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DEVELOPING EFFECTIVE SELF-MANAGING WORK TEAMS IN SERVICE ORGANIZATIONS

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Executive Summary

In the past decade, a large body of research has emerged on the effective implementation of self-managing work teams (SMWTs). Bur virtually all of the research on SMWTs has been conducted in manufacturing settings. We do not know the extent to which these findings are generalizable to SMWTs in a *service* context. This paper draws upon the authors' research on the use of SMWTs in two service organizations: Aid Association For Lutherans, a fraternal benefit society with a large insurance business, and Pacific Telesis, a regional telecommunications company. We focused on three research questions. First we examined what effectiveness means for self-managing teams. We found that the use of SMWTs may involve a set of trade-offs across multiple dimensions of effectiveness. As such, SMWTs may not be the panacea implied by some proponents. Second, we explored the key success factors for self-managing team effectiveness in a service context. We found that creating an employee involvement context was the most important predictor of SMWT effectiveness followed by work design and team characteristics. Surprisingly, team leadership was least important for SMWT effectiveness; in fact, in some cases, team leadership was negatively related to some dimensions of effectiveness. And third, we examined whether there is a special relationship between employee morale and customer satisfaction in service organizations. Contrary to our expectations, we found that employee morale had little effect on customer satisfaction. Customers were primarily concerned with prompt assistance in solving their problems. At the end of the paper, implications of the findings for researchers and practitioners are discussed.

Developing Effective Self-Managing Work Teams in Service Companies

Self-managing teams are groups of interdependent individuals that can self-regulate their behavior on relatively whole tasks. The adoption of self-managing work teams (SMWTs) has soared as companies respond to competitive challenges in today's business environment. Organizations are replacing whole layers of management with SMWTs being implemented as a substitute for hierarchy. The Center for Effective Organization's study of employee involvement practices in Fortune 1000 companies found that 27 percent of firms in 1987, 47 percent in 1990, and 69 percent in 1993 used SMWTs with at least some employees.

Manufacturing firms eager for productivity improvements and cost control have championed the implementation of SMWTs. Increasingly, however, service firms interested in improving customer service and other performance outcomes have been adopting SMWTs. Unpublished data from the Fortune 1000 study indicate that 52 percent of service firms used SMWTs in 1993, up from 22 percent in 1987. Most users of SMWTs report them to be successful and plan to expand their use in the coming years.

Many books and articles have been recently written about SMWTs. They consider how SMWTs should be implemented, how jobs for SMWTs should be designed, how SMWTs can develop effective group processes, how the supervisory role must change, and what the organization needs to do to support teams. While our knowledge base on SMWTs is expanding, virtually all the evidence is from SMWTs in *manufacturing* settings. We do not have a clear idea about the extent to which these prescriptions are generalizable to SMWTs in a *service* context. We do know, however, that many self-managing work teams in service contexts have struggled to achieve increased productivity, quality, and customer satisfaction, while simultaneously making work more satisfying and fulfilling for employees.

To learn more about self-managing team effectiveness in service contexts, we studied SMWTs in two service organizations: a fraternal benefit society that operates a large insurance business and a large telecommunications company. In our study of these two organizations, we sought to answer three research questions: (1) What does effectiveness mean for self-managing teams? (2) What are the key success factors for self-managing team effectiveness in a service context? (3) In service organizations, is there a special

relationship between employee satisfaction and customer satisfaction? We outline the logic underlying each of the three research questions below.

1. What Does Effectiveness Mean for Self-Managing Work Teams?

Most organizations recognize, at least implicitly, the multidimensional nature of effectiveness. The dimensions of effectiveness are often defined in terms of three sets of stakeholders: owners, customers, and employees. Financial performance metrics are most relevant to owners; customer satisfaction and loyalty are typical customer metrics; and quality of work life indicators are most relevant to employees. Self-managing work team researchers and consultants typically argue that the use of self-managing work teams can contribute to all three dimensions of effectiveness. From an owner perspective, self-managing work teams can reduce the need for hierarchy and supervision, thus reducing labor costs. Self-managing work teams can also boost productivity through better problem solving and more integrated working relationships. From a customer perspective, self-managing work teams can enhance levels of customer satisfaction through providing higher quality of service, thus leading to greater customer loyalty. Finally, from an employee perspective, self-managing teams can enrich jobs and thus enhance employee quality of work life (QWL) in terms of job satisfaction, commitment, and turnover.

Organizations often assume that the adoption of SMWTs will simultaneously maximize all three types of outcomes. This is partly the result of over-marketing by consultants, who portray SMWTs as a panacea for a wide range of problems. However, part of the problem stems from academic research and theory that appears to justify such thinking. Two major research perspectives on SMWTs are Richard Hackman and Greg Oldham's job characteristics model and the sociotechnical systems perspective initially developed by Eric Trist and others at the Tavistock Institute. Both suggest that a variety of positive outcomes will flow from the intervention. Hackman and Oldham apply the principles of job enrichment to the design of the self-managing work group's task. They explicitly suggest that enriched work, the basic work design in SMWTs, can lead to positive outcomes in all three areas. A core idea in sociotechnical systems thinking is that managers can design organizations to jointly optimize the social and technical systems, maximizing both performance (from the owner and customer perspectives) and employee QWL.

