SATURN, THE GM/UAW PARTNERSHIP: 
THE IMPACT OF CO-MANAGEMENT AND JOINT GOVERNANCE ON FIRM AND LOCAL UNION PERFORMANCE 

by 

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Submitted to the Sloan School of Management 
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ABSTRACT

This dissertation examines the depth of U.S. restructuring of industrial relations and production systems by analyzing the development and performance of General Motors' (GM) Saturn Corporation. Designed and implemented as a partnership between GM and the United Automobile Workers (UAW), Saturn breaks new ground in firm governance, management and industrial relations. This research builds both on organizational theories of the design and management of team-based work systems, and on theories of human resource management and industrial relations, by evaluating the impact of organized labor on firm quality performance using data from Saturn.

Through detailed analysis of Saturn's partnership arrangements this study finds that local management and union leaders have created a system of co-management which gives jointly selected union members the responsibilities of operations' management. This dissertation explores whether this system of co-management and the labor-management partnership work organization add value to Saturn's first-time-quality performance. Behavior patterns, supervisory methods, time use, dynamics of individual union-management partnership relations, differences in the patterns of communication and coordination, and quality performance outcomes of both union and non-union middle managers were studied in order to test whether the variations in the co-management system and quality performance were systematically related.
Three groups of variables were found to have a significant impact on quality performance:

- The amount and pattern of communications and coordination activity;
- The alignment between the partnered represented and non-represented managers;
- The balance of time spent managing people and production.

Further, union managers had a higher level of communications, and a greater impact on quality performance, than did non-represented managers. Network analysis techniques were used to describe and measure the communications network built on the union organization throughout Saturn's management structure.

These data were combined with analyses of the tensions within the union between its traditional role in membership representation, and its new role in management and governance. Qualitative data were collected to determine the impact on the membership of the union's extensive involvement in firm management and governance. The evidence indicates that while Saturn's governance and management systems have provided the union access to management's strategic and day-to-day operational decision making thereby impacting firm performance, this may have come at some cost to individual representation. Finally, questions about organizational learning and the diffusion of innovation from Saturn back to General Motors and the UAW international union are explored.
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Chapter 1
Introduction & Background

INTRODUCTION

Intense international competition over the past two decades has motivated many U.S. industries to attempt a restructuring of their production systems (Piore & Sabel 1984; Dertouzos, Solow and Lester 1989; Blinder 1990; Womack, Jones & Roos 1991). This restructuring has in turn generated a need to rethink the human resource management, industrial relations and employment practices which support those production systems (Katz 1985; Kochan, Katz, & McKersie 1986; Hecksher 1988; Locke 1991).

Yet U.S. attempts at restructuring manufacturing systems, labor relations, and human resource practices have had very mixed results. In some cases (Walton & McKersie 1991) - Xerox, Nummi (the GM/Toyota joint venture), and LSE (the LTV/Sumitomo joint venture) - the transformation of industrial relations and work organization has been extensive, reaching business strategy development, job design, choice of technology, contracting out, compensation practices, training, job classification, conflict resolution, decision making, and problem solving. However, in most cases
transformation and diffusion have been limited, stalling or reaching a plateau after a few years of initial support and commitment (U.S. Department of Labor 1982; Kochan & McKersie 1990; Levine & Tyson 1990; Cooke 1990; Cole, Bacdayan & White, 1991; Appelbaum & Batt 1994). Significant barriers to institutionalization of these reforms can include management resistance to significant sharing of power and authority. Management systems often retain hierarchical control while accommodating more extensive integration of labor into an expanded level of problem solving and decision making (Hancke and Rubinstein 1995). Institutionalization also depends on the diffusion of local innovations, practices and policies throughout the parent corporation and national union (Rubinstein, Bennett, and Kochan 1993). Since most transformations do not become fully institutionalized, the systems can regress back to their traditional state.

Further, organized labor is often unable to redefine itself in response to new needs, retaining instead its traditional roles which then impede the transformation process (Kochan, Katz and McKersie 1986). Unions struggle with the question of how to respond to new opportunities which extend their roles into the realm of management while continuing to represent the interests of their members. One approach, which has become increasingly common over the past decade, has been for unions to actively participate in managerial decisions, thereby representing the needs of the membership in the early stages of the decision making
process. It is hoped that by representing labor's collective interest in management decisions and policy making, worker interests will be incorporated into the early stages of strategic decisions, thereby improving the quality of the choices made and the speed of implementation. Yet few models currently exist in which organized labor has successfully blended their responsibilities in representation with new roles in management.

Attempts at transforming the relations between labor and management, work organization, and employment practices have taken a wide variety of very different forms. These have ranged from quality of work life and socio-technical systems interventions (Davis and Churns 1975; Guest 1979; Davis & Taylor 1979; Trist 1981), to employee participation problem solving teams, quality circles and labor-management committees (Cole 1979; US Department of Labor 1982, 1987; Cutcher-Gershfenfeld 1987; Leigh 1987; Hoerr 1988; Wever 1988; Eaton and Voos 1989). Currently there is a growing interest in quality management systems and self-managing work teams (Walton 1979, 1985) to support "lean" production systems (MacDuffie & Krafcik 1989, 1991).

While many firms have reported attempts to transform manufacturing systems, work organization and labor-management relations, the terms used to describe their efforts do not reveal the significant variation in the design and outcomes between, and within, various approaches. Even when the same terms are used, the transformed organizations are often quite
different in practice based upon factors such as: the degree to which decision making and power are truly shared; the level of strategy development by both labor and management; the integration and institutionalization of the transformed organization within the human resource system; the levels and density of participation within the organization; the leadership roles played by both union and management; and the extent and content of skill development (Kochan and Cutcher-Gershenfeld 1988).

**Labor's Value Added: A Review of the Literature**

While the literature on the social value of organized labor dates back to the Webbs (1897), Perlman (1928), and Commons (1935), a more recent literature addresses the economic value-added of organized labor. This literature on the contribution of unions to improving organizational efficiency focuses primarily on the union's role in disciplining management and labor (Slichter, Healy, and Livernash 1966). Studies of transformed labor-management relations suggest that where unions serve as participants in joint efforts they add value directly by organizing the workplace, providing management with an efficient means to communicate and negotiate with the workforce, and integrating labor into cooperative efforts (Cutcher-Gershenfeld, McKersie, Wever 1988). Unions can also organize input,
establishing a credible articulation of the collective voice of labor (Eaton and Voos, 1989). Unions are credited with establishing checks and balances on management, exerting institutional discipline backed up by legal contract. In establishing legal barriers to some forms of unilateral, short-term managerial decision making, unions can create longer time horizons resulting in economic as well as social benefits. By creating a voice option for their members, unions contribute to efficiency by increasing tenure, decreasing turnover, and giving information to management on organizational slack (Freeman and Medoff 1984).

Yet despite these arguments and hypotheses, there is no extensive research on organized labor's impact on performance outcomes with the exception of a limited early literature (Slichter 1941, Golden & Parker 1949, Golden 1955) which addressed the union's contribution to organizational performance by presenting case studies and qualitative evidence of labor's input in problem solving and decision making. While widespread in certain industries in the 1920's and again during the war years of the 1940's, most arrangements disappeared by the end of the 1950's. Further, these attempts at increasing the participation of labor were largely "off-line", that is specially established shop floor or plant-level joint labor-management committees that met outside of the normal production or managerial activities. The results have been attributed to both problem solving activity and increased "effort" on the part of the workforce.
Further, most research treats the process by which unions affect organizational performance as a "black box". The existence, or in some cases "participation" by the union is seen as input variables with performance as the output. The way in which organized labor impacts performance is not explained. Even the more recent studies tend to treat union-management joint efforts as a black box, and do not explain how unions add value to organizational performance except through administering programs promoting greater employee involvement in problem solving. This research attempts to open the black box and analyze the means by which unions might influence organizational performance outcomes.

This dissertation explores these issues through an in-depth study of a labor-management partnership arrangement which has been sustained for more than ten years, and now appears to have become institutionalized through both a collective agreement and an "on-line" system of co-management with joint organizational governance. On-line refers to day to day operations or managerial processes which directly produce products or services. The partnership arrangement developed by the United Automobile Workers (UAW) and General Motors Corporation (GM) at Saturn, in particular the design of systems for joint governance and co-management, may address some of the key dilemmas associated with the failure of earlier efforts at transformation. These include the sharing of power, management authority and prerogatives, the role of labor in quality management, and the resolution of
conflict within a context of joint responsibility for
business as well as social and economic needs of the union
membership. Given that Saturn was created more that ten years
ago, and has been producing vehicles since 1990, sufficient
time has passed to assess the labor-management partnership
experience.

SATURN: THE GM/UAW PARTNERSHIP

Since its inception, the partnership arrangement between
the Saturn Corporation and the UAW has received international
attention. Saturn has achieved remarkable results in quality
performance. After only two years of production, and every
year since, Saturn has earned higher ratings from consumers
than any other domestic car line in vehicle quality,
reliability, and satisfaction after one year of ownership
only exceeded all GM and other domestic lines, but every
automaker world-wide except Lexus and Infiniti, much costlier
luxury brands.

The unique role the union played in the conception and
design of Saturn, and its present responsibilities in
Saturn's operations management and governance, break with
many of the established legal doctrines, principles, and
customs that have guided American labor-management relations
since the New Deal collective bargaining system was first put
in place. In implementing this partnership, Saturn management and the local union have gone well beyond past attempts by General Motors and the UAW to create more cooperative and productive relationships through participation in joint labor-management committees and teams. The institution of the partnership attempts to integrate labor into the organization's long range and strategic planning and day-to-day operational decision making. Unlike most labor-management efforts, Saturn's joint committees have responsibility for strategic level decision making and firm governance, and an even more radical departure from traditional organization has taken place at the shop floor and middle management levels. Saturn's workforce has been organized into self-directed work teams responsible to a middle management organization, half of whom are local UAW members. In this way the local union is in fact co-managing the business.

While much has been reported about the market response to Saturn, its technology, and the general principles used to design its initial labor-management system, few details have yet been provided on how its innovations in labor-management relations are evolving in practice. This dissertation describes the new role the local union plays in this partnership, and reviews experience to date with this new organizational form. Special emphasis is given to the union's leadership, structure and organization. I will also suggest an analytic framework for assessing the implications of this
model of labor-management relations to the specific stakeholders involved and to the broader labor, management, and public policy communities. Saturn is an extremely important innovation in U.S. industrial relations and organizational governance that, if understood properly, could inform other efforts that are needed to help transform traditional labor and management practices. Yet like any new experiment, implementing these principles is a trial and error process.

