may be small due to the infrequent working relationship between the user and the procurement contact. This is not the case for the more frequent users, however. The "best practice" relationships between frequent users and the control departments involved a high degree of learning orientation. People in these relationships had a similar strategy about the procurement process and its function, worked as a team to perform the tasks at hand, shared important knowledge with each other, and overall, were willing to "give and take" in the relationship.

**Creating The Procurement Learning Organization**

Three areas are identified in this study to be important in creating the procurement learning organization, including: leadership style, procurement culture, and learning orientation (Hult 1995). Each is discussed below.

**Leadership Style**

As mentioned earlier, the case studies revealed that there are basically two types of users: those who go through the procurement process on a frequent basis and those who go through the procurement process less frequently. Less frequent users indicated that they need leadership during the procurement process in the form of explanation of what to do and help in completing all the paperwork. These users want the procurement department to function as a transactional leader. Here, reciprocal negotiations result in an ever-changing relationship between procurement leaders and user areas. Such procurement leadership is rooted in the "here and now," where reaction and conflict drive the procurement process more than thoughts of teamwork, responsibility, and morale.

Transactional leadership is postulated to result in users achieving the negotiated level of performance (i.e., the feeling is that "if I fill out all these forms I will obtain the services of that vendor.") In this regard, both the leader and
the user reach an agreement concerning what the user will receive for achieving the negotiated level of performance. Considerations and rewards are then provided consistently with satisfactory completion of the agreement. As long as the leader and the user find the exchange mutually rewarding, the relationship is likely to continue.

Frequent users, on the other hand, indicated that they want the procurement department with the assistance of the finance and the legal departments to function as a facilitator of the procurement process, i.e., be a transformational leader. Users want the procurement department to lead when needed and step back and let the users lead the procurement process when they are capable of doing so. Transformational leadership represents a leadership style that transmits a sense of mission, stimulates learning experiences, and arouses new ways of thinking about the process at hand. The transformational leader attempts to raise the users' awareness of the activities in the procurement process. (Table 1 identifies important characteristics and qualities of transformational leaders that pertain to the procurement process.) The transformational leader will also expand the user's say in the procurement process when appropriate. Based on the increased involvement in the process, users are more likely to be aware of the important procurement activities and also be truly committed and actively involved in the procurement process rather than just compliant.

**Procurement Culture**

Most organizations operate within a culture that has developed over time. To be effective in the fast cycle time environment, the focus should be on creating and maintaining a procurement culture that stresses learning and improvement opportunities. There are several factors that can affect the procurement culture. In the learning organization, degrees of openness and localness are commonly viewed as the key to a successful procurement culture.

Openness refers to the idea that the users and control people share and challenge each others' thinking, and also actively participate in the total cycle of the procurement process. The most effective procurement process was found to exist where the users and control people actively interacted with each other even though a specific user group may or may not be active in the procurement process at the moment. This was usually the case for the frequent users' relationship with the control departments. The idea behind openness is to advocate an atmosphere of relationship building where the users and representatives from the control departments work together to complete the procurement process. Thus, user participation in the process with an actual or reflective "say in what goes on" is the focus of openness. In a state of openness, the users and control people become more willing to share their thinking and to have their thinking influenced by others, uncovering depths of understanding of the procurement process not accessible otherwise.

Localness refers to moving decisions down the organizational hierarchy and letting the users have greater decision-making power. This means that commitment to the procurement process is created by giving the users more control over the process (i.e., the freedom to select vendors) and holding them responsible
<table>
<thead>
<tr>
<th>Behavior</th>
<th>Definition</th>
<th>Quality</th>
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<tbody>
<tr>
<td>Attributed Charisma</td>
<td>Leadership that instills pride, faith, and respect, has a gift for seeing what is really important, and transmits a sense of mission in the procurement process.</td>
<td>1. A clear sense of purpose</td>
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<td></td>
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<td>2. Persistence</td>
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<td>3. Risk taking</td>
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<tr>
<td>Inspirational Leadership</td>
<td>Leadership that stimulates enthusiasm among procurement people for the work of the group and says things to build confidence in their ability to successfully perform assignments and attain group objectives.</td>
<td>1. Emotional maturity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Love of work</td>
</tr>
<tr>
<td>Individualized Consideration</td>
<td>Leadership that delegates projects to stimulate learning experiences, provides coaching and teaching, and treats each user as an important customer.</td>
<td>1. An unwillingness to believe in failure</td>
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<td></td>
<td></td>
<td>2. Identifying and satisfying the needs of a specific user or user area</td>
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<tr>
<td>Intellectual Stimulation</td>
<td>Leadership that arouses users to think in new ways and emphasizes problem solving and the use of reasoning before taking action.</td>
<td>1. Knowledge of personal strengths and abilities and knowledge on how to maximize them</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. A perpetual desire for learning</td>
</tr>
<tr>
<td>Idealized Influence</td>
<td>Leadership that stresses the importance of goals and also communicates the underlying purpose of the procurement process.</td>
<td>1. The ability to attract others</td>
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for the outcomes. Localness extends the maximum feasible degree of authority and power to the users, the people that for the most part have the greatest knowledge of the purchase requirements. While the control departments are a part of the overall structure of the procurement process, the most efficient procurement cycle was found to be the one that was based on a high degree of localness relating to what type of vendor to select and what quality criteria to use in evaluating this vendor. The control departments' responsibility then becomes that of facilitating the procurement process of contracting with this
vendor instead of controlling the process. Frequent users were found to advocate a greater degree of localness than did the less frequent users.