We do not suggest that the thought leaders in these traditions are unaware that there might be tradeoffs among outcomes in certain settings or that some outcomes may be more easily attained than others. However, the general thrust of these perspectives is toward the maximization of outcomes in all three domains.

In this paper, we explore the extent to which the three core dimensions of self-managing work team effectiveness operate in parallel. To this end, we examine the relationship among the different elements of SMWT effectiveness: productivity and cost performance, customer service, and employee QWL.

2. What Are the Key Success Factors for Self-Managing Team Effectiveness in a Service Context?

We investigated the success factors for self-managing team effectiveness in a service context. Our starting point was the prior research on SMWTs in manufacturing contexts. Most prior research has focused on the micro-design of work groups. It has focused on the relationship between one component of SMWT design, such as leadership or work design, and key effectiveness outcomes. Some research examines standard group characteristics variables on SMWT effectiveness. This research considers, for example, the skill and demographic mix of group members, group size, and group norms. Research examining the role of team leadership in self-managing team asks questions about the management of SMWTs. For example, to what extent should the team leader supervise the team rather than encourage self-supervision? Other research on the design of the work has focused on task design for SMWTs. How interdependent should team member tasks be? How much autonomy should team members have? Is task identity important? Finally, while prior work has recognized that the employee involvement context is important for systems that promote self-management in general, prior research on SMWTs has not considered this factor. We, however, extend Edward Lawler's theory on employee involvement -- in terms of cascading power, feedback, rewards, and training to employees at lower levels of the hierarchy -- to the domain of SMWTs. Thus, based on prior research on SMWTs and self-management more generally, we will examine four sets of predictors of self-managing team success: team characteristics, team leadership, task design, and an employee involvement context.

3. In service organizations, is there a special relationship between employee satisfaction and customer satisfaction?

Research on employee motivation two decades ago found only a weak relationship between employee satisfaction and employee performance. According to Ed Lawler and others, to the extent that a relationship exists, satisfaction is probably the result rather than the cause of performance. The common management belief that "a happy worker is a productive worker" is a myth. Some employees are unproductive despite bovine contentment, and some unhappy workers are highly productive. In short, research had not found a performance payoff in increasing employee satisfaction.

A recent stream of research by Ben Schneider and his colleagues, particularly David Bowen, has raised new questions about whether the relationship between employee satisfaction and performance might not be stronger in service organizations. Their basic finding in a series of studies is that employee attitudes about service strongly predict customer perceptions about service. Moreover, positive employee attitudes about human resource management practices (supervision, work facilitation, etc.) are strongly related to customer perceptions of service quality. Good feelings by employees appear to translate into warmer, more courteous behavior toward customers. Schneider and Bowen caution that this relationship does not necessarily hold in all service settings, because some customers may be more interested in efficiency than warmth. We wonder about the relationship between employee satisfaction and customer service for SMWTs in service settings. Will the higher level of employee satisfaction that is often associated with membership in SMWTs translate into a higher quality of customer service in service settings?

In the next section, we describe the two studies used to examine these three questions regarding the effectiveness of self-managing work teams in a service context.

Two Studies of SMWTs in a Service Context

We examined the research questions in two service organizations that have implemented self-managing work teams in fairly large numbers. In both companies, we had extensive access to their self-managing work teams, company management, and relevant archival data on effectiveness over several years.

Aid Association for Lutherans

The first research site was the insurance operation of Aid Association for Lutherans, a fraternal benefit society that provides fraternal benefits and financial services to members. It has several billion dollars in assets. Its financial products include life, disability, long term care, Medicare supplement insurance, and annuities. It is among the top two percent of all U.S. life insurers in assets, and it carries the highest ratings from Standard & Poors and Best, which rank insurers on overall performance and financial strength.

We studied the Individual Product Services division (IPS). IPS provides all services related to insurance products for field agents and members, including the underwriting and issuing of new business, the servicing of in-force contracts, and claims administration. In 1987, IPS made a major transformation from a traditional functional, hierarchical organization to one that was relatively flat, regionally-based, and customer-focused. The key work units in the new IPS were self-managing work teams that provided all services to field agents in their geographic region. The company was among the first in the insurance industry to use self-managing work teams.

Five years later, AAL assessed the status and design of the team-based IPS organization. Internal studies indicated that the transformation to SMWTs had been highly successful in increasing performance. Internal ratings of customer satisfaction provided by field agents climbed steadily and had become overwhelmingly positive, with an average of 73 percent indicating favorable ratings (versus 55 percent before the change). Productivity (essentially a measure of employee hours per unit of work) increased 40 percent during the same period. Management was concerned, however, that employee QWL gains following the transformation had lagged gains in customer satisfaction and productivity.

We worked very closely with a design team that included SMWT members, team directors, functional specialists, human resources, and IPS top management. Before collecting survey and performance data, we conducted interviews with a sample of members and team directors from six out of the 14 customer service teams. IPS had defined self-managing work teams as follows:

> Self-managing work teams are semi-autonomous groups of workers who share the responsibility for carrying out a significant piece of work and who run their own operations

with almost no supervision. The group has the authority, and the technical, interpersonal, and managerial skills to make the decisions about how the work should be done.