Saturn should not be seen as an isolated island or a routine economic investment by GM. Instead, it was and continues to be a strategic experiment, a decision to try and test out a new approach to organizational governance and management, and to use the lessons gained at Saturn to change the rest of GM's operations and its relationship with its employees and the UAW. As an explicit attempt to redesign human resource management, industrial relations and manufacturing systems, Saturn provides us with a laboratory for experimentation and learning about these innovations. Saturn also provides us with a window to the process of transformation at General Motors. While Saturn has achieved an outstanding reputation for its quality, most observers do not believe that GM has transformed into a world class manufacturing organization (Womack, Jones & Roos 1991). How the lessons from Saturn have or have not diffused back to its parent organization is an important question. Saturn was established as a separate organization to allow innovation to
take place. Yet we know from past experiences that experiments like Saturn often tend to get isolated in larger organizations (Hancke and Rubinstein 1995) when those outside the experiment take the position that there is little to learn or transfer from this special case. Thus it is important to examine the extent to which Saturn has served as a learning opportunity for GM and the UAW. Learning and diffusion from the Saturn pilot back to GM will reveal important lessons for other organizations seeking models for stimulating innovation.

The Saturn partnership is a transformation in industrial relations which itself continues to evolve. Tensions exist in many areas - within the local union as various caucuses vie for power, between the local and the international union as innovation confronts tradition and the need for local autonomy and national standards are joined, between Saturn and GM as the appropriate level of autonomy and new investment is sought, and within the partnership itself as the union seeks to balance its role in management with its role in representing the membership both collectively and individually. As these problems are worked out, changes have occurred in organization, structure, strategy and policy. I will analyze this evolution and describe where the system remains incomplete.

The data for this study come from a long term research project with the Saturn Corporation and UAW Local Union 1853. As part of this research I conducted over one hundred in-
depth interviews. I engaged in participant observation, attending meetings of Saturn's governing bodies - the Strategic Action Council (SAC), Manufacturing Action Council (MAC), and the joint union-management "decision rings" in each business unit/plant (Vehicle Systems, Body Systems and Powertrain). I worked the assembly line, attended the union "Congress" and many module decision rings across the site, and participated in union leadership off-site planning sessions as well as seminars and meetings with management and union officials. Three surveys of communication networks, time use, managerial priorities and partnership relations were conducted on-site and covered all represented and non-represented management at the module level. This study therefore consists of a mix of qualitative research based on direct participation, observation and intervention in the partnership, interview and field notes, and quantitative survey data. Together the data collection phase spans the period from February, 1992 through February, 1995.

This research relationship with Saturn reflects a partnership, with the union and management providing excellent access and cooperation. Feedback of the results to Saturn and UAW representatives occurred earlier than would be normal for outside social science research in the hopes of helping the parties learn from their experiences as the project evolves. In some cases the results addressed problems leading to changes in the partnership design.

However, this work has been funded by outside sources,
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BACKGROUND

Figure 1 presents a chronology of some of the key events in Saturn's Partnership history to date. GM's expressed objective in creating Saturn was to build a small car in the U.S. aimed at what it refers to as "conquest sales" from Japanese auto makers, i.e., sales that otherwise would have gone to a Japanese product. In early 1982, General Motors concluded that it could not manufacture a small car competitively in the U.S. under the existing GM/UAW contract and so, in 1983, approached the UAW international union, which led to the formation of a joint union-management committee charged with evaluating the key success factors of world class manufacturing. This joint study team started with a clean sheet approach as it explored and evaluated practices throughout the world. Its findings were embodied in a set of basic organizing principles for Saturn (Figure 2).

Saturn's manufacturing operations are located in Spring Hill, Tennessee as a fully integrated 4.2 million square foot facility including foundry, engine and transmission plant, stamping, body fabrication, assembly, and interior parts
Figure 1

Partnership Evolution and Development

1982: GM Small Car Study

1983: Joint GM/UAW "Committee of 99" Study World Class Manufacturing

1985: Memorandum of Agreement on Saturn Corporation

1986: Joint Supplier Selection Begins
       First UAW Hiring

1987: Approval of Initial $1.9 Billion Saturn Capitalization by GM Board of Directors

1988: Addition of Jointly Selected UAW Module Advisors as Partners

1989: Addition of Jointly Selected UAW Crew Coordinators and Staff Partners

1990: First Car off the Line
       First Local Union General Election

1991: Second Crew Added
       First Member-to-Member Survey
       Agreement Renewal Process
       Withdrawal of UAW International Representative From SAC

1992: First Election of Team Leaders (Work Unit Counselors)
       Work Unit Business Plan Development
       Initiation of Off-line Problem Solving Process
       Second Member-to-Member Survey

1993: Local Referendum on Partnership
       Second Local Union Election
       Third Crew Added
       Third Member-to-Member Survey

1994: Saturn Integrated into GM's Small Car Group
       Skip LeFauve Promoted to Head Small Car Group
       Agreement Renewal Process Results in Establishment of 14 Elected Crew Coordinators

1995: Election of 14 Crew Coordinators with Authorization to File Grievances
       Mike Bennett Opposes Incumbent in Election for Director UAW District 8
       One-millionth Car is Built
       Don Hudler, former VP Marketing replaces LeFauve as Saturn President
       Becomes 2nd Best Selling Small Car in the U.S.

1996: Mike Bennett Resigns as Local Union President, Retaining Position as MAC Advisor
       Joe Rypkowski Succeeds Bennett, becoming the 2nd of President of UAW Local 1853
       Bennett and Rypkowski both Win in Third Local Union Election
Saturn's Organizing Principles

- Treat people as a fixed asset. Provide opportunities for them to maximize their contributions and value to the organization. Provide extensive training and skill development to all employees.

- The Saturn organization will be based on groups which will attempt to identify and work collaboratively toward common goals.

- Saturn will openly share all information including financial data.

- Decision making will be based on consensus through a series of formal joint labor-management committees, or Decision Rings. As a stakeholder in the operation of Saturn the UAW will participate in business decisions as a full Partner including site selection and construction, process and product design, choice of technologies, supplier selection, make-buy decisions, retail dealer selection, pricing, business planning, training, business systems development, budgeting, quality systems, productivity improvement, job design, new product development, recruitment and hiring, maintenance, and engineering.

- Self-managed teams or Work Units will be the basic building blocks of the organization.

- Decision making authority will be located at the level of the organization where the necessary knowledge resides, and where implementation takes place. Emphasis will be placed on the work unit.

- There will be a minimum of job classifications.

- Saturn will have a jointly developed and administered recruitment and selection process, and work units will participate in hiring their own team members. Seniority will not be the basis for selection, and the primary recruiting pool will consist of active and laid off GM/UAW employees.

- The technical and social work organization will be integrated.

- There will be fewer full time elected UAW Officials and fewer Labor Relations personnel responsible for contract administration.

- Saturn's reward system will be designed to encourage everyone's efforts toward the common goals of quality, cost, timing and value to the customer. 1

manufacturing. It is the largest single integrated auto production facility built in the U.S. since Ford's River Rouge plant in Detroit, Michigan. Its engineering center is
located in Troy, Michigan. Current investment is estimated at $5 billion including product development costs, plant and equipment. As of this writing employment is estimated at 9000, with approximately 7,300 UAW members in Spring Hill relocated from 136 GM locations in 38 states. As Saturn expanded production beyond a single shift, it provided employment to many around the GM system who were laid off or working in plants scheduled to close. Almost 100% of those eligible have joined the union in a right to work state (three members withdrew from the union in May 1994).

The original "Committee of 99," as the joint study team came to be called, envisioned a new form of organizational governance enabling management and the local union to jointly manage the business. Its intent was for the union to be a full partner in decision making through consensus at all levels of the organization, with the right to block decisions and provide alternatives based on the needs of the people and the business. In 1985, a 28 page Memorandum of Agreement between the UAW International and the Saturn Corporation outlined the underlying principles of the partnership (Figure 2), and the team and committee structure (Figures 3 and 4).

I found four arrangements most significant in this unique document: 1) the entire blue collar work force would be organized into self-directed work teams; 2) decisions would be made through a consensus process; 3) the union would be a full partner in all business decisions; and 4) the
corporation would be governed by joint labor-management committees at all levels - corporate, manufacturing, plant and department. In this way the Saturn contract provided language which set the stage for the local parties to create on-line labor-management partnership arrangements.

Figure 3

**Saturn Partnership Structure**

- **Work units** are organized into teams of 6 to 15 members, electing their own leaders who remain working members of the unit. They are self-directed and empowered with the authority, responsibility, and resources necessary to meet their day to day assignments and goals including producing to budget, quality, housekeeping, safety and health, maintenance, material and inventory control, training, job assignments, repairs, scrap control, vacation approvals, absenteeism, supplies, record keeping, personnel selection and hiring, work planning, and work scheduling.

- Saturn has no supervisors in the traditional sense. Teams interrelated by geography, product, or technology are organized into modules. Modules have a common Advisor.

- Modules are integrated into three Business Units: Body Systems (stamping, body fabrication, injection molding, and paint); Powertrain (lost foam casting, machining and assembly of engines and transmissions), and Vehicle Systems (vehicle interior, chassis, hardware, trim, exterior panels and assembly).

- Joint Labor-Management **Decision Rings** meet weekly:

  * At the corporate level the **Strategic Action Council** (SAC) concerns itself with company-wide long range planning, and relations with dealers, suppliers, stockholders, and the community. Participating in the SAC for the union is the local president, and on occasion a UAW national representative.

    * The **Manufacturing Action Council** (MAC) covers the Spring Hill manufacturing and assembly complex. On the MAC representing the local is the union president and the four vice presidents who also serve as the UAW bargaining committee.

    * Each **Business Unit** has a joint labor-management **Decision Ring** at the plant level. The Local President appoints an elected executive board member who is joined by UAW module advisors and crew coordinators in representing the union.

    * **Decision Rings** are also organized at the **Module** level. Module advisors and the selected work unit counselors (team leaders) participate in the module decision rings.
Figure 4

Partnership Structure
RESEARCH OBJECTIVES

PARTNERSHIP EVOLUTION AND DYNAMICS

A major emphasis of this research will be on understanding the partnership dynamics and development, not as planned and designed but how the process evolved and played out in practice. In this study special attention will be given to the tensions and problems encountered by the parties in managing both internal and external relations over time. Critical conflicts which will be explored include internal struggles over representation, quality and decentralization, and external struggles with the UAW international union and GM over autonomy and additional investment. These examples and others will be developed and discussed in greater detail in the following chapters.

DEVELOPMENT OF A FRAMEWORK FOR TRANSFORMED LABOR-MANAGEMENT RELATIONS

This research will attempt to deepen understanding of the process and scope of U.S. industrial restructuring by analyzing in great detail the work organization, management system and governance arrangements at Saturn. I will build both on organizational theory of the design, management, and diffusion of team-based work systems, and on industrial relations theory by re-evaluating the role of labor in the management process. In creating a system of union co-management, Saturn represents a departure not only in what
management does, but who management is.

I will introduce a theoretical framework for analyzing transformed relations between labor and management, which is grounded in the observations of this partnership in practice. This framework differentiates off-line joint governance activity from on-line union involvement in management, and delineates off-line from on-line team activity. While these industrial relations arrangements are not mutually exclusive, they have different dynamics and outcomes for labor, management and organizational performance.

