1-03-70 Improving IS with Cross-Functional Teams
Stewart L. Stokes, Jr.

Payoff

IS departments must find new ways to leverage human resources, and increasingly they are doing so through teamwork. Cross-functional teams with representatives from various business units can enhance partnerships between IS professionals and their clients. The team concept poses challenges as well, because they are essentially collaborative and self-directed. This article describes how IS professionals can build new levels of teamwork into their working environments to achieve an improved IS function.

Problems Addressed

Project teams have been around a long time in the IS environment; they are the vehicle through which work gets done. Nonetheless, most IS professionals find building collaborative project teams to be a daunting challenge. Team development requires a wide range of communication and interpersonal skills rather than simply technical know-how, and IS professionals have only recently begun to adopt and value these skill sets.

IS departments are also having to adapt to organizationwide decrees to shrink staff size in order to rightsize. The mandate to do more with less, coupled with the need to become business partners with users (i.e., clients), requires IS professionals to look anew at ways to improve teamwork and leverage their skills and knowledge.

IS managers are being asked to look at business in new ways, to change their paradigm from a silo or smokestack view of the organization to that of a cross-functional model. Developing a cross-functional point of view, in which business problems are viewed as horizontal (i.e., spanning functional boundaries and linked at the interfaces), demands not only new business knowledge but the ability to work with customers from various functional areas simultaneously. This is a more complex task than developing an application for a particular department in a single functional area.

This paradigm shift is essential if organizations are to reengineer their business processes successfully. As IS professionals and their clients develop systems that span functional boundaries, they will increasingly form cross-functional teams. This article discusses what cross-functional teams are, their benefits, and how to build new levels of teamwork in the IS environment.

Selecting Team Members

Cross-functional team members should be selected carefully. Some people work more comfortably and effectively in team settings than others, and although this observation may at first sound like a statement of the obvious, it has profound implications. Teams can derail quickly if members do not possess certain key competencies.

Identifying Key Competencies

Above all else, team members should value the group process as a way to create and enhance high-quality solutions. Team development skills can be taught, but they will not be easily learned or applied if individual team members would really prefer to work alone.
Team members should also have a grasp of business issues, especially as they apply to their company and its organizational structure. For example, if the company is losing market share in a product line and there is a perceived slippage of quality within the line, a helpful competency for cross-functional team members to have is an understanding of the marketing function, including the company's products and its customers and their view of product quality. Related competencies include a knowledge of competitors and how customers perceive the quality of competitive products.

Equally important would be an understanding of the organizational structure of the business and how the functional departments fit and work together. This includes how departments actually get work done—in other words, an understanding of organizational politics.

Organizational savvy may be in short supply in some IS departments, but increased emphasis is being placed on acquiring the related skills. High levels of interpersonal skills in such areas as influencing, conflict resolution, and change management are vital for effective cross-functional, collaborative team development.

A New Model for Collaboration

IS professionals and users (now often referred to as customers or clients) are no strangers to working together. Traditionally, however, working together has meant working in arm's-length relationships. Analysts, designers, and users often struggle to interpret what the other meant and typically have worked alone as individual contributors rather than collaboratively in teams.

The individual-contributor model served IS departments well as long as they were developing systems to meet departmental or functional applications (e.g., order entry systems, accounts receivable and payable systems, manufacturing requirements planning systems, and payroll systems). As the profession has matured, however, senior line executives (e.g., CEOs, CFOs, and VPs of manufacturing or marketing) now demand that information systems and information technology serve a broader purpose and begin to add value across the organization. This expectation requires a new model: team members drawn from various functional line and staff departments—including R, manufacturing, marketing, finance, IS, human resources, sales, and customer support—meeting to jointly search out and solve problems.

Managing the Transition to Self-Management

For value-added systems to result, cross-functional teams must move beyond expected cooperation into this more collaborative style of operation. For true collaboration to take part, two conditions must be present:

· Team members must be committed to accomplishing a common mission.

· Team members must understand that they need each other to accomplish their common mission, and behave accordingly.

People—and departments—can work together without being committed to a common mission, but the quality of effort and result will be reduced. Without commitment to a common goal and mutual need, the passion for accomplishment will be missing.

Collaboration requires that team members take responsibility for their own actions and learn to solve problems at the team level, not necessarily waiting for higher management to
make every decision. Although this expectation needs to be negotiated and clarified, its implementation requires that team members exercise skills ranging from meeting management and consensus building to conflict resolution, negotiation, influencing, and change management.

These skill sets represent a move toward self-direction or team self-management, which is a marked change for most IS professionals who are used to managing in a more traditional, authoritarian command-and-control structure. However, as organizations flatten and middle-manager positions are lost, management's span of control may increase from 8 to 20 or 40 employees. Self-managed teams are allowing IS departments to function amid this change.