The design team guided us on our research design and helped us collect relevant data. Survey data from a sample of employees across the 14 SMWTs were collected in 1993. Team members provided data on three of the four critical success factors identified in Question #2 above: the design of the team's work, team leadership, and the employee involvement context. We used five job characteristics to measure the design of the team's work: job variety, identity, significance, autonomy, and feedback. Three supervisory characteristics were used to measure team leadership: consideration, production-orientation, and visibility. Employee involvement context was measured with three variables in the survey: power, technical training adequacy, and information. Several archival measures were also used to assess the EI context: the number of training classes focused on interpersonal skills and the amount of dollars given as part of the skill-based pay system, the team bonus system, and in terms of total team compensation (including base pay, skill-based pay, and bonus). We did not measure team characteristics in this study.

We collected data on team effectiveness one year later. We created an overall index of team member QWL from survey data on team members' satisfaction with work, pay, and job security, their opportunities for growth and social interaction, their trust in management, and their commitment to the broader organization. We used the organization's measures of team performance and customer satisfaction. To assess team performance, we collected archival productivity data for each team based on a weighted measure of work activities per $100 expended. To measure customer satisfaction, we collected field agents' assessments of their satisfaction with the service provided by each team as measured by a semi-annual survey.

The variety of measures and longitudinal nature of the research design in AAL provide a rich understanding of the nature of SMWTs. The small sample size (only 14 teams in total), however, limits our analysis to correlations. The larger sample size of the telephone company study, described below, allows for a more in depth analysis of SMWTs.

Pacific Telesis

Pacific Telesis is a large, regional, unionized telecommunications company that provides voice, data, video, and wireless communication services to its residential and business customers in the state of California. We conducted a study in 1989 in Pacific Bell, the regulated part of Pacific Telesis that provides telephone services. At that time, Pacific Bell was organized into four geographic regions and several functional groups. Pacific Telesis has recently been acquired by SBC, another telecommunications firm.

Pacific Bell implemented SMWTs in a variety of functions under the sponsorship of local managers. They hoped that SMWTS would improve productivity, quality, and customer service. The organization approached us to provide an assessment of their SMWTs before diffusing the innovation across the entire organization. Top managers wanted to know if the teams made a difference in performance. Union leaders wondered about their effect on employee morale. Before we agreed to do this research, we conducted interviews with a small sample of employees and managers involved in SMWTs in various functions. Our interviews convinced us that the SMWTs were "real" and that management would give us significant access to the teams.

We worked very closely with a company research team composed of ten middle managers and four local union presidents. The purpose of the research team was to provide insider insight on the use of teams within the company. Before the research team identified where the SMWTs were in the company, we discussed the self-managing team idea at length to make sure we had a common understanding. We defined SMWTs as groups of employees with interrelated tasks who are responsible for making a product or providing a service, and who make their own decisions about how work is done. We pointed out that SMWTs may or may not have a direct supervisor and that the presence of a supervisor did not necessarily mean that a team was not self-managing. Because the telephone company used several different names for SMWTs (such as shared leadership teams, directed autonomy teams, self-regulating groups, and self-designing groups), we worked to ensure that the research team did not eliminate appropriate teams from our study because of labeling differences. The study team identified 84 SMWTs that performed the following functions: (1) providing technical service to customers (such as installing and repairing telephone services); (2) recommending products and services to small business and residential customers; (3) providing clerical

support to engineers and other technical personnel; and (4) managing engineers and other technical personnel. We also compiled case studies on SMWTs representing three out of four of the types of work reflected in our study. They included a telephone installation and maintenance crew, a location records clerical support team that drew maps that showed the location of company equipment, and a sales team that sold products to small business offices.

The processes used to form teams varied by function and location. In the technical support and clerical support areas, a second or third-level manager made the decision that teams could be beneficial for their area and worked with their employees to implement them. Reasons for forming a team were often idiosyncratic (for example, forming a self-management team in a group whose supervisor was out on long-term disability). In one region, the Senior Vice President of Operations asked each of his high level managers to have at least one SMWT operating under their jurisdictions. As a result, that region had more functioning SMWTs than all other regions combined. In sales offices, the move to "directed autonomy" was part of a state-wide effort, and each small business office decided whether it would become self-managing. Employees typically participated in the design of SMWTs, once their business unit decided to implement them.

After the research team identified the SMWTs, we selected for comparison traditionally managed teams that we matched by the type of work they performed. For example, we searched through organizational charts to find installation teams that were not self-managing that serviced a similar population as those that were self-managing. By having comparison groups, we were able to isolate the impact of self-management. We dropped teams from the sample if we were not able to find appropriate matches or if data were missing. In all, we identified 50 matched pairs of self-managing and traditionally managed teams. For purposes of this paper, we primarily report the results from the 50 self-managing work teams.

Self-managing work team members provided data on the four key success factors of SMWT effectiveness outlined in Question #2 above -- team characteristics, team leadership, task design, and the employee involvement context. Team members assessed the same five dimensions of work design as examined in the insurance division: variety, feedback, identity, autonomy, and significance. Team members also assessed the same four dimensions of EI context (that is, power, information, rewards, and

training), though in the telephone company all measures were drawn from survey rather than archival data. Team members assessed SMWT leadership along six dimensions developed by Charles Manz and Hank Sims to tap effective leadership behaviors for self-management. Finally, team members assessed the teams' characteristics in terms of coordination, stability (or the lack of team member turnover), norms, expertise, and innovation.