Leadership is very essential in facilitating the procurement process, and a culture that fosters learning strives to keep the process updated. However, the procurement process needs a learning orientation in order to implement a continuous improvement program. Learning orientation is a mechanism that stores old information about the procurement process and at the same time continually uses this stored information to improve the procurement process.

**Learning Orientation**

From an early age, we are taught to break apart problems to make complex tasks and subjects easier to master. But this creates a bigger problem in that we lose the ability to see the consequences of our actions, and we lose a sense of connection between the parts and a larger whole. In organizational processes such as procurement participants—users and control people—tend to focus on the details of their portion of the process rather than what the process is supposed to do. The process is supposed to facilitate "getting the best deal possible" for the user that requests it. By adopting the idea of learning orientation in the procurement process, an integration will be made of the various activities that are included in the procurement process. Learning orientation will lead to participants focusing on what is important in the process rather than details such as "did I sign my name in the right place?"

The learning orientation of the procurement process is a function of what the organization has learned about the process over time and also its particular methods of acquiring, distributing, interpreting, and storing information. The learning orientation concept provides a framework for learning new ways of operating and continually improving the procurement process. Included in learning orientation are shared vision, team learning, learning utility, and accessible memory (Table 2). While these disciplines are never mastered, the best organizations practice them continuously. And while organizations develop them separately, the presence of each is critical to success. The case studies indicated that the users that have gone through learning seminars dealing with the procurement process have a much better understanding of the process than those who have not attended these seminars.

**Recommendations For Cycle Time Improvement In The Procurement Process**

Based on the case studies, several recommendations are made that will help other organizations and their procurement processes. Figure 1 presents a matrix that is proposed as a tool for evaluating a particular procurement situation. This matrix represents the relationships between cycle time of the procurement process, cost considerations, and standards compliance for needed compatibility between user areas and control departments.

While it has been said that "time is money," there is more to the procurement decision than time alone. Cost factors and the need for standards or compatibility of procurement activities are also important. Fast cycle times and standards compliance in the procurement process can be achieved by advocating the organizational learning framework. We propose that a high degree of learning orientation (see Table 2) will lead to reduced cycle times in the procurement process. Similarly, standards compliance for compatibility or more closely coupling the operational functions of the procurement process can be accomplished by advocating a high degree of organizational learning.
Table 2: Learning Orientation

<table>
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<tr>
<th>Orientation</th>
<th>Explanation</th>
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<tr>
<td>Shared Vision</td>
<td>No organization becomes great without goals, values, and missions that are shared throughout the organization. The leader imposing their vision on the employees is not enough. A genuine vision breeds excellence and learning because employees feel that they are pursuing their own goals.</td>
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<td>Team Learning</td>
<td>Often it seems that teams made up of highly intelligent employees do not &quot;live up to the expectations.&quot; The reason is that they have not really learned to work together. True learning begins with dialogue, in which members suspend assumptions and think together to solve problems instead of each member trying to get their personal &quot;point across.&quot;</td>
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<tr>
<td>Learning Utility</td>
<td>The learning utility refers to the fact that the value placed on the learning activity in the procurement process can be viewed as axiomatic in nature. Thus, the ability to think and reason is a foundation for learning that will vary depending on the organization’s axioms.</td>
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<tr>
<td>Accessible Memory</td>
<td>Accessible memory refers to the distribution system that provides knowledge to the users. It is the foundation for learning since learning depends on the evaluation of previous experiences with current activities, and also to potential future operations. Accessible memory leads to users and control people in the procurement process that have a high level of proficiency in dealing with procurement-related activities. In seeking personal proficiency, we clarify and deepen our vision and understanding of the procurement process.</td>
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Figure 1: A Matrix for Assessing Procurement Situations
While both frequent and infrequent users differ in their behavior and the way they go through the procurement process, some similarities exist between the two users. Cycle time, cost, and standards compliance have already been identified as important factors for both types of users. The makeup of the relationship between these three components can be assessed in several different ways.