THE UNION AS A SOCIAL NETWORK

Saturn offers us an alternative to the way we have traditionally understood the social and economic value of organized labor. I will test the hypothesis that in the case of Saturn organized labor has become responsible for performance through the development and implementation of a system of co-management and joint governance in which the union as an institution has integrated its organizational and social network into the manufacturing and governance processes of the corporation. The Saturn partnership arrangement has created the potential for a management infrastructure with high levels of coordination, communication, and quick-response, which is also rooted in the traditions of the labor movement. Specifically, I will study the effects of on-line co-management, an institutional arrangement unique to Saturn and through which the union
seeks to add value to the management of Saturn's team-based work system. From detailed observations of the partnership dynamics, I develop and then test the proposition that the union is itself a dense organizational network which contributes significantly to the management and production systems by facilitating the communications and coordination both within and between departments. This proposition will be tested empirically with the use of survey data and network analysis.

REPRESENTATION

At the same time, I will explore the conflict and debates this new co-management role produced within the local union. In designing and implementing the partnership arrangements the local has devoted much of its organizational resources to fulfilling its new roles in firm governance and management. One particular tension researched extensively in this study concerns membership representation. In recent years, debates over the adequacy of representation intensified within the local union, and between the local and the international union. How the union balances its new roles in the governance and management processes with its traditional representation responsibilities will therefore be examined.
ORGANIZATIONAL LEARNING AND DIFFUSION

I will also investigate the problem of organizational learning, and raise questions about the diffusion of the Saturn partnership model to the rest of General Motors and the UAW. This will provide a picture of how the traditional GM-UAW practices and the Saturn-UAW model influence each other and have shaped the partnership over time, thereby providing a glimpse into the institutionalization process and the forces affecting it.

QUALITY PERFORMANCE

I plan to test the proposition that this model of industrial organization, which attempts to build on the organizational strengths of the union as an institution in the activity of management, produces higher levels of quality performance. Saturn provides an opportunity to gain new insights into the contribution of organized labor in the transformation and management of high performance organizations. This research will analyze whether Saturn's quality performance can be explained, at least in part, by the managerial responsibility accepted by individual union members and the social network of the union as an institution, as opposed to more traditional explanations such as "effort bargains" which management has extracted from employees or the discipline the union exerts on management and labor (Freeman and Medoff 1984).
RESEARCH METHODOLOGY

I have studied Saturn through a research strategy which combines quantitative and qualitative methods. The quantitative research component tests whether variations in quality performance and Saturn's system of co-management are systematically related. I have conducted a detailed examination of the management system, analyzing the behaviors, time use, and supervisory methods of both union and non-union middle managers, attributes of their individual union-management partnerships, differences in the patterns of communication and coordination of each group, and quality performance outcomes. These quantitative data will be analyzed using regression and network analysis techniques. Employing qualitative techniques (interviews and participant observation), I will also analyze the history and dynamics of the partnership, and the challenges these new roles and requisite changes in industrial relations pose for labor and management leadership.

OVERVIEW OF THE CHAPTERS

Chapter 2 will explore the evolution and development of the partnership arrangements between UAW Local Union 1853 and General Motors Corporation at Saturn.

Chapter 3 will test the hypothesis of the union as a organizational network, and analyze the effects of co-
management on quality performance.

New roles in management also present difficult challenges for union leaders who are trying to balance both the responsibilities of management with those of membership representation. The dilemmas presented by these dual responsibilities will be examined in Chapter 4.

Chapter 5 will explore the opportunities and obstacles to learning and diffusion of the Saturn model back to General Motors and the UAW. It will also describe the organizational and political tensions within the local union, between the local and the international union, and between Saturn and GM.

Chapter 6 will offer a synthesis, and discussion of implications for theory and future research.
Chapter 2

The Evolution and Development of the Saturn Partnership

INTRODUCTION

The qualitative material presented here serves as the basis for a grounded theory of the local union as an organizational network within the Saturn partnership arrangement. I will first describe the dynamics of the partnership, and then based on interviews and participant observation build an argument for the union in this partnership as a network organization. This grounded theory will then be tested empirically in Chapter 3.

THE EVOLUTION OF CO-MANAGEMENT

The partnership organization and the structure of the local union have evolved significantly over time. Currently there are four distinct dimensions or sub-processes of the Saturn Partnership. Only two of these sub-processes appeared in the original design by GM and the UAW International - joint labor-management committees (Decision Rings) and on-line self-directed work teams (Work Units). The joint
labor-management committees at each level of the partnership (strategic, manufacturing, business unit, and module) share information and provide an opportunity for input and decision making. In the words of one plant manager at Saturn:

[The decision rings are] used here as more of a communication medium to get the word out to the floor, what's going on, what changes are coming, and what procedural changes we're making...When you finally reach a decision its slower but you usually make a better decision. You've got everybody's buy-in. You're not trying to force your ideas all the way down to the floor to make it go.

While off-line, these committees tend to be effective in sharing information and providing voice for all stakeholders in the decision making process. They are very much part of the Saturn culture and a radical departure from the world of General Motors which all Saturn employees have experienced. As one union executive board member described the difference:

The biggest difference [from GM] I found is that when I was at my old job, you [labor] were never a part of identifying problems. You were always out there bitching and moaning about problems, but when it came time to get into a huddle in the room and resolve it, you were never part of that. You are never part of the conversation. Management would go off into one room and do their thing, and we would go off in our room and do our thing. We would get back together, and they would lay their plan in front of you and want you to buy into it. Well its a lot harder to buy into a plan you haven't been part of. Part of buying into it is conceptualization of an idea, looking at all the different alternatives, and once you've explored all those alternatives, no matter what you come out with you are a lot more committed. It very well could be that they could come out with a good idea, but because you weren't part of that thought process, you didn't buy into it. You are always suspicious, "did they think about this, did they do that?"
These groups meet weekly for one to several hours, with the SAC meeting Mondays, MAC Tuesdays, business units Wednesdays, and modules on Thursdays. In this way information or decisions made at higher levels in the organization can be considered immediately. However, since these groups meet only once a week, their function is largely off-line. Participants must leave their normal day-to-day responsibilities to attend, and are therefore removed from the moment-to-moment on-line operational decision making which consumes most of their time. Joint labor-management committees are not unique to Saturn and have been active in the U.S. automotive industry since the early 1970s.

Self-directed work units are also not unique to Saturn. European (Trist 1981) and Japanese (Womack, Jones, and Roos 1990) manufacturers have been using this form of shop floor organization for decades. In the U.S. self-directed teams date back to the 1970s (Walton, 1975, 1979, 1985), but until recently have found their greatest acceptance in the non-union sector (Kochan, Katz, and McKersie 1986).

Since 1985, two other sub-processes have been developed locally by the parties. These include off-line problem solving teams (Problem Resolution Circles), and co-management through individual one-on-one (Partnering) between the union and management in both staff and line organizations. It is through this last dimension, co-management, that Saturn and the UAW have become unique in U.S. industrial relations, with
institutional arrangements which directly challenge long held assumptions regarding the limits of labor's role in the management process.

Yet when people visit Saturn and attend formal presentations on the partnership, this on-line co-management process involving one-on-one partnering is hardly mentioned. Saturn members themselves tend to focus on the contractual arrangements. In fact, it was only after I spent considerable time on site that I began to see this new organizational form. However, to understand the joint governance arrangements at Saturn it is critical to see not only the formal labor-management decision ring committee structure described above and put in place by the 1985 Agreement, but also the individual one-on-one partnerships which have been developed over the past few years throughout the management organization. As indicated above, while self-directed work teams and off-line labor-management committees were explicitly outlined in the contract, the management system was not. The local parties - Saturn management and the UAW local union - used the organizing principles which called for a process of consensus decision making with the union as full partner, to create an on-line operations co-management system. The individual partnerships were initiated by the local union leadership who recognized that they could not fulfill their managerial responsibilities simply through weekly off-line decision ring meetings. One elected union leader described it this way while referring to a chart of
the partnership organization:

We want the voice of the worker involved in all aspects of the business. Partnership to me means in effect having that voice of the worker integrated into those decision making arenas...One of the things [we are] attempting to do is in fact institutionalize some of those things in a systematic way. [We] are making sure there is a gatekeeper in that [decision making] process from the workers' standpoint...UAW leadership integrated into the modules or the various functional areas in terms of those gatekeepers have structurally built in the voice of the worker...What we continue to struggle with is that [management's own] decision making process is being utilized more than this one [decision rings]. And that's the conflict I struggle with every day here. So wherever there's a gate [for decision making], I'm going to put somebody in there. That's what I've done right down the line. As long as they're going to rely on that process, I've got to do that. I can't make this one [decision rings] work to the extent I want to. But we have a matrix organization here [one on-one partnering], that provides for co-equal [status] i.e., the process. This one [decision rings] doesn't because it can get into [management's] unilateral decision making...We established, even though the Memo [of Agreement] didn't provide for it, it does now, a partnership here with regard to the module advisors, [who] will represent the interests of the module at the business team level.

The development of one-on-one partnering began in 1988 with module advisors. While management considered the positions outside of the bargaining unit, the union argued that these jobs were not supervisory in the traditional sense and so its members should fill them. After months of debate on this issue, an agreement was reached which allowed the jobs to be filled by both union and non-represented employees who work together as partners. Rather than having one module advisor for fifty team members as originally envisioned, the parties doubled the span of control with two module advisors, one represented and the other not, for every 100 members. The
development of one-on-one partnering provides union leaders with an opportunity to contribute to day-to-day management, making operating decisions, and supporting the work units. One elected union leader explained the justification for union members filling managerial positions:

If managers can both represent the workforce and their fiduciary responsibilities, what's to presume the union leader cannot in fact represent the workers and the fiduciary responsibilities of the stockholders? There is none, there's no argument for it...Now there is a difference in my mind about management and managers... The union and managers practicing management, balancing the needs of the people and the needs of the business, and then both being held accountable and responsible for the output with regard to those two elements is what is needed in this process. I want to have as much responsibility, and as much accountability, for the quality of this product and the price of this product, as I do for the human side of this with regard to the wages and benefits we are paying people, and the working conditions that they are part of.

There's a legal problem here...The law divides us. What I'm saying is that law needs to be changed so that they both are held responsible and accountable. The only way you're going to change the role of the union is to change the role of the managers. Or vise versa. And society ought to hold us responsible and accountable for our performance today. I think society want us to provide good working conditions and good pay, and still return a profit to the shareholders. I think that's what we should be held accountable for.

Figure 5 includes an illustration of the four dimensions of Saturn's labor-management partnership. I propose this framework for analyzing these arrangements, and comparing Saturn's joint governance system to other models of joint labor-management activity. The partnership provides opportunities for both off-line planning, decision making, and problem solving, as well as on-line control of day to
day operations. Further, it is important to distinguish between the institutional arrangements involving the **local union** leadership, and those organized around the **workforce** involved in shop floor production. While other U.S. joint labor-management governance arrangements include off-line labor-management committees and teams as well as on-line self-directed work groups, I am not aware of any other industrial organization which has developed such a process for co-management by the union. Thus, while co-management through on-line partnering was never foreseen by the original designers, and was therefore not included in the agreement, it has deepened the partnership and evolved as one of its most critical elements.