Members of the SMWTs also provided data on their QWL in terms of how satisfied they were with their work, their team, their opportunities for growth and social interaction, and their commitment to the broader organization. Rather than the archival measures used in the study of the insurance sample, supervisors and upper level managers provided data on team performance through evaluations of productivity, quality, and efficiency. We also collected absentee data from personnel records (that is, how much did absenteeism cost in the preceding eight month period). No measure of customer service was available throughout the telephone company. However, the small business offices collected data on customer satisfaction.

In summary, these two studies provide an interesting context for examining the effectiveness of SMWTs. Both companies were interested in the predictors and outcomes of SMWTs. The two studies can provide useful insights on the three research questions because we were able to collect roughly comparable data across two different service contexts. The study of AAL provides initial insights on the three research questions but is limited by its small sample of teams. The study of Pacific Bell provides more in depth analysis because the larger sample size permits more sophisticated analyses.

Research Findings Across the Two Service Organizations

1. What Does Effectiveness Mean for Self-Managing Work Teams?

Contrary to popular wisdom that different dimensions of SMWT effectiveness reinforce one another, we did not find that the dimensions of SMWT effectiveness strongly related to one another in either organization. In AAL, the lack of strong relationships among the effectiveness dimensions was dramatic. We measured employee QWL (as assessed by team members), customer service (as measured

by field agents), and productivity (from archival sources). Productivity, customer satisfaction, and employee QWL were found to be independent of one another; that is, there were *no significant relationships* between any of the dimensions of effectiveness. In Pacific Bell, we found only one weak relationship among the three dimensions of SMWT effectiveness. We measured employee QWL (as assessed by team members), team performance (as assessed by managers of the teams), and absenteeism (measured with archival data on dollars lost to absenteeism). We found no relationship between team performance and employee QWL or employee absenteeism. Employee absenteeism was slightly and negatively correlated with employee QWL, that is, more dollars were lost to absenteeism from dissatisfied employees. In general, the various dimensions of SMWT effectiveness were not strongly related in either of the two studies.

These findings suggest that practitioner expectations for SMWTs may be unrealistically high. While employee QWL, customer satisfaction, and team productivity did not work against each other, the dimensions did not necessarily reinforce or support one another. As such, SMWTs may not be the panacea implied by some proponents.

2. What Are the Key Success Factors for Managing Self-Managing Team Effectiveness in a Service Context?

We report the relationships between the key success factors and SMWT effectiveness for the insurance division of AAL using correlations in Table 1. These correlations reveal the degree to which characteristics of the employee involvement context, task design, and team leadership are associated with productivity, customer service, and quality of work life.

Insert Table 1 About Here

We report the findings from a type of analysis called structural equation modeling using data from Pacific Bell in Table 2. Structural equation modeling has two advantages over correlation analyses. First, we can simplify the analysis by creating a reliable index of the individual variables for each key success

factor. For example, an index of team design is made up of the five team design characteristics: variety, identity, significance, autonomy, and feedback. Second, the structural equation model produces numbers called path coefficients that hold constant the effects of the other variables, so that we can examine the effect of each success factor on SMWT effectiveness, independent of the other success factors.

Insert Table 2 about here

Employee Involvement Context. The strongest determinant of SMWT effectiveness across both samples was the degree to which the team context supported employee involvement; that is, the extent to which teams had power to make decisions and received training, information, and performance-based rewards. Interestingly, this category of predictors had received the *least* research attention in prior research on SMWTs.

In the insurance division of AAL, the employee involvement context was the only success factor found to be related to all three elements of team effectiveness. More specifically, the training component of the EI context was a significant predictor of team productivity, customer service, and employee QWL. The insurance division offered a number of technical insurance classes as well as comprehensive interpersonal training on SMWT effectiveness (such as conflict management skills). The amount of *interpersonal skills training* predicted team productivity. Interpersonal skills training helped team members to better communicate and coordinate their activities and thus increase their productivity. The adequacy of the *technical skills training* was particularly important for customer service and employee QWL. With better technical skills, team members answered field agents' questions more quickly and accurately. Better technical skills also helped employees to feel more satisfied with their work and work relationships.

The other three dimensions of an EI context were also strongly related to employee QWL. When team members believed that they had *power* to make decisions and had valid *information* on the team's performance as well as technological and organizational changes that influenced the team, they reported increased satisfaction with their work. Moreover, higher levels of total compensation also increased team member QWL. Total compensation included base pay, bonuses based on team performance, and pay

increases based on learning applied skills. Thus, each of the four elements of an employee involvement context contributed to SMWT effectiveness in the insurance division.

In Pacific Bell, the employee involvement context was the only predictor of employee QWL and the strongest predictor of team performance as rated by managers. The SMWTs located in business units that provided business *information* and performance *feedback* to employees, *recognized* and *rewarded* employees, and provided sufficient *training* and resources were those that the managers said performed the best and had the most satisfied employees. Furthermore, SMWT members who felt they could take initiative in carrying out their work and who had *power* over what happened in their organization reported better QWL.