The key points of leverage for reducing cycle time in procurement appear to be cross-functioning for all procurement activities, empowering for frequent users, and providing just-in-time (JIT) training for infrequent users. These concepts and their application are discussed below.

Learning Through Cross-Functioning
Cross-functioning refers to the idea of increasing the use of cross-functional teams throughout the procurement process. To increase the degree of cross-functioning in the procurement process, a structured process map that indicates the key stages in the process, which functional areas and representatives should be involved, and when they should be involved is a necessity. A prerequisite for cross-functioning is that the users have to be aware of the respective roles of the control departments in the process as well as their own roles at the front-end of the process. The cross-functional teams can also design the JIT training system for infrequent users and the prompts for cost savings and standards.

Cost, while an important consideration, must be evaluated in the light of time and standards compliance. For example, remember Bill from the opening vignette. In Bill's case, the procurement department did not assess the lack of productivity on Bill's part during the processing and ordering time of his printer. In this case it was found that the opportunity cost of not completing the procurement process for the printer in a timely manner reduced Bill's productivity. The cost for this lack of productivity was significantly more than the extra cost of the printer if it had been purchased separately without the benefit of the quantity discount.

While most organizations assess cost factors, and some even address cycle time, organizations often struggle with achieving cost-effective standards compliance for compatibility. Wetherbe (1995) talks about the standards for the integration of software products. Instead of buying stand-alone products for word processing, graphics applications, and spreadsheet programs, an integrated suite of software may be more beneficial for some users. For example, using the WordPerfect, Harvard Graphics, and Lotus 1-2-3 programs may cause some compatibility problems in linking these independent applications. Using Lotus SmartSuite or Microsoft Office integrated software packages that include components of word processing, graphics applications, and spreadsheet programs will prevent the compatibility problems between the various applications.

In the procurement process, standards compliance when poorly managed will lead to user dissatisfaction and lower productivity in the process. For example, one state government ran into a problem with poor standards management. In an effort to ensure compatibility of the different PCs purchased by different state agencies, the state established a specific PC as being the only one acceptable to be purchased by the different state agencies. The Department of Transportation in this state found a hybrid PC that could be used for doing road surveys. It was an innovative technology that would allow two people instead of the customary three to complete a road survey. However, since this PC was not the standard office PC that had been approved by procurement, the purchase requisition was "bounced out" for evaluation. Since the group that established the standards were unfamiliar with the hybrid PCs, eight months were lost in the "bureaucracy" as they attempted to enforce the PC standard. Of course this situation was
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ludicrous to the Department of Transportation and they became very adversarial in future dealings with procurement. In this case, the Department of Transportation needed the empowerment to make what was a reasonable decision under the circumstances without being "waylaid" by standards compliance.

Similarly, in the past, several organizations had problems with the compatibility between Apple and IBM computers because of the technical aspects of their operating systems. Apple users very seldom switched to IBM or IBM compatible systems and vice versa. Another example of compatibility problems that multinational organizations often come in contact with is the electrical requirements of their machines and appliances. Most European outlets have 220 Volts while US. outlets operate on 110 Volts. This means that a lack of integration when it comes to compatibility and standardization when procuring products for the various subsidiaries in the two continents can result in higher costs and longer cycle times. This also means that an evaluation has to be made when procuring products or services if they must be compatible with the organization's standardized system and when it has to be compatible with the operating environment.

The way of creating the best relationship between the three variables proposed in Figure 1 (cycle time, cost factors, and standards compliance) depends on if the user is classified as a frequent or an infrequent user of the procurement process.

Empowering The Frequent User
The best working relationships between the frequent user and the control departments were found to be the ones where the users were empowered by the transformational leader to perform a large portion of the procurement activities (Wetherbe 1995). Empowering the users and providing for a procurement climate that stressed cross-functioning significantly reduced the procurement cycle. An example of empowerment in the procurement process can be found at Hewlett-Packard (HP). HP gives all of its secretaries a credit card to charge up to $2,000 per month in office supplies, thereby reducing the cycle time of the procurement process. Similarly, FedEx's frontline customer service representatives are empowered to handle damage claims up to $100 without seeking higher approval, which results in the customer getting their check within a day. The result of empowering the users in the procurement process resulted in a greater degree of user satisfaction and reduced cycle times.

Empowering the frequent users that are familiar with the procurement process to have the ability and authority to make procurement-related decisions is proposed to lead to reduced cycle times in the procurement process. This empowerment can be done by giving users more autonomy and discretionary opportunities, and by getting support from the control departments for their effort. Users' learning can be further facilitated by alerting them to discretionary opportunities for quantity discounts and issues of standards or compatibility through prompting via information technology (i.e., work station or PC prompt). The transformational leadership style is proposed as the most appropriate in creating empowerment among the users.