For example, union leaders have been partnered with non-represented Saturn employees through a joint selection process to carry out new roles as operations middle management replacing the foremen, general foremen, and superintendents found in traditional GM plants. The joint selection operates through an interview process. Joint committees including union and management leadership are organized in each business unit. Candidates, both represented and non-represented, are interviewed by these committees and recommendations are sent forward to the UAW MAC Advisor and the VP Manufacturing for their approval.
At Saturn self-directed work teams are organized into modules based on product, process or geography. Each module has two advisors to provide guidance and resources. While they are jointly selected by the union and Saturn management, one is represented by the UAW, and the other is not. The union views its selected members as supplementing the local leadership. Both partners approve payroll, overtime, and purchase orders. They also facilitate decision making with
the elected team leaders. Module advisors have no authority to discharge, hire or discipline workers, nor can they write grievances. Their focus is on organizing the work units and managing resources (e.g. maintenance, engineering, training, crew coordinators, suppliers, etc.). Module advisors also represent their work units at the business unit (plant level) labor-management committee meetings. All non-represented module advisors now have union partners who together share all responsibilities.

This partnering arrangement in the production areas has not raised indirect staffing headcount when compared to traditional plants, since each pair of module advisors is responsible for supporting an average of 100 production employees. This high direct to indirect ratio of approximately 50:1 results from both the unique role of the module advisor and from the design of the work teams which are empowered to assume many of the responsibilities of traditional foremen. In most GM plants direct to indirect manning in production areas averages 25:1. Even NUMMI with its team based "lean production" system is operating at a direct to indirect ratio of 18:1.

Further, in each business unit are middle managers known as crew coordinators, who are organized across each shift and are responsible for providing leadership and resources to the module advisors. Union crew coordinators have a non-represented partner. Originally crew coordinators were jointly selected by a joint union-management interview/
selection committee. However, this joint selection process has been controversial with a significant portion of the membership calling for all UAW positions in the partnership to be filled through the democratic tradition of direct election. Also, since the MAC Advisor (who until March 1996 also had the dual role of UAW Local 1853 President) has authority to approve all selections, some members felt this put too much influence over too many jobs in the hands of one person. This debate led to a local referendum in January, 1993 with 71% of the membership voting to continue the system of joint selection. The question continued to be an issue during the local elections in April, 1993 with the incumbent caucus winning all positions albeit by a slim margin. However, during the 1994 negotiations a change was made to the collective bargaining agreement which allowed for the 14 jointly selected UAW crew coordinators to be elected by the membership. The controversy around the selection process and representation which led to this change, will be discussed in detail in Chapter 4 of this dissertation.

After represented module advisors were put in place in 1988, crew coordinators were added in 1989. From 1989 to 1990 functional partnering in the staff areas was extended to sales, service and marketing; finance; industrial engineering; quality assurance; health and safety; training; organizational development; and corporate communications. Maintenance was added in 1991, and product and process development in 1992.
The one-on-one partnering involves over 400 union members in full time positions. Specifically, as of May 1993 this included 91 module advisors, 24 crew coordinators, 51 functional coordinators with site-wide responsibility, 53 functional coordinators at the business unit level, and 155 with module support responsibilities for quality, engineering, materials, etc. Elected union vice presidents are partnered with Business Unit Leaders (plant managers). Elected executive board members have partnership arrangements in staff or line positions. Jointly selected union members fill the balance of the partnerships (with the exception of elected crew coordinators noted above). These union partners have had the opportunity to join directly in the managerial debates and decisions that shape Saturn's strategy. Thus, partnering goes beyond the formal labor-management committee structure. Essentially, what would be considered middle management in most organizations now contains a significant number of one-on-one partnerships between non-represented managers and their represented UAW counterparts. Saturn is the only organization in the United States, in which union members are filling so many managerial operating and staff positions. I believe this example of labor's role in management represents the most far reaching innovation in the Saturn governance system.

Given the importance of this unique feature, this dissertation will focus on more fully understanding how the partners jointly fulfill these new roles. Particular
attention will be given to understanding the dynamics of this operating partnership, how represented and non-represented managers exercise their authority and functional responsibility, and the effects of this arrangement on quality performance and union representation.

**THE UNION'S ROLE IN FIRM GOVERNANCE**

A central issue is whether the union's involvement in partnership decisions adds value to managerial processes, a question I will return to at the end of this chapter. In the section that follows I will illustrate through examples of specific decisions and actions, the role the local union has played in a variety of managerial activities dealing with firm governance.

**SUPPLIERS**

The union is a full partner in supplier selection, and helped to develop a sourcing process. The original 1985 Memorandum of Agreement states:

The mission of Saturn is to market vehicles developed and manufactured in the United States that are world leaders in quality, cost and consumer satisfaction through the integration of people, technology and business systems. Consistent with being quality and cost competitive, a goal of Saturn is to utilize American-made components in assembly of its vehicles.

From 1986 to 1989 the union appointed representatives
to each of more than 300 product development teams joining product engineers, manufacturing engineers, material managers, and financial/accounting management. These teams qualified suppliers based on a formula which evaluated quality, costs, delivery reliability and labor relations. They reached consensus recommendations which were forwarded to the UAW international union and Saturn management for review and approval.

Both management and the union reported a great deal of early struggle in supplier selection, yet over time common goals around quality and price were established. The international union maintained a strong preference for GM-allied suppliers employing UAW members. Non-allied UAW shops were seen as the next best choice followed by non-allied union shops. If GM-allied suppliers were not chosen, the International would often put a 'hold' on the decision. Partnerships were then established between Saturn and allied, as well as non-allied suppliers, to help them qualify. Help would include the development of a plan and demonstration of commitment to improve quality and productivity. For example, when the initial decision for a supplier of head lamps was going in the direction of a Japanese firm, the UAW International helped the GM Inland Fisher Guide division qualify as the supplier through an agreement to have them acquire the Japanese technology to produce the head lamps domestically. Thus, the UAW took on the role of upgrading the quality and operations of its member firms in order to help
them qualify as suppliers, while maintaining the integrity of Saturn's standards.

The result has been the development of a supplier network which provides 90% U.S., and 95% North American content. While the local union continues to be active in new supplier selection, the recent reintegration of Saturn into GM's Small Car Group raises tensions concerning the future of its independence in supplier selection. GM has stated that it hopes to reduce costs by increasingly sharing components between models in the group. A local UAW partner in supplier selection reported that while there have been instances where GM's world-wide purchasing group has pressured Saturn to consider their preferred suppliers to increase volume and drive down costs, GM has "never forced" a supplier on Saturn. In fact, he reported that Saturn's supplier selection process has even had influence on GM's sourcing, citing for example recent decisions on fuel pumps and alternators.

The 1996 18-day strike by GM's Delphi Chassis brake parts facility illustrates the critical problems in GM's own components plants. The strike was called by the UAW because of GM's move to outsource brake components, and failure to provide state of the art technology in its own plants. Supplier selection becomes labor relations when jobs are affected by outsourcing, and Saturn's own reputation for quality is impaired if its components are not world class. While Saturn currently uses brakes made by GM, the technology is several generations behind competitors such as Bosch,
which worries the local parties. Concern has been expressed that unless GM can keep its own components suppliers up to date, Saturn's customer commitment will force it to increasingly consider sources outside GM.

On the other hand, balancing its management roles with union values, the local showed support of a boycott by the United Steelworkers of America, initiating an alternative to the customary Bridgestone/Firestone tires which have been the exclusive original equipment on all Saturns. Although GM named Bridgestone/Firestone its 1995 supplier of the year, Saturn buyers will have a choice of tires.

MARKETING AND PUBLIC RELATIONS

The union also participates directly in the selection of retailers. Not surprisingly, this is quite a change from the traditional GM management culture, and has not occurred without some resistance. When union representatives began their discussions with and selection of potential retailers, Saturn's marketing and sales officials resisted the UAW's involvement in the process. That resistance subsided over time as union representatives demonstrated their ability to help convince potential retailers to invest in what was once seen as a risky undertaking. For example, senior management points out that it was the union, in discussing the details of the partnership and Saturn's commitment to quality with potential retailers, that had the greatest impact in convincing them to individually invest the $3 to $5 million
necessary to open a dealership. According to Saturn's President Richard "Skip" LeFauve:

In order for partnership and consensus decision making process to have meaning, each party must put something at risk. The significance of UAW involvement in retailer selection is the commitment made to quality. They put themselves at risk, on the line for performance.  

The union was involved in the development of the new customer-focused sales approaches which included non-negotiable pricing, participated in the selection of the corporate advertising agency, and was an early supporter of the 1991 decision to replace rather than repair cars containing a defective coolant. Local union representatives are involved in the retail side of Saturn's business with marketing and sales, as well as retailers. Union representatives participate on both the Franchise Operating Team decision ring, and the Customer Action Council. In this arena the UAW has experienced alliances with retailers, sometimes differing with executives who tend to give greater weight to the effects of a decision on the corporation's short term bottom line.

Saturn uses as its marketing slogan and logo: "A Different Kind of Car, A Different Kind of Company." Thus, it builds on its partnership with the UAW and several other distinctive features such as its no-haggle fixed price and retail sales and service strategy, in positioning the company and its products in the minds of consumers. To date this
approach has been very well received by the market. Within two years of its first production run in 1990 and each year since, Saturn achieved higher ratings in initial vehicle quality, satisfaction after one year of ownership, and service than any car in its class (J.D. Power Customer Satisfaction Index 1992, 1993, 1994, 1995). This performance on quality has been extremely important to General Motors, which has begun to advertise Saturn's quality record as its own.

PARTNERSHIP PLANNING

In response to problems or changes in the Spring Hill manufacturing complex, the union leadership has engaged in constant organizational development of both the partnership structure and its own internal arrangements for representation. For example, over the past few years the local first partnered its vice presidents with plant managers, then in response to tensions around the lack of visible union representation, assigned the vice presidents to specific crews with executive board members partnering with plant managers. As of this writing vice presidents have once again been partnered with plant managers.

The union developed annual "Partnership Implementation Plans" in 1986, 1987, 1988, 1989 and 1990. These plans attempted to interpret and expand the initial 1985 Memorandum of Agreement and outlined detailed steps for the union's development, implementation, and administration of the
partnership throughout Saturn. It is out of these plans that the 1:1 partnering in middle management evolved. Further, in order to improve cross-crew communications the union reorganized the module advisor structure, fixing AMAs (Area Module Advisors) on day shift so they would interact with all rotating crews while OMAs (Operating Module Advisors) would continue to rotate shifts with their crew. Rather than taking the original contract (Memorandum of Agreement) as the fixed partnership design, it is seen more as enabling language. The union in particular has led adjustment and redesign in response to specific changing needs, and a more general evolution in understanding of partnership relations.