For example, Pacific Bell changed the engineering clerical function to support the transition of the location records clerks to SMWTs. They received training on meeting effectiveness, team-building, and communication effectiveness, and spent several meetings learning about the self-managing team concept. The company designed new evaluation procedures and for the first time, the location records clerks received monthly feedback on productivity and on the quality of their mappings from the engineers they served. The team advisor bought gifts for team members after she was recognized for her success in developing the team. Team members also had the opportunity to report on their progress to upper management, and they viewed this as a significant recognition event. Typically employees at this level had no access to upper management.

In summary, for both companies, the employee involvement context (that is, the extent to which training, information, power, and rewards were shared with team members) was important for SMWT effectiveness across multiple dimensions. These findings support Edward Lawler's theory of employee involvement, which suggests that cascading these practices to lower levels of the hierarchy increases employees' morale and performance.

Task Design. Another success factor we examined was the design of the self-managing team's work. In the insurance division, the design of the team’s work was most important for employee QWL. More specifically, each of the five design characteristics (that is, task identity, variety, autonomy, feedback, and significance) was related to employee QWL. Employees reported more satisfied with their work and

with the organization, and felt greater trust and commitment to the organization, if they found the design of their jobs to be motivating. Identity (completing a whole piece of work) and autonomy (having freedom and independence over how and when to do their work) were particularly important predictors of employee QWL. One dimension of team design, variety of work, had both positive and negative effects on the outcome variables. While more variety of work enhanced employee QWL, it also decreased productivity. More varied work keeps the job interesting and thus satisfying for employees. But at the same time, variety may also reduce team efficiency as team members spend time learning multiple tasks. Increased variety is likely to create fragmented work, with efficiency costs resulting from rotation between various tasks. Thus, introducing more variety into the design of the team's work is likely to result in trade-offs between team performance and team member QWL.

We measured the same five dimensions of the design of the team's work in Pacific Bell. Task design predicted team performance as rated by team members in the telephone company. Here a clearly identifiable, interdependent group task, in conjunction with autonomy to make key decisions about how the team should do its work, were key to the team's performance. In contrast to traditionally managed groups, management is more likely to assign SMWTs a whole task to perform and allow members the autonomy to make decisions required in the process of doing their work. In this study, this interdependence and autonomy translated into better team performance.

However, some of the SMWTs in Pacific Bell did not have an interdependent team task and consequently did not derive performance benefits. For example, the customer service representatives in the small business offices individually handled inquiries from individual customers. Service representatives helped one another in responding to unusual customer requests and shared information about new product updates, but individuals had little identification with the "team." The lack of interdependent team tasks hindered their performance. In contrast, the installation and repair crews were responsible for providing services to all customers in a specified geographic turf. They had the autonomy to do what was necessary to serve their customers. The installation and repair crews derived performance benefits from self-management.

In summary, across both companies, the work design of the SMWT was important to different dimensions of team effectiveness. In the insurance division, team design characteristics were associated with better employee QWL and, in the case of task variety, less productivity. In the telephone company study, team design characteristics were more important for team ratings of effectiveness. However, in both studies, the team design dimensions were not as important as having a supportive employee involvement context.

Team characteristics. The characteristics of the team reflected another success factor. We did not assess the effects of team characteristics in the insurance division, but the findings in the telephone company study are strong. We measured team coordination, expertise, stability, norms, and innovation. Team characteristics predicted both reduced absenteeism costs and team performance as rated by the team. Especially important was composing a team with the requisite knowledge and skills for competent performance. The composition of the team also needed to be stable enough so that the team could develop norms that supported effective performance. The best teams had clear norms, were able to coordinate their efforts, and developed innovative methods aimed at improving their work methods. For these teams, continuous improvement was more than a slogan; it was how they operated. Teams that developed these performing-enhancing norms had lower absenteeism as well as enhanced performance.

Our case studies provide more insight on the important role of team characteristics. One of the installation and repair crews that we observed was proud of its five years of working together. Each of the craftspersons was highly skilled, and a few had specialized knowledge that was called upon for particular technical tasks. These members were gradually teaching the other members of the team these skills. Team members would share new "tricks of the trade" during team meetings, and set aside time to discuss ideas for improvements. The installation and repair crew covered a 40 mile suburban geographic "turf." Although team members were dispatched to particular jobs, they worked closely with the other members of the team to make sure all customers were serviced in a reasonable period.

In summary, while we did not assess the effects of team characteristics in AAL, the results for Pacific Bell suggest that team characteristics are important success factors for SMWT effectiveness.

Team Leadership. We expected team leadership to contribute to team effectiveness. To our surprise, self-managing team leadership was the least important success factor. It was even negatively related to manager ratings of team effectiveness in Pacific Bell and to customer service in the insurance division of AAL. The only positive relationship for team leadership was with employee QWL in the insurance division.