In this study, transformational leadership style was found to build a relationship between users and control personnel where the maximum degree of empowerment can take place. That is, the transformational leader works to increase shared knowledge and shared vision in the procurement process with the idea of empowering the users to the fullest extent possible. Frequent users that perceived the process to be inefficient felt that they did not get enough information from the control departments when requested, while the frequent users that were satisfied with the process constantly communicated with the procurement contact.
The degree of empowerment depends on the degree of openness and localness existing in the procurement process. Openness refers both to the idea of speaking openly and honestly about procurement issues and the capacity to continually challenge the structure of the procurement process. A high degree of localness means that transformational control personnel extend the maximum degree of authority and power to the users. Together, openness and localness give the users a genuine sense of responsibility for their actions. Empowering users leads to increased commitment through giving them the freedom to act, to try their own ideas, and be responsible for producing results. This also means that a procurement process that operates based on a great deal of user empowerment needs to have a system in place such as cross-functioning that alerts the users when there is an opportunity to standardize procurement activities.

**JIT-Training For The Infrequent User**

Learning in the procurement process means the continuous testing of experience, and the transformation of that experience into knowledge that is accessible to all the members of the organization. Since the infrequent user does not experience the procurement process in the same way as the frequent user or the control personnel, the infrequent user will likely need an updated system and information about the procurement process every time they go through the process.

Perhaps one of the most difficult tasks in the procurement process is to determine the level of knowledge each user has about the process. Information-gathering mechanisms in the procurement process typically seem to evolve in ways that result in the users of the process having a limited, incomplete, and even biased understanding of the process. Infrequent users often get their information from other infrequent users, or they simply assume that the process is the same as the last time they went through it. This type of information is rarely accurate. While most procurement processes have an elaborate manual to go with them, most users do not “actually” read these manuals. For example, it was found that the organization in this study updates its procurement manual every six months, but few users read the new portions of it. Instead, the infrequent users rely on the old routines to still work. What is needed to prevent this lack of information and also lack of information-gathering is a just-in-time training system that will inform the infrequent users of the latest procurement procedures. One way of doing this is with an interactive information system.

JIT-training provides the infrequent users with educational tools to familiarize them with the procurement process on a just-in-time basis. This training will be extremely useful for the occasional user. JIT-training will also complement the transactional relationship between the infrequent user and their procurement contact. This is especially true if the regulations change on a frequent basis as was the case in our study. In the organization studies, the rules and regulations were updated every six months, making it hard for the infrequent user to stay updated. The JIT-training can be integrated with an information system that captures all the information required by the relevant groups and provides the groups with timely access to this information. Ideally, all users should have the information they need, when they need it, and in the desired format.

This study found that the transactional relationship between the control personnel and the user was the most efficient for infrequent users. This means that the infrequent users need guidance and help in completing the
procurement cycle, including a lower degree of openness and localness. However, a high degree of learning orientation is still an important ingredient in determining the level of JIT-training and facilitation of the process that the infrequent user desires.

Conclusions
Learning is an action concept, which means that it is not simply having a new idea or insight about the procurement process. Instead, learning involves taking effective action in the procurement process based on the process of detecting and correcting the inefficiencies in the current process.

The results of this study show that there are several alternative structures that enhance the effectiveness of the procurement process. First, instead of having the control departments assume a transactional leadership style, a transformational leadership approach would enhance the procurement process under most circumstances (i.e., frequent users). Second, adopting openness in the procurement process will lead to users and control personnel being more willing to share their thinking and to have their thinking influenced by each other. This will lead to users and control personnel gaining entrance to depths of understanding of the procurement process not otherwise accessible. Third, adopting localness in the procurement process, where users are given more power to influence the outcome of the process and also given more power to make significant decisions during the different phases of the process will improve cycle time performances. Fourth, there needs to be a mechanism that will facilitate learning in the procurement process.

There are several areas that need to be addressed to make procurement departments more effective. Making appropriate trade-offs between cycle time, cost factors, and standards or compatibility activities are proposed to be key variables to success. These trade-offs can be best dealt with if the users, procurement, finance, and legal departments work and cooperate in a cross-functioning manner. In addition, particular attention should be given to the difference between the frequent and infrequent users. Frequent users need more autonomy and decision-making power in the form of empowerment in the process, while infrequent users need just-in-time training. This study provides a tool for the continuous procurement processes based on the needs of the various users and the operating environment. Implementing the set of recommendations provided in this study should enhance both the short term goals of the procurement processes as well as the level of continuous improvement and learning on a long term basis.

References