PRODUCT DEVELOPMENT

The union had its most significant product development impact on the Powertrain Business Unit, in the area of lost foam casting. UAW team members argued for building prototypes on the same fixtures which were to be used in production, a recommendation not originally supported by engineering. In implementing this recommendation the team found it could not perform the assembly on the intended fixtures and had to modify them. Thus, Saturn was able to simultaneously debug both the product and the assembly process, convincing management of the benefit of early involvement of union members in product and process design.

In 1989 and 1990, Saturn engaged in a great deal of discussion about how to expand its product line. Saturn's
marketing organization and retailers wanted a convertible and a station wagon. Both could not be introduced at the same time, and the convertible had structural problems which needed to be solved. The local union supported the position of introducing the station wagon first, arguing that while the convertible carried more product image for Saturn, the station wagon represented higher potential sales, and therefore improved employment security. A consensus was reached to introduce the station wagon first. The value of labor input in product development was explained this way by one elected union leader:

What are the decisions being made in Troy, Michigan on the 94-95 product which impacts people on this line - when they have to build it down here. How do we get our voice into that process to help it. So the UAW adding value is really an integrating piece here. It is integrating a product, it's integrating finance, it's integrating manufacturing, and it's integrating human resources, all in some arena. So that's our value that I see we bring to the party at this point...The workers are contributing to helping the process engineer, the manufacturing engineer be able to better allow us to work. The other end of it has to do with design for manufacturing, design for assembly. How do we get that voice integrated into Troy, which is a problem for us because Troy is 600 miles away [along with] the people who are designing the product. We struggled with it in the station wagon and got more input into that than we did this car [earlier sedan] in terms of buildability. So technology and knowledge are being transferred, if those [management] specialists will listen.

NEGOTIATIONS

During the 1991 agreement renewal negotiations the local union surveyed the entire membership to determine their issues and needs. From this input the union developed its
bargaining priorities and then worked with Saturn management in an attempt to find integrative solutions to the top ten issues identified. Three of these issues were economic (e.g. pensions), while the remaining seven were operational and specific to the partnership and the Saturn governance system (e.g., availability of technical and managerial experts to solve production and quality problems). Negotiations took over seven months and were conducted with no strike vote, no formal submission of demands or counter proposals, and no strike deadline. The membership ratified the agreement by 83%. The 1994 negotiations will be discussed in Chapters 4 and 5 because of its impact on member representation, and the role played by the international union.

TRAINING AND DEVELOPMENT

Saturn and the UAW Local are attempting to provide workers with skill sets normally not found in conventional manufacturing facilities. New Saturn members received from 350 to 700 hours of training before they were allowed to build a car. The workforce is trained in work team organization, problem solving, decision making, conflict resolution, and labor history. Further, they develop skills in areas traditionally reserved for management including budgeting, business planning and scheduling, cost analysis, manufacturing methods, ergonomics, industrial engineering, job design, accounting, record keeping, statistical process control, design of experiments and data analysis. Recognizing
the need for a highly skilled workforce, in 1991 the union proposed linking the implementation of organization-wide training to the risk and reward compensation plan (discussed in greater detail below). This has led to a goal of at least 92 hours of additional training each year for every Saturn employee.

OPERATING PLAN AND WORK SCHEDULES

During 1991 in support of retailers, the union joined with management in forming a task force to explore a new staffing arrangement and eliminate bottlenecks, thus increasing production. This task force generated options which were presented to all work units. The plan they selected became the operating plan which included a 50 hour work week until the third crew could be added and bottlenecks eliminated. The plan was in place during the period in 1993 when the module advisor survey (discussed in Chapter 3 below) was conducted.

BUSINESS PLANNING

In 1992 the union initiated a bottom up planning process to identify problems which limited productivity, quality, and profitability. This was prompted by the union's frustration with persistent quality and cost problems which the current manufacturing organization (led by the MAC) seemed unwilling to address. At the union's initiative and under their leadership, work units over a six week period identified
1,150 specific problems or suggestions and presented these to Saturn's President and his top leadership team at a massive meeting held in the quality audit area of the assembly plant (which I attended). One outgrowth of this process, and of MIT's related research, was the realization that Saturn lacked an effective off-line problem solving system for issues that involved multiple work units, or required joint efforts from the work units, middle management, and Saturn's technical and engineering staff. At the union's initiative a two day seminar was held with the union Leadership Team and a cross section of Saturn executives representing engineering and operations. The participants discussed approaches to address the need for more extensive and effective off-line problem solving activity. This meeting relieved some of the tension which had developed between engineering management and union leaders, and provided them an opportunity to reaffirm their joint interest in solving quality problems. To my knowledge, the specific plan to solve the 1,150 problems was never implemented by management. However, local union representatives worked with Saturn engineering and operations management to implement an off-line problem solving process (Problem Resolution Circles) in the manufacturing organization.

**Performance Appraisal**

In 1992 the union took the initiative to implement an appraisal system for module advisors in order to better
understand and improve performance in this newly created managerial position. The appraisal includes 65 questions about leadership and management of quality, cost, and build schedule. It also evaluates module advisors on their ability to supervise people, covering absenteeism, training, communications, and the development of self-directed teams. Finally, the performance appraisal assesses values such as trust, teamwork, continuous improvement, viewing other modules as internal customers, diversity, balance of people and production needs, and union solidarity. Appraisals for each module advisor are filled out individually by work unit members and leaders, crew coordinators, and peer module advisors. The results are then aggregated by union leaders who provide feedback. To date only the union module advisors have been appraised by this system.

I used these performance appraisals, along with quality data, to identify the highest and lowest performing modules in each of the three business units/plants. I then spent time in each of these six modules as a participant observer to understand the unique role of module advisors in the partnership management system. From these field notes I developed the three survey instruments detailed in Chapter 3.

**MEASUREMENT**

In order to obtain more useful and accurate information on operations, the union has initiated a work team measurement system, i.e., information system tool kits,
designed to help teams perform their various functions and produce the data they need to support their own problem-solving activities. This information system is an outgrowth of a Ph.D. student research project (Whipple, 1993) to provide teams with timely data on standard measures for quality, maintenance, costs, delays, attendance, and time spent on each of the 30 work unit functions. However, as this system became formalized over time it also became more centralized, and its focus shifted from one which provided information about the production process to the teams, to one which provides information about the teams to the MAC. As one team member described its use:

It's taken so much time away from the building of a car, having more and more paperwork...And now that paperwork is beginning to go down to the WUCs. It's just paper. You've got to do this, you've got to do that. And less and less time toward building the car. And as we then complain about the build issues [it] kind of goes on deaf ears. Cause everybody's talking about administrative issues. You get in the computer and you have to sit there all day trying to do administrative stuff [like] 30 Work Unit Functions, and the SMMS. It's just one thing after another.

While the more centralized system may provide needed information to the MAC, its usefulness for team members interested in understanding their process and problem solving seems to have been compromised. This reverse course, away from autonomy toward a re-centralization, is a theme which I came across repeatedly in my observations of the evolution of the Saturn partnership. I will return to this issue later in Chapter 4.
CONFLICT AND ITS RESOLUTION

The Saturn partnership has not eliminated conflict between the union and management. In fact, by involving more people in more decisions, more conflicts may be surfaced at Saturn than in comparable firms or union-management relationships. Yet, the evolving partnership has provided new institutions and processes for conflict resolution. While a grievance procedure and the right to strike remain in place, most conflicts are resolved through on-going problem solving or joint decision making processes.

For example, earlier in this chapter I gave examples of two conflicts in which the union forced management to engage in joint problem solving. The first was the struggle over the hiring of module advisors. Both union and management wanted these positions to be filled from their ranks. A long struggle ensued in which the union insisted 1) that the contractual language called for consensus decision making and a full partnership; and 2) these were not supervisory positions in the traditional sense. The solution of one-on-one partnering with a doubling of module size was arrived at through the discussions.

The second example involved the union raising production problems publicly when it was frustrated by its inability to get them addressed through the manufacturing partnership organization. While the public effort of raising 1,150 examples did not solve these problems directly, it did result
in the acceptance by management of the need to develop and support an off-line problem solving effort for continuous improvement.

Other conflicts sometimes involve what Walton and McKersie (1965) describe as "mixed motive bargaining" a mixture of traditional distributive tactics along with integrative problem solving. One such conflict occurred during the 1991 agreement renewal process over whether management was backing away from its commitment to quality in response to market pressures to increase production volume. The work units, wearing black arm bands that said "Stop Defects", initiated a plant-wide protest to highlight their perception of a lack of responsiveness to quality problems by engineering and management. The protest also resulted in a temporary production slowdown.

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[For management it was a] transition from quality at any cost to quality at least cost. Management did not see this as erosion of commitment to quality. Yet the union was skeptical about management's commitment to quality. Arm bands were a signal we were not getting problems solved fast enough, particularly focused on engineering. There was an underlying frustration that management was not responding to problems. There was frustration that there were not enough problem solving resources.5

These actions created considerable tension and conflict for Saturn management and engineering staff, who saw this as a return to traditional bargaining tactics since it occurred during negotiations.
There were two issues here, black arm bands and slow down. Yet we kept management support. It's still sensitive, reverting to old behaviors risks destroying the work and trust. I got criticized by management that it's all one way. The root cause was communications. Engineering saw very little value in communicating to the teams. We refocused on communicating the status of what was being done to solve the teams' problems. If management had not held the union in high regard, the partnership could have dissolved at that very dangerous point.6

Management's response to the conflict helped to sustain the partnership, illustrating how they valued it. Since this crisis, Saturn has physically relocated an increasing number of engineers from Troy, Michigan to Spring Hill, Tennessee. For the local union this episode demonstrated a willingness to stand up and protest what it saw as a gradual deterioration in the company's commitment to quality at a time when the market was beginning to intensify pressure on Saturn to increase the rate of production to meet strong customer demand. In this case the union used more traditional confrontational tactics which are only available to an independent collective organization with the resources to protect its members from retaliation. It illustrates how the union can help sustain organizational innovation through periodic crises by serving as a countervailing force to management, who they perceived were responding to short run pressures at the expense of long term principles and values.

Even traditional issues such as overtime and hiring have
been sources of conflict at Saturn. As mentioned above, the union helped design the 1993 operating plan which called for fifty hour, five day a week schedules until the third crew could be hired. By the middle of the first quarter the specific plan to hire and launch the third crew had not been developed. The union expressed frustration, stating that the overtime arrangement would not be extended into the second quarter. When at the end of the first quarter the plan had still not been developed, the union unilaterally ended the overtime arrangement. The decision seemed to take management somewhat by surprise as the first Friday in April found the line short of operations technicians, with management filling in on the line in order to keep up production. An agreement to finish hiring the third crew and have it in place by June 14 was finally agreed to early the following week. This is another example of the union's willingness to confront management over areas of disagreement. The union fought hard against what it perceived as short term managerial decision making, as well as for the traditional concerns over working hours and employment levels.