In AAL, we assessed the degree to which supervisors were considerate of team members and demanded that they work hard to produce high quality outputs. We also measured how visible the supervisor was to the team members. Did the supervisor interact frequently with members of the team, keep him or herself informed about how team members thought and felt about things, and represent team concerns to higher level management? We found team leadership to be positively related to employee QWL in the insurance division. Self-managing work team members reported higher levels of satisfaction if their immediate supervisor treated them with respect and consideration but also set high expectations regarding team productivity. Employees were also more satisfied if the activities of their supervisor were highly visible to them and if the supervisor interacted frequently with the team. However, high levels of visibility came with a price. When the supervisor interacted closely with the team, customer satisfaction tended to suffer. In other words, those teams that received the worst customer satisfaction ratings reported the highest levels of supervisory visibility to team members. Thus, the visibility of supervisory leadership comes with both costs and benefits to the team. Team leadership, like a team design with task variety as described above, involves a set of trade-offs for SMWT effectiveness in the insurance division.

In Pacific Bell, we used team leadership measures based on the work of Charles Manz and Hank Sims. They identified the following six leadership behaviors as critical for effective self-management: (1) encouraging team self-observation and evaluation so that the team gathers the information to monitor its performance; (2) encouraging team self-goal setting so that the team sets performance goals; (3) encouraging team self-reinforcement so that the team recognizes good team performance; (4) encouraging team self-criticism so that the team discourages poor team performance; (5) encouraging team self-expectation so that the team sets high expectations for its performance; and (6) encouraging rehearsal so that the team practices an activity before performing it. Those telephone company teams that described their supervisors as doing

the most to encourage self-leadership had the worst performance ratings by upper level management. Like the finding in AAL, the greater the team leader interaction observed by team members, the worse upper level managers perceived the team to be performing.

The findings at both companies suggest that supervisors spent more time interacting with the teams performing less well. There are a few possible explanations for this unexpected negative relationship. It is possible that supervisors are more likely to "encourage" the teams that are performing less well and are less likely to attend to those teams that are performing well. On the other hand, higher level managers may infer that a team needs help if a supervisor is spending considerable time coaching it. Another possibility is that the more supervisors intervene in the work of SMWTs, the more they get in the way of the team's performance. More research is necessary to determine which interpretation is correct, but the consistency of findings across the two settings using different team leadership measures suggests that the unexpected finding on team leadership is robust.

In summary, an employee involvement context, the design of the team's work, and various team characteristics were important success factors for SMWT effectiveness. Contrary to expectations, however, supervisory leadership of teams was not a key success factor and may in fact have hurt team performance.

3. In Service Organizations, Is There a Special Relationship Between Employee Satisfaction and Customer Satisfaction?

We expected that employee QWL would be important for achieving satisfied customers in a service context. Findings from prior research had found that a wide range of employee attitudes predict customer service quality. As Ben Schneider and David Bowen (1993, p. 43) argued: "Employees need to feel that their own needs have been met within the organization before they can become enthusiastic about meeting the needs of customers." Because employee enthusiasm is invisible to customers in a manufacturing context, prior research may not have shown a strong connection between employee morale and quality indicators in these contexts.

In the insurance division of AAL, we found no statistically significant relationship between employee QWL and customer ratings of service quality. Employee QWL did not help or hurt customer

ratings of service -- the relationship was neutral. Our data were limited in the telephone company study because we were not able to obtain good measures of customer service for all types of teams. However, we were able to examine a measure of customer satisfaction and number of complaints for a subsample of customer service teams. When compared to traditionally managed teams, the SMWTs did not have higher rates of satisfaction or lower rates of customer complaints, even though SMWTs had higher employee QWL.

In summary, both studies failed to find a positive relationship between employee QWL and customer satisfaction in the context of SMWTs. This finding is not consistent with earlier work by Ben Schneider and David Bowen (1994, p. 41) which had suggested that "a positive relationship for employees should be reflected in a positive service experience for customers." In contrast, our finding suggests that employee satisfaction is not any less or more important in a service context than in a manufacturing context.

A Comparison of the Two Studies

When we consider both studies together, the consistency of findings is striking. Regarding the first research question, neither study found the dimensions of SMWT effectiveness to be strongly related to one another. Regarding the second research question, we found some consistent patterns of results regarding the relationship between the critical success factors and the dimensions of effectiveness across the two samples. For example, having a team context that supported *employee involvement* was the most powerful success factor. The *design of the team's work* (where team members shared responsibility, had the autonomy to make decisions, and completed a whole, identifiable task) was the second most important success factor. In addition, greater involvement of *supervisory leadership* in the operation of SMWTs had some surprising negative effects on team effectiveness in both studies. Regarding the third research question, QWL was not associated with greater customer satisfaction in either study. The consistency in findings across the two studies suggests that these findings are robust and generalizable across different service contexts.

Nevertheless, we also found some minor differences between the two studies. We did not assess team characteristics in the insurance division of AAL. Thus, we do not know whether the team

characteristics that supported effective self-regulation in Pacific Bell would have contributed to effectiveness in AAL as well. In addition, only in the Pacific Bell study were any relationships found among the different dimensions of SMWT effectiveness, but this relationship was weak.