The vested interests arrayed against self-managed teams can be considerable, however. The authority to manage, which is accompanied by various perks and status symbols, is not relinquished lightly. The title and role of manager has been hard-won for some. In some IS departments, the transition from a traditional structure to self-management should be made as quickly as possible; in others a more gradual, phased, or staged approach is needed. The unlearning-relearning change process is a significant challenge and can be best met by providing opportunities for increased collaboration.

Benefits of Cross-Functional Teams

Compressing time to market is a critical success factor for most organizations as the windows of opportunity for products and services are closing more rapidly than ever before. Greater speed to market necessitates close collaboration among IS professionals and their clients. Team members need to share detailed information that in the past would be available only to senior managers. Cross-functional teams yield specific benefits in this respect.

First, cross-functional teams allow IS managers and professionals to better understand the perceptions and points of view of line or functional-area personnel. The reverse is also true: such teams allow line managers to understand the rationale behind IS needs and requests.

Overall, IS professionals gain new knowledge of the business, thereby helping ensure that the goals and objectives of IS are continually aligned with those of the business units. Systems professionals learn how they can add value to an organization through information systems and technology because they understand how all members of the organization are customers to each other and how products and services flow horizontally through the interfaces between work groups, departments, and functional areas. As IS contributes to enhancing the internal value chain, IS professionals are able to meet their mandate of reshaping business processes through IT.

Adding Value

Before examining how to build and sustain collaborative cross-functional teams, it is important to define what it means to add value to the organization. Three considerations are essential:

- Information technology (i.e., hardware and software) in and of itself does not add value to the organization. It is what the organization does with these assets that has the potential for adding value.
Managing the traditional IS function efficiently does not necessarily add value to the organization. Managing IS (or any other function) efficiently and managing it effectively are not one and the same. Managers may efficiently manage processes that no longer yield value to the organization.

To add value, information systems and technology must enable the organization to grow through some combination of new or existing products, markets, customers, channels of distribution, and leverage of existing resources. Value is added when the organization is able to launch a new business, grow an existing business, or create an improved product or service through information systems and technology.

Value added is always in the eye of the beholder. It is not enough that IS perceives that it adds value; it is what the IS department's clients perceive that counts. If users do not perceive that IS adds value through technology and systems services, that value is judged to be lacking. Cross-functional teams can serve as the means through which value-added opportunities may be ascertained and evaluated.

The goal of collaborative cross-functional teams is to add value. The act of simply bringing people from several business units or functional areas together on a regular or ad hoc basis does not add value. Within the team, value added can be thought of the whole being more than the sum of the parts. Value can be added only when human energy is created, channeled, and focused on a common mission, and when the team members partner and behave in accordance with the understanding that all the parts need each other to accomplish the common mission.

The Formation of Cross-Functional Teams

Teams experience predictable stages of growth and decline that can be likened to individual life stages. This section examines the several team stages and issues of interest to collaborative team leaders and members.

For a semiautonomous cross-functional team (in which authority is vested in the team members themselves) to work, it must have continuous interaction with a cluster of other teams. This interaction is facilitated by a team coordinator who works directly with the coordinators of other teams in the cluster.

The number of teams in the cluster can change as conditions warrant. (A cluster of three to five teams is common in organizations experimenting with these work practices.) Team coordinators change as well, with the role and responsibilities of coordinator rotating among members of the team every few weeks or months.

Teams may be ad hoc and formed as needed. Frequently, the driving force behind the team approach is the organization's Total Quality Management program. The total quality management (TQM) concept that everyone is someone else's customer is slowly spreading to the IS department and marks a major change in the corporate culture. Before adopting the total quality management (TQM) program, it was common for each department and functional area in a company to be concerned only with what went on inside its own borders. For example, the IS department delivered systems that it had contracted for with its users; it was not viewed by its customers as a reliable, cost-effective, value-adding partner. Consequently, the IS manager may have seen more of the budget for systems development beginning to flow out of the organization to vendors.

One of the major reasons organizations form self-managed teams is that they seek to improve customer service. Customers insist that quality be integrated into the entire process of product development, manufacturing, and marketing. A concern for overall
quality must therefore underlie internal lateral communication among people in all departments, including information systems.

In this example, a customer-service team may be championed by the IS manager and the director of customer relations. The customer relations director must view information systems as a key stakeholder, because IS has the ability to provide cross-functional systems to alleviate the quality problems. IS and customer relations are really each other's customers. IS management, which may be concerned about the outflow of systems development budgets and the resulting threat to the IS staff and to its own position, can turn this situation into an internal marketing opportunity for IS.

Customer service problems are by nature cross-functional; that is, they involve personnel from several departments. In this example, the IS department needs to create not another vertical system to track the growing number of refunds, rebates, and adjustments the company must make, but a system that spans the organization. Such a system would enable people in the various internal departments to work more effectively with each other and, ultimately, with the external customer.