Another example illustrates the complexity of conflict resolution at Saturn which often involves multi-lateral negotiations between multiple stakeholders. In 1987 the union initiated a process for assessing the work units - the Team Growth and Development Process. Local union leaders were concerned that the corporation was not taking the steps necessary to fully develop the team concept on which Saturn
was based. In response it initiated the development of training programs for the work unit team members, leaders, and module advisors. The union contends that some management participated and supported the process.

While some managers may have supported the unions' efforts, others expressed frustration that the conflict had not been worked out, and that the local union in taking the initiative, had acted on its own. They had agreed that something should be done, but not on what. This conflict has lingered over time and has, according to management, only now found partial resolution in the training component of the new reward system.

While union and management may disagree over the breadth of management support that existed for the Team Growth and Development Process, both concur that the question of managerial autonomy is an ongoing issue at Saturn, with each Business Unit - Body Systems, Powertrain, and Vehicle Systems - jealously guarding its independence. The union believes management is sometimes fragmented as evidenced in the varied practices across the three Business Units. To some extent this is understandable and may be appropriate given the different technologies, processes and needs of these operations. Yet, often this autonomy has made it difficult to achieve the level of coordination, consistency, and cross-unit cooperation needed to effectively manage the total operation. Each Business Unit has moved in a unique direction to a certain degree, somewhat resembling its parent
organizations in GM (Fisher Body, GM Hydramatic, and GMAD). The local union, viewing itself as an organization with site-wide responsibility, often voices frustration at this independence.

Reacting to this perception of over decentralization, the local union has attempted to provide its leadership with knowledge and experience covering the entire Saturn operation by rotating the union partners assigned to lead each business unit. Rotation has also expanded to the human resource development function which is responsible for training, recruitment, selection, performance appraisal, compensation, benefits, and formal negotiations.

_Skip LeFauve_

[Management] got independent business teams, when what we really wanted was interdependent business teams. We walk the line between providing independence and autonomy, and having interdependence recognized and honored. In this management and the union balance one another, and the partnership brings to bear different needs for control. Yet it is interesting that it has been management who has promoted greater autonomy for the business teams, while the union has pushed for greater consistency of practices across the site. I would have expected the reverse.⁷

This problem is exacerbated by turnover in leadership at the Business Unit level. At the time of the module advisor survey (Chapter 3), the average tenure of Business Team Leaders (plant managers) was under one year, providing less than an ideal environment for continuity and stability of
leadership. This then is an example of a conflict of views on how to manage and coordinate operations, a conflict that is surfaced in various ways periodically, but is never "resolved" in the traditional sense of that term. But by raising and debating it, and acknowledging the different points of view, both union and management, in their terms "can work the problem" in their own ways. As we will see in Chapter 3, the union has "worked" this problem by communicating informally across these organizational boundaries through its own social network.

Another source of conflict at Saturn involves debate over just how broad and far union participation should extend into what has been traditional management domains. This issue arose first in the areas of product engineering, supplier selection, and marketing during the early organization building years at Saturn. As discussed above, similar issues arose more recently after production start-up over how to solve manufacturing problems that require cooperation among product engineers, manufacturing engineers, middle managers and work units. The differences are not just between union and management, but occur within the union and management organizations themselves. In addition, traditional economic issues such as pensions, pay for performance, absenteeism, hours of work, and the selection and status of work unit module advisors have all been sources of considerable debate within Saturn (see Chapters 4 and 5).

Resolving conflicts while sustaining the partnership is
a critical process for this type of multiple stakeholder enterprise. Throughout this dissertation are examples of conflicts which developed and were resolved through the partnership. There are two common features about conflicts that arise at Saturn. First, they seldom can be described as clear cut, bilateral, labor versus management conflicts. Instead, they often involve multiple groups with different interests and perspectives. For example, some of the conflicts presented in this study involve differences between local union leaders and their international union colleagues, some involve differences among managers and engineers located in Spring Hill versus those located in Troy, Michigan, and some involve debates between labor and management leaders at Saturn and GM executives. Second, few of these conflicts are resolved crisply through a single negotiated agreement or unilateral decision. Instead, they are subjected to a more extended set of discussions, often taking place in multiple forums until either a consensus emerges or a crisis forces a final decision.

It is difficult to assess whether this more continuous approach to problem solving and conflict resolution is more or less efficient and effective than traditional negotiations. Ultimately, the effectiveness of decision-making and problem solving at Saturn must be judged not only by comparing it against traditional forms of labor-management conflict resolution, but also against traditional managerial decision-making. At Saturn these two activities are
inseparable parts of the organization's governance system. What makes Saturn unique therefore is not the absence of conflict, but the process by which the stakeholders work out their differences and search for common solutions. Clearly it does often take longer to reach a consensus than for one party to make a unilateral decision. But this approach is guided by a belief that once a decision is made, the shared commitment of the parties eases its implementation and reinforces the values and principles on which Saturn was built. These are viewed as long run intangible but nevertheless strategic assets that have value of their own.

LeFauve believes this approach produces both better decisions and more effective implementation. The result is more willingness to make decisions work, adjusting or rectifying if necessary. One difference between Saturn and other joint union-management efforts in the GM system is the degree and quality of involvement.

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The union is in the room, not talked to about the decision afterwards. The process is inclusion, not consultation. Real value comes from shared ownership of the decision itself, which also produces better answers.8

Instead of spending time on symptoms and debating solutions, labor and management try to focus in on the root cause of problems, on prevention vs. correction, often
redefining issues. An example LeFauve gives is the Saturn risk and reward package in which union and management redefined the problem, changing the basic concept from that which appeared in the original agreement. During the 1991 negotiations the local union and management essentially separated the two issues, tying risk to training, and reward to performance. The union proposed tying the risk portion (5% in 1992, 10% in 1993, 15% in 1994, and 20% in 1995) to a training goal of 5% of the annual work schedule or 92 hours.

All Saturn employees, both union and management, share in the risk and reward. The reward portion of the compensation package is based on exceeding quality, schedule, productivity and profitability goals. Over the past few years industry observers have debated whether Saturn is in fact profitable. The answer hinges on how the original investment is amortized. While its earnings are not reported separately from those of GM, Saturn leaders claim Saturn is the most profitable car line in the GM system. According to President Don Hudler Saturn "made a profit in 1993, and a bigger profit in 1994, and we're making a still bigger one in 1995 so far."9 Based on performance Saturn members earned reward bonuses of $2600 in 1992, $3000 in 1993, $6400 in 1994 and $10,000 in 1995. The 1995 bonus was the maximum allowed under the Saturn contract. The GM profit sharing bonus for 1995 averaged $800.
UAW Local Union 1853 has struggled to define its multiple roles in representing and defending the contractual interests of its members, participating in the management of the business, and jointly designing and administering the partnership arrangement. In the process of defining these multiple roles, Local 1853 has reinvented the local union. Local union leaders at Saturn define their role as being responsible for both the economic and social outcomes of Saturn (Bennett, 1988). The economic outcomes must demonstrate Saturn's ability to meet the quality, productivity, market share, and long term profitability levels set by its domestic and international competition. The social outcomes must meet the interests of the workforce for stable employment with high wages, good working conditions, an effective voice on the job and in the enterprise, as well as meet the expectations the broader community holds for a modern corporation.

Local union leaders see these economic and social outcomes of Saturn as being highly interdependent. Michael Bennett, the first president of Local 1853, articulated a model of worker representation based on the premise that despite a contractual provision providing at least 80% of his members job security, long term employment security can not be negotiated independent of the economic performance of the firm, nor solely through collective bargaining after all

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strategic decisions have been made by management. Rather, he believes employment security can only be achieved over the long run by both contributing to the economic performance of the firm, and participating directly in business planning and decision-making processes to insure that worker interests are given appropriate consideration.

Traditionally, the role of a local union was to represent and organize the membership, while management managed the business. The local union leadership at Saturn is attempting to break down this dichotomy. They seek to share responsibility for both the effective use of capital, and meeting the economic and social needs of the labor force. They argue that when both labor and management share these responsibilities, each comes to the task from differing perspectives and experiences. And instead of a division of responsibility based solely on constituency, each can be responsible for managing people and capital.

This formulation of the interests of labor, and the division of responsibility between labor and management, is deeply embedded in the structure of the partnership arrangement, particularly in the one-on-one partnering that involves hundreds of UAW members as managers. While opposition caucuses have attempted since 1993 to assume the leadership of Local 1853, none appear to seek the dismantling of the partnership. I have no evidence that suggests any opposition group wants to abandon the individual partnering roles, or the institutional partnership which operates
through the joint decision rings. As one leader from an opposition caucus explained:

At [my old plant] labor relations were more of an adversarial relationship. Management made the decisions, labor worked. If those decisions that management made had an adverse effect on the union, then the union's recourse was to file a grievance. Depending on how severe, it could even get up to a walk out, or plant shut down, or something like that. At Saturn it is totally the opposite. If you looked at it in the old world, management managed the business and labor worked. At Saturn you have taken that line out and you have management and labor manage the business...It is becoming more clear on what my role is, and that is represent the stakes and equities of the team members that are out there. In [management partner's] role, it is looking out for the business, the interest of the business. Then by combining those two and making sure that the business is being taken care of, and that the people are being taken care of, then you have successfully integrated the two. You'll always need those two...We [achieve] consensus on those decisions, and we make those decisions. And some team members don't like those decisions. So I will go in and sit down and help explain why we made that decision. And they will accept that a lot better from me than from [management partner].

However, internal union conflict has arisen regarding the method of selection of the union partners, resulting in a 1994 decision to elect the 14 UAW crew coordinators (more on this in Chapter 4).

THE NEW LOCAL UNION: SERVICING AND ORGANIZING

One of the distinctive features of this new local union is the combined focus on both servicing and organizing its membership. By servicing I mean the traditional roles of representing both the interests of the collective, as well as
protecting individuals through advocacy. Local 1853 has attempted to provide representation and protect the long term interests of its members by organizing extensive involvement into governance and co-management roles in the partnership system. As I will discuss in detail below, almost 20% of the UAW membership have leadership roles at various levels in the partnership. Originally the design of Local 1853 called for no grievance committee in the traditional sense with only the president and four vice presidents able to write formal grievances. This changed with the April, 1995 election of crew coordinators who were authorized to file grievances. However, the union has developed new approaches to handling traditional services such as conflict resolution and negotiations, by internally organizing its members to allow for greater participation and input into the programs and policies of the union and the partnership. These participatory processes are listed in Figure 6.

For example, through a series of off-site workshops and meetings during 1992, the Leadership Team in response to increasing financial pressure on Saturn to break-even initiated steps to improve the union's management of the business. This included the development of a 1992 team-directed business plan, the implementation of an off-line problem solving process, and the reorganization of union leadership roles in the business units. The union has reorganized its senior leadership responsibilities several times, first experimenting with business unit rotations among
the vice presidents, and later realigning responsibility for servicing members to the vice presidents by crew, with executive board members taking on operations management leadership in the business units. With the election of crew coordinators who have authority for member servicing, the elected vice presidents are once again partnered with the plant managers in each business unit, focusing on co-managing the business along with the jointly selected module advisors and functional coordinators.
**Participatory Processes Used by the Local Union**

**Congress:** Twice a month meetings attended by all local union executive board members, union module advisors, crew coordinators, and other key staff functional coordinators. The purpose of the Congress is to provide the local union with strategic direction and focus on specific issues.