The variation that we found in the pattern of results between success factors and dimensions of SMWTs between the two studies is more perplexing. For example, while the employee involvement context influenced employee QWL at both companies, team design and team leadership also influenced employee QWL at the insurance division of AAL. These findings suggest that AAL has more potential levers at its disposal for enhancing the satisfaction, trust, and commitment of SMWT members. In contrast, AAL had fewer levers for enhancing team performance than Pacific Bell. We also found mixed results for the team performance outcome. While an EI context influenced team performance at both companies, team characteristics and task design also influenced team performance in Pacific Bell (as assessed by the team). This difference may be due to our use of a narrower and objective measure of performance, team productivity, in the insurance division of AAL. The final two dimensions of effectiveness were specific to each of the samples so we cannot make ready comparisons across the two studies.

Overall, the results suggest some realism about the benefits of SMWTs. Self-managing work teams are not panaceas for all organizational problems. We found that SMWTs can have positive impacts on some organizational outcomes but that they do not necessarily improve all organizational outcomes simultaneously. Trade-offs are common. This makes intuitive sense, but differs from what the literature on SMWT appears to promise. In the sections below, we discuss some of the implications of these findings for researchers and practitioners.

Implications for Researchers

Our findings suggest that the promise of SMWTs may be oversold in the literature. Trade-offs between the success factors are common, and the dimensions of SMWT effectiveness do not necessarily reinforce one another. Overselling the benefits of different human resource processes is a common problem in the organizational studies literature. For example, as noted above, Richard Hackman and Greg Oldman suggest that their dimensions of *job design* can simultaneously achieve better employee QWL, enhanced

performance, improved quality, and lower turnover and absenteeism. Similarly, Thomas Cummings and Christopher Worley (1993, p. 1) suggest that processes *of organizational development* can simultaneously "help organizations achieve greater effectiveness, including improved quality of life, increased productivity, and improved product and service quality." A 1994 special issue of the *Academy of Management Review* on total quality management (TQM) likewise emphasized that *TQM practices* can achieve on enhanced customer focus, continuous improvement/efficiency, teamwork, and employee loyalty. Though each of these bodies of research *implicitly* recognize the inherent tradeoffs and contingencies, few make the tradeoffs and contingencies an explicit focus of their research.

Recently, however, two researchers have done just that: Marshall Meyer and Vipin Gupta provide some convincing evidence that most common measures of organizational performance tend not to be correlated with one another. They call this a paradox of performance. We believe that the literature on SMWTs can gain from a deeper understanding of this performance paradox; that is, an understanding of the tradeoffs and contingencies involved in making SMWTs effective. Our research provides a step in the right direction by demonstrating that effectiveness outcomes are not related to one another and making explicit some of the tradeoffs inherent to the use of SMWTs in a service context.

Our research contributes to the literature on service quality as well. Contrary to prior research in service settings such as banks, we found no significant relationship between employee QWL and customer satisfaction in the insurance division of the AAL. We also failed to detect a relationship with our more limited customer data in Pacific Bell. Our findings are more consistent with research by Robert Sutton and Anat Rafaeli. They found no particular relationship between employee QWL and customer satisfaction in a different service context -- convenience stores. In that context, customers did not care whether employees were friendly or displayed positive emotions. Instead, they cared most about the efficiency and competence of the service provider. Customers cared only about whether employees served them promptly. Our finding that increased technical training in the insurance division resulted in enhanced customer satisfaction is consistent with this pattern of results. Field agents cared about whether the team members were competent in providing accurate answers and technical information quickly.

These mixed pattern of results suggest different customers want different things. Where some customers may want a close relationship with employees, other may desire efficiency above all else. Some customers may want both efficiency and closeness, but at different points in time (perhaps efficiency when time is of the essence and a close relationship when the customer has a special need). We cannot resolve these issues in our own research, but a key issue for future research to flesh out the contingencies influencing the relationship between employee QWL and customer satisfaction. A focus on the tradeoffs and contingencies of SMWTs for effective customer service is a fertile area for future exploration.

Implications for Practice

These findings suggest some important implications for practitioners interested in designing effective SMWTs in service companies. Most important is a focus on enhancing the employee involvement context of SMWTs. We explore this finding in detail because the effect of an employee involvement context has received minimal attention in the SMWT literature.

An employee involvement context may play a critical role in service companies because of the *nature of the work* performed. The service task typically reflects non-routine information processing. Whether a claims processor is analyzing data to assess whether to pay an insurance claim or a telephone repair person is checking computer circuitry to pinpoint a problem, information needs to be analyzed and judgments must be made. Knowledgeable, informed, and motivated employees are in the best position to exercise good judgment. Organizations can create the conditions for employees to exercise good judgment by providing team members power to influence decisions, performance feedback, training in interpersonal and technical skills, and rewards linked to business results. These are the key ingredients of a high involvement organization. When work is of a more routine nature, as in many manufacturing contexts, an EI context may not be as critical for the success of SMWTs.

An employee involvement context for SMWTs in a service context may also be important for another reason. Providing service to customers is *less tangible* than producing a product. Thus, the interactions that occur between employees and customers help to shape perceptions of service quality. The degree to which a telephone customer sales representative understands the client's needs influences the

customers assessment of service quality. The boundaries between the internal operations of the organization and service delivery are more permeable than organizations that produce products. Because of the permeability of the boundaries between the organization and customers in a service context, an employee involvement context can shape service quality more directly. Bowen and Schneider provide support for this assertion in their work -- service organizations with progressive human resource practices (that is, practices that supported employee involvement) provided superior customer service.