**Stages of a Cross-Functional Team Life Cycle**

Collaborative teams have a distinct life cycle that can be likened to the life stages of an individual. The first stage, forming, is analogous to infancy. During this stage, the team members get acquainted. Members of customer-service teams may include representatives from information systems, manufacturing, finance, marketing, sales and sales support staffs, and human resources. An outside consultant may participate, mainly to help the teams deal with change management and group dynamics issues.

An average team may consist of eight people, but its charter must leave the team free to make changes, additions, and cuts as needed. The ranking managers, or those who championed the teams (e.g., IS manager and director of customer relations, in the previous example), position the issues and give the team its charter or mission. All members must be able to suggest improvements in the cross-functional manufacturing-marketing-sales support process and in the information systems that support this improvement.

The ranking managers set expectations for the teams and ask the teams to provide weekly progress reports. In addition, they may volunteer themselves and their colleagues as resources when needed and should encourage the team not to make premature—and perhaps weak—recommendations. The team coordinators must not make decisions for the team, however. Teams take time to grow, and the approach often receives criticism from people who wonder why the task takes so long. Usually, the problems a team is attempting to solve did not come about overnight, however; the team needs time to remedy the situation.

During this forming stage, team participants may initially be polite and somewhat stiff and formal in their relationships with one another. They may experience a certain degree of confusion, frustration, and anxiety over their roles and expectations. An internal human resources representative can help in areas in which ambiguities exist.

As team members explore the issues and their goal, a pattern of leadership emerges and the team coordinators are selected. In addition to their roles as team members, the coordinators facilitate the meetings and report weekly (or as often as necessary) to their manager-clients.

As a team moves into its second stage, storming (similar to adolescence), it may experience growing pains and infighting as individuals search for role identity. Some team members may decide to leave and may be replaced by colleagues who are more
comfortable with group processes and consensus decision making. Most team participants experience various levels of frustration with the added work load of team meetings.

The team moves into its third stage, that of performing, which is equivalent to adulthood. At this point, the members begin to pull together as a team rather than as a collection of individuals, roles are negotiated according to the discovered strengths of individuals, and tasks begin to be accomplished. Feedback sessions with the manager-client (in the customer-service team example, the manager-client is the IS manager and the customer relations director) become more productive. The group matures and a high level of esprit de corps may develop.

During this third stage, the external consultant and internal human resources representative continue to meet with the teams and with the managers-clients. They help the teams and the managers anticipate problems and develop possible solutions, and they help guide the team to develop a respect for its ability to manage itself. Each of these team meetings lasts for approximately two and a half to three hours, with the final 15 minutes devoted to team members reviewing the team’s performance and the quality of their peers’ work. Any team member can have the floor at the beginning of each meeting to describe problems that have arisen between meetings and how these problems were resolved. In this way, the team monitors its own progress.

Over several months, teams can suggest various ways to improve the cross-functional manufacturing-marketing-sales support process and the information systems to support the improvements. As suggestions are developed, the manager-client representatives meet with the teams more frequently, in preparation for the internal selling of the improvements, a process that they would spearhead.

As suggestions surface and are fine tuned, the teams evolve into the fourth stage, transforming, which is the equivalent to old age. This stage is characterized by the accomplishment of tasks and the search for new purposes and roles. As a team nears the completion of its charter, a certain amount of anxiety may return as team members search for new roles. The final stage of team development, recycling, allows team members to use their own experiences to lay the groundwork for other cross-functional teams to follow.

**Recommended Course of Action**

The development and growth of cross-functional teams are appropriate as continuing rightsizing efforts affect IS departments. Pressures are mounting to leverage employees’ skills and knowledge, and collaborative, cross-functional teams are a vehicle for doing so.

To be fully effective, a team needs a charter, a mission, and a set of expectations for its work as a team. Individual members of cross-functional, collaborative teams may need to substantially alter the way they work and acquire a wider range of skills, many of which are unfamiliar to systems professionals. For collaboration and self-direction to be successful, the skills that must be obtained include meeting management, consensus building, conflict resolution, negotiation, influencing, and change management. The potential benefits, however, are substantial and include:

- Enabling IS professionals to better understand the points of view of line and functional area personnel.
- Enabling more complete communication among IS professionals and their internal clients or customers.
- Helping IS professionals to better understand the businesses they serve.
Enabling IS professionals to add more value to their organization through a greater understanding of the interfaces between groups, departments, and functional areas.

Enabling IS professionals to reshape business processes through information technology.

To add value, information technology must enable the organization to grow. Cross-functional teams can open up value-adding opportunities.

**Author Biographies**

Stewart L. Stokes, Jr.

Stewart L. Stokes, Jr., Jr., is senior vice-president of QED Information Services, Inc., in Wellesley MA.