**Leadership Team:** Approximately 50 top union leaders including elected officers, Executive Board members, and crew coordinators. It meets every week and conducts periodic workshops to discuss the partnership, union strategy, and business issues.

**Work Unit Counselors:** Bi-monthly meetings are held between elected union officers and elected work unit counselors to discuss their roles and responsibilities as both production team leaders and elected union representatives.

**Block Meetings:** Weekly meetings between module advisors, work unit counselors, and crew coordinators to provide communications and discuss operating problems and issues in each module.

**Rap Sessions:** Monthly meetings held in each Business Team between the local union president and union members in an open question and answer forum.

**Town Hall:** Monthly local union meetings held twice during the normal work day to facilitate the participation by crews on both first and second shifts.

**Member to Member Survey:** This annual survey utilizes the team leaders to conduct formal 45 minute interviews with every individual union member (5300 in 1992) on the issues, concerns, or needs they would like to see addressed by the union. The 1991 member to member survey served as the basis for the union's negotiating platform in the contract renewal process that year.
Unique to Saturn is the Congress in which the Leadership team meets with the module advisors to share information and discuss issues ranging from partnership problems to corporate performance. During one such meeting which I attended in April 1992, the Congress received the same detailed briefing on Saturn's financial performance and 1993 final budget, which earlier that week had been given to Lloyd Reuss, then GM President. The top union leadership participated in the budget generation at earlier stages. All UAW partners are required to attend this several hour meeting which is held twice a month. Congress has been held since 1988.

Also important have been Member-to-Member surveys which provide opportunities for individual members to communicate their points of view on key issues. This has occurred at strategic times such as contract renewal, or when critical problems arise requiring leadership action. Moreover, because the member-to-member surveys involve personal interviews by UAW leaders of individual members, they allow members to raise issues that otherwise would not be uncovered in formal written questionnaire surveys, local union meetings or traditional grievance procedures. They also reinforce the principle that part of the job of a team leader is to encourage this type of upward communications on an ongoing basis.

These processes are designed to extend the principles of participation embedded in Saturn's organizational design to
the management of the local union. Shifting to this type of leadership style has been described as one of the biggest changes required of local union leaders in organizations that promote teamwork and employee participation (Cutcher-Gershenfeld, McKersie, and Wever, 1988).

The local union has experimented with a number of approaches to its internal structure as new problems surfaced. For the first few years, the focus of the partnership was necessarily on designing and building the organization. However, in 1990 with the start of production, the priority shifted to building cars. Making the transition from organization building to automobile building challenged the union and required adjustments in the partnership arrangements. As discussed above, the union recognizing that the SAC, MAC, and Business Unit Decision Rings were insufficient avenues for co-managing the business, initiated the one-on-one partnering. Further, because team leaders become union officials upon their election, their responsibilities include both team management as well as representing members' needs. This is not an easy assignment as evidenced by data on team leader turnover. First elected in February 1992, by October of that year over 10% had resigned. In 1995 the number of elected team leaders had risen to 700. As indicated above, including elected team leaders, crew coordinators and other union officials along with the jointly selected UAW partners, almost one member in five has a position of leadership in the partnership. This
represents an extremely high level of membership participation in the leadership ranks of the local union.

COMPARISON OF LOCAL 1853 AND OTHER UAW Locals

JOINT GOVERNANCE AND CO-MANAGEMENT

The roles of UAW Local 1853 stand in stark contrast to those of other UAW locals within General Motors. As described above, the Saturn local through its more than four hundred full time partners is directly involved (on-line) in decisions affecting supplier and retailer selection, marketing and public relations, product development, choice of new technology, ergonomics and safety, training and development, performance appraisal, information systems, and operations management. In addition, through weekly participation in off-line joint union-management committees (Decision Rings) at the corporate, manufacturing site, and plant levels the union participates in operations decision making and business planning. Further, the union is involved in personnel selection, since all hiring recommendations come from the teams themselves.

Traditional UAW local unions would have formal input into very few of the decision areas listed above, and typically only through off-line processes. Specifically, traditional locals have input on ergonomics and safety through joint health and safety committees. They may also
have input into certain types of training which are funded and administered through a joint union-management training fund. Decisions in all of the other areas are primarily handled by management unless the union is invited to participate on an exception basis.

NEOTIATIONS AND GRIEVANCE HANDLING

UAW Local 1853 is also responsible for the traditional roles of contract negotiations and grievance handling. While the union has an elected bargaining committee, it departs from tradition by relying heavily on frequent member-to-member surveys to set negotiations priorities and objectives. Grievances can be filed only by the president, four vice presidents, and fourteen elected crew coordinators. This makes the ratio of members to crew coordinators over 520:1. At Saturn emphasis is placed on solving problems at the lowest level before they become escalated to the point where they are filed as formal grievances. Traditional UAW Locals also handle negotiations through an elected bargaining committee, however they handle grievances through an elected grievance committee, with approximately one committeeman for every 250 members.

The contrast between Local 1853 and other UAW locals is important for two reasons. First, it illustrates the multitude of opportunities, both off-line and on-line, by which the Saturn local can represent member interests in significant management decisions. The expectation is that the
incorporation of worker input early in the decision making process will result in better decisions which reflect labor's collective interests, as well as more effective implementation. Second, it illustrates the difference in resource allocation between Local 1853 and other UAW locals. While the Saturn local has devoted most of its organization and resources to its management and governance roles, it has about half the number of grievance filers that a more traditional UAW local its size would have. I will discuss this issue in greater detail in Chapter 4.

THE AMALGAMATION OF THE LOCAL

Local leadership has sought to expand the representation of the union to all employees of Saturn including contract workers. To date, two additional UAW units have been added to the original local union. The first of those units includes approximately 170 members incorporating the employees of the Morrison Milco Food Service, a contractor who runs Saturn's four on-site cafeterias. The second unit includes 240 employees of the Premier Corporation which provides services to Saturn for paint booth cleaning, janitorial services, on-site grounds keeping and auto drive away for vehicle transportation loading. These amalgamated units of UAW Local 1853 participate in local-wide elections. The local also organized the 600 direct material truck drivers of the Ryder
Corporation whose members voted to form their own independent UAW local union.

This amalgamation expands the membership base of the union, and provides representation to workers who in most firms remain unorganized and are treated as "second class" citizens. But it also adds a greater diversity of interests to the local union and by extension to Saturn. Giving voice to these interests can increase their ability to surface concerns and create conflicts. For example, in 1993 the cafeteria workers went on strike, primarily over wage issues. While their wages had improved considerably since joining the UAW, they were still well behind their brothers and sisters in the production and maintenance (P&M) unit. The strike lasted several weeks with picket lines set up in the plant at the doors of the cafeteria rather than at the front gate, which might have closed down production as the P&M unit refused to cross the line. A resolution came only after the local union leadership persuaded Saturn management to put pressure on Morrison Milco for a settlement. In the absence of representation, the concerns of these workers would not be addressed.

**INFRASTRUCTURE FOR HIGH PERFORMANCE MANUFACTURING:**
**THE LOCAL UNION**

One of my early impressions of Saturn's manufacturing operations was that the organization had a tremendous
capacity to spread information rapidly across the three plants. I also had the sense that much of this communication system was built on the union organization. In visits to other unionized manufacturing plants I have often heard both managers and union members comment that the union gets information before middle management and supervision. This appeared to be true at Saturn as well. Further, UAW members in managerial positions were in a position to take action with that information.

For example, during an interview I was conducting with module advisors in the Panel Assembly module, a team leader came into the office stating a team member thought the torque on his air gun was improper for screwing down the panel under the wiper blades. Improper torque would lead to a loose panel and possibly some rattling. The module advisor called ahead to the Car Final module and asked the module advisor there to check the wiper panels. Sure enough, they were loose. Further, cars with loose panels had likely left the plant and were already loaded in rail cars and trucks for shipping. At this point in General Motors, a report would probably be sent to upper management for a decision regarding whether to repair the defect on site or leave it to the dealers. At Saturn, a module advisor approached the representative of the company which ships the finished vehicles and assumed liability for the cars once they leave Car Final. Their representative stated that Saturn employees could no longer have access to the vehicles. Rather than leave the repair to
the dealers, or wait for a decision at higher levels, the module advisor from Panels, along with the team leader and quality point person, went out a side door and into the rail cars. They found the first vehicle with a loose panel and worked their way back to the plant, hand tightening all defects. This rapid response between module advisors was impressive. Equally surprising was their willingness to take risks and responsibility for fixing problems rather than sending them up the chain of command for a decision. This indicated a certain level of trust, and strong horizontal communication and coordination between managers.

A second example illustrates the unique role the union plays in communication. In May, 1993 as I was preparing to administer my surveys to module advisors on their managerial behaviors and priorities, time use, and communications, the MAC announced the date in June for the separation of C crew from A and B crews. The separation announcement also meant that pending decisions on new assignments and promotions had been made. When I became aware of this I approached the union president to express my concern that once people found out about their new positions, they might not answer the surveys the same way because their attention would become focused on their new assignments. Some were even scheduled to leave their old jobs and begin training in their new ones.

Since the MAC had a great deal of interest in this research and had sanctioned the surveys, the local president immediately directed through his network of UAW partners,
that no announcement of new assignments be made. Within the hour word had circulated through all three plants, and reassignments, promotions, and training for C crew leadership was held up for several weeks so that we could complete all survey work without compromising the reliability of the data. This quick and effective response indicated that the local union at Saturn had succeeded in organizing an efficient network of its UAW partners.

A GROUNDED THEORY:
THE LOCAL UNION AS AN ORGANIZATIONAL NETWORK

I include these two vignettes to illustrate the basis for a grounded theory (Glaser and Strauss, 1967) of the union as a network which facilitates the communications and coordination necessary for high performance manufacturing. I came to this theory by witnessing these communications and others like them. Out of these experiences evolved a view of the local union which went well beyond my original assumptions regarding its unique role in the partnership - balancing management and representation. As a result, I formulated the following proposition about the union as a dense social network focused on communications, coordination and problem solving, in addition to providing institutional and operational balance to production and membership needs: The local union, in organizing the partnership structure, has created a communications and
coordination infrastructure which pre-adapts Saturn for the requirements of high performance manufacturing. This basic proposition will be tested in Chapter 3.