In addition to building an EI context, practitioners need to reconsider the role of the supervisor of SMWTs. Despite all the attention paid to coaching behaviors in the SMWT literature, our research suggests that team coaching may be overrated. The leaders' coaching behaviors did not positively influence team performance; in fact, they may have had detrimental effects.

Nevertheless, the important role for leaders of SMWTs may be a *design* role focused on facilitating the three success factors -- team characteristics, task design, and employee involvement context. Leaders can help to create a team with sufficient knowledge and skills, membership stability, and performance-enhancing norms. Leaders also can make sure that work is designed for teams. Team members will feel ownership and be motivated to perform well if they have responsibility for providing a whole service or minimally, an identifiable part of that service. Team leaders can also ensure that team members have collective goals for which they are mutually accountable. Finally, team leaders can influence the design of employee involvement practices to ensure that they support effective teamwork. More specifically, the leader has a key role in providing team members with necessary training and resources. The leader needs to make sure that the systems are in place to provide performance feedback. The team leader also needs to work with upper managers and the human resource function to create a team-based, performance-contingent reward system. Thus, rather than managing the day to day functioning of the team, the more effective role for the team leader may be in terms of its design.

The differential influence of success factors on the dimensions of effectiveness also has implications for practitioners of SMWTs. Practitioners may need to simultaneously work on multiple success factors to achieve all the dimensions of SMWT effectiveness. Alternatively, practitioners might carefully target a specific dimension of effectiveness and then focus on success factors that predict that dimension. For

example, if absenteeism increasingly becomes a problem in Pacific Bell, time would be better spent on helping teams develop norms to support self-regulation than to engage the teams in task redesign or provide closer team leadership. Practitioners cannot assume that the same success factors will contribute to all desired outcomes.

The different pattern of findings across the two studies also suggests that some relationships vary from organization to organization. The mixed pattern of relationships suggests that the effective development of SMWTs is complex and may be idiosyncratic across companies. Just because technical training contributed to customer satisfaction in the insurance division of AAL does not mean that it would contribute to customer satisfaction in another service organization. Such differences may be due to extraneous factors such as the different dominant technologies or organizational cultures. Further research that controls for such factors is necessary to better understand these relationships. In the meantime, practitioners must recognize that the implementation of effective SMWTs is a highly complex process. Because of the idiosyncratic nature of these patterns, off-the-shelf consulting products are likely to achieve at best limited success in creating appropriate SMWT systems for a given context.

Finally, many practitioners value employee QWL because of its assumed impacts on team performance. The lack of relationship between QWL and team performance across the two studies suggests that QWL is not a means to an end (that is, performance) as is implied by the literature on the management of service employees. Instead, employee QWL is an end in itself. Thus, practitioners cannot rationalize investing in employee QWL for the sake of performance results alone. Rather, practitioners must decide whether to invest in employee QWL because they think it is the right thing to do in managing the human resources of the organization. This creates a moral challenge for companies. This moral challenge contrasts with the trend in today's organizations to overemphasize the owner and customer dimensions of organizational effectiveness while de-emphasizing the employee dimension. In the face of unprecedented levels of corporate downsizing and cost cutting, unless organizations see an unambiguous and immediate link to performance, we are pessimistic about the investment many corporations will make in enhancing the quality of work life of today's employees.

Selected Bibliography

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TABLE 1
KEY SUCCESS FACTORS

Insurance Division Study
Correlations Between 1993 Success Factors and 1994 Outcomes

	Productivity *(N=14 SMWTs)*	Customer Service *(N=14 SMWTs)*	Quality of Work Life *(N=95 team members)*
Employee Involvement Context			
Power	-.02	.23	.38***
Adequacy of Training Classes	.24	.40+	.29**
Total Interpersonal Classes	.45+	.33	-.03
Performance Information	-.07	-.31	.37***
Pay for Applied Skills	.30	.39	-.08
Total Compensation	-.04	.17	.22**
Task Design			
Variety	-.55*	-.04	.20*
Identity	-.08	.10	.48***
Significance	-.01	-.05	.19+
Autonomy	-.25	.01	.34***
Feedback	.39	.23	.18+
Team Leadership			
Consideration	-.33	-.36	.49***
Production-Orientation	-.19	-.18	.23*
Visibility	-.32	-.43++	.35***

Interpretation Guidelines:
The higher the correlation (i.e., the closer it is to 1.00), the stronger the relationships

*** p<.001 *** p<.01 * p<.05 + p<.10 ++ p<.15

TABLE 2
KEY SUCCESS FACTORS

Telephone Company Study

	Performance: *Manager Rating*	Performance: *Team Rating*	Absenteeism *Costs*	Employee Quality of Work Life *Employee Rating*
EI Context	.64**	-.32	-.11	.65**
Team Design	-.34	.35**	-.01	-.04
Team Characteristics	.06	.43**	-.28+	.16
Team Leadership	-.35**	.09	-.13	-.09

Interpretation Guidelines: Data shown are path coefficients from a structural equation model. The higher the path coefficient (i.e., the closer it is to 1.00), the stronger the relationship.

*** p<.001 *** p<.01 * p<.05 + p<.10