These observations regarding the union as a network fit with the literature on organizational networks, which emphasizes the importance of interdepartmental communications and coordination. Aoki (1988, 1990) points to the significance in Japanese firms of non-hierarchical, horizontal communications and coordination networks in adjusting to change. In creating this capacity he stresses the importance of worker "communicative abilities"¹⁰, information flow, and an organizational learning view of the firm. Information and coordination play key roles in Aoki's J-form model of the Japanese firm. Horizontal coordination that occurs through information exchanges substitute for the hierarchical control systems built into the traditional American corporation (Aoki, 1990). Horizontal coordination and information sharing are encouraged in Japanese firms by organizational design features and human resource practices that break from the American legal and managerial traditions of separating planning and supervision from those who execute the work. Among these features are job rotation, enterprise unions that include blue collar, white collar and managerial employees, extensive use of teams and other problem solving processes that support the sharing of knowledge that is essential to improving work unit and organizational
performance. Aoki suggests this conception of the firm may
fit those environments in which markets demand product
variety, where the technology can be informed by and made
more productive with worker knowledge, where the market
conditions support a premium on quality, innovation, and
rapid response to changing consumer preferences, and where
the regulatory environment supports those organizational
features. As described above, the functional equivalents of
many of the critical features of Aoki's J-form firm were
built into the organizational design and employment system of
Saturn.

Granovetter (1973, 1985, 1992) has argued the importance
of understanding economic activity as embedded in networks of
social relationships. Baker (1992) suggests that "All known
network organizations evolved unplanned or resulted from the
redesign of a non-network organization"11. He further
suggests that the distinguishing feature of network
organizations is the high degree of integration across units.
At Saturn, I argue, it is the union, through its organizing
roles in the partnership structure, which provides this
integration through a dense communication and coordination
network.

High performance manufacturing requires higher levels of
internal coordination upstream and downstream in the
production process, in which each unit is treated by the
others as a customer or supplier. This form of organization
provides the capacity to solve non-routine problems, improve
quality and lower costs. It requires however, extensive information sharing, decentralization and rapid mutual adjustment (Shimada and MacDuffie 1986; Mintzberg 1983). MacDuffie (1995) has argued that in these systems workers' tacit knowledge of their tasks become linked to those in other units, and informal networks become key for coordination. Further, he states the important knowledge leading to innovation tends to be boundary spanning. Trist (1981), challenging the traditional theory of bureaucratic scientific management, argued that the function of supervision in these systems is to manage the boundaries, not control the people.

Aoki's model stresses the importance of lateral communication and information sharing as a means for coordination and control. At Saturn, the co-management process appears to be an example of this feature in action. To test whether this is the case in fact, I carried out a network analysis of the co-management process among all module advisors.

I argue, by way of a grounded theory, that local unions as organizations, have the leadership and resource capabilities to create the communications network necessary for upstream and downstream coordination. While most locals never develop these capacities, the Saturn model should provide insight to those who may attempt transformation to high performance manufacturing in unionized organizations.

In the chapter which follows I use survey data and
network analysis to test this hypothesis by measuring: 1) whether union partners are truly managers; 2) the extent to which the union contributes to a network of horizontal communications; and 3) whether communications and coordination are systematically related to quality performance. I will also analyze the relationships between union and non-represented partners to see what impact their relationships have on quality performance.

Summary

Let me now return to a question raised earlier in this chapter, does the union through the partnership arrangements add value to managerial processes at Saturn? This is an extremely difficult question to answer given the very nature of the partnership. That is, the essence of the partnership is that union and management representatives work together to achieve integrative (joint gain) solutions to problems or decisions. In this type of co-management process, it is hard to estimate the independent effects or contributions made by one side of the partnership. However, I believe these illustrations have demonstrated that the local union appears to add significant value to the Saturn organization in the following ways:

First, as union leaders bring substantive expertise and an independent perspective to a problem, they add value by
increasing the quality of decisions made in the various joint
committees and forums from shop floor teams to the Strategic
Action Council. In a number of meetings I have observed
union leaders speaking up directly to confront problems that
were difficult for managers to voice openly with their
superiors. For example, earlier in this chapter I discussed
the 1992 bottom up planning process which surfaced 1,150 cost
and quality problems. Many of these were originally surfaced
in the MAC and business unit decision rings. In particular,
the lack of a widespread off-line problem solving process was
an issue raised most effectively by the union. The decision
to launch C crew was another example. While some managers
shared the concern about the excessive overtime caused by the
delay in separating C crew, it was the union which brought
the matter to a head by refusing to work the overtime.
Moreover, the presence of union leaders insures that human
resource dimensions of strategic and operational issues are
considered in making decisions. Indeed, some engineers
expressed concern to me that these issues may get too much
weight relative to other technical or financial criteria.

Second, as suggested in the quotes from Skip LeFauve
noted above, once decided, the commitment of the union
leaders helps to get decisions implemented effectively. The
middle management partnering, 1992 operating plan, team
leader business plan, off-line problem solving process, and
module advisor performance appraisal process, are all
illustrations of the union's implementation ability.
Third, whereas UAW members and leaders have severed their ties to the GM seniority and transfer system, and therefore see their long term security tied solely to Saturn's future, most managers and engineering professionals retain their links to GM. As evidenced by the turnover in Business Team Leaders cited above, to some extent it is the union which provides continuity, as well as site-wide and long term perspective. Some managers may have conflicting loyalties between the interests of Saturn and their long term careers, which they see tied to their functional or technical discipline at GM.

Finally, the institution of individual partnerships between UAW and non-represented Saturn employees throughout the line and staff organizations has created a unique system of co-management. This combination of union and management leadership brings important and varied expertise, experience and perspectives together on both the social and technical problems of production.

But all of these new roles require a different style of management, (i.e., greater power sharing, willingness to deal with conflicts and upward communications of problems, greater skill in negotiations and conflict resolution, etc.) New styles of union leadership are also required, (i.e., more membership participation and communications/ more varied approaches to negotiations and use of power and influence, greater expertise in planning and in the technical issues of management and engineering, skill in balancing new managerial
roles with traditional responsibilities and member
expectations for representation, etc.) As the examples show,
neither Saturn managers nor UAW leaders have perfected their
new roles yet. Instead Saturn serves as a laboratory where
both management and labor are "learning by doing", sometimes
successfully, sometimes not.

While the illustrations presented in this chapter are
qualitative data, through the survey instruments described in
Chapter 3, I will use quantitative techniques in an attempt
to isolate the impact of both union and non-represented
module advisors on the quality performance of their modules.
Specifically, I will analyze the impact of these individual
partnerships, as well as that of the communication and
coordination network organized by the local union, on quality
performance.
Chapter 3

Co-Management and the Union as a Social Network: Effects on Quality Performance

Theory and Overview

The last chapter advanced the argument that high performance manufacturing increasingly required rapid and decentralized coordination among units of the organization that functioned as internal customers and suppliers. Further, it advanced the proposition that the local union provided Saturn with a communications and coordination network based on its efforts to organize its members into co-management roles in the partnership structure. Through a study which includes survey data on the behaviors of union and non-represented co-managers (module advisors), a network analysis of their communications, and the quality performance in their departments, this chapter will test this proposition.

The automotive industry in particular has required greater levels of coordination between customers and suppliers (Womack, Jones, & Roos 1991). These suppliers can be both external and internal, requiring highly effective levels of communication and coordination within an organization in which semi-finished product flows from one department to the next. Each department adds value and then
transfers product, treating the downstream department as its "customer", while the receiving department must behave as though it is getting product from its upstream "supplier" (Mintzberg 1983, Ishikawa 1985). These concepts of total quality management increasingly rely on team-based production systems with self-managing work teams (Walton 1979, 1985) to support "lean" production (MacDuffie & Krafcik 1989, 1991). Vital to such systems are upstream and downstream communications, customer-supplier coordination, and on-line problem solving (Aoki 1990). The role of supervision in these work systems has increasingly become one of facilitating relationships between teams and departments in the production chain (Gittell 1996).

Team based production systems pose significant challenges for unions (Kochan, Katz, McKersie 1986; MacDuffie 1995) because they often break down traditional job classifications, replace individual incentive systems with contingent pay based on group performance, and minimize seniority rights. However, we know little about the actual role of the union function in these new production systems. The union's role in high performance manufacturing, or lean production, has been less well researched than has the role of management or the behavior of the teams. While relatively recent research efforts have looked at the union's impact on firm turnover and tenure by providing a voice option for labor, there has been little empirical data collected or theory developed on how unions, when acting in partnerships
with managers, might impact performance directly through their involvement in the managerial process.

A literature which explores the more general economic value-added of organized labor does, however, exist. One argument, first developed over fifty years ago (Slichter 1941; Slichter, Healy, and Livernash 1960) states that unions contribute to performance primarily by disciplining management and labor through the collective bargaining relationship. These are rather general arguments based on indirect data, or are explanations based on the observed behavior between unions and some measure (turnover, etc.). Few if any studies have looked empirically at how unions actually affect managerial and production processes, and through these processes affect performance outcomes. Moreover, despite considerable speculation and case study research, we still lack a well developed theory of the role of unions in manufacturing processes that emphasize team based production.

This study of Saturn provides an opportunity to both examine how local union representatives who serve as partners in managing a team based production system affect the management process, and to assess the effects of this union role on performance outcomes. I will test hypotheses regarding the systematic relationship between performance outcomes and the unions' direct involvement in firm management and governance. I believe this "partnership" arrangement has created a quality management infrastructure
with high levels of upstream and downstream coordination, cross-team/crew and interdepartmental communication, and quick-response problem solving. Intra-firm communications is increasingly critical to quality performance in complex manufacturing processes for several reasons. First, when defects are discovered and reported quickly by a downstream operation to their source, then adjustments can be made before large volumes of defective product are produced. Second, often quality relies on interdepartmental coordination of operations, adjusting practices in one area to accommodate requirements in another. This adjustment process relies on regular communications and feedback between the departments. Third, quality improvement relies not on finding and repairing defects, but on analyzing their underlying cause so the problem will not recur. This problem solving process often requires the input, cooperation and coordination of people across departments. Again, regular and effective communication is critical for success.

Specifically, this chapter will test the proposition that the partnership model, which attempts to build on the organizational strengths of the union in the activity of management, results in higher levels of quality performance. This research analyzes whether Saturn's quality performance can be explained, at least in part, by a new system of quality communication and coordination built on the managerial responsibility accepted by union partners and administered through the social network of the union.

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institution. The specific questions I will address in testing this proposition include:

- How much communication is occurring among represented and non-represented management, with whom, and around what issues? Do the observed patterns of communications fit the features of a dense social network?
- Do the amount and type of communication and coordination differ between represented and non-represented managers?
- Is the communications and coordination pattern of either represented and/or non-represented management systematically related to quality performance?
- Are there dynamics in one-on-one partnering that systematically relate to quality performance?
- How is balance achieved in managerial roles between responsibility for people with responsibility for production? Is balance related to quality performance?

Co-management and Quality Performance

The institutional arrangements for co-management and joint governance were put in place beginning in 1988 and now include over 400 full time union members in operating line and staff positions - positions which traditionally would be filled by managerial personnel. (GM and the UAW international union sought to alter traditional roles regarding authority,
decision making and governance responsibilities of labor in the workplace.) In order to fulfill these new managerial responsibilities, the union has focused on constantly "organizing its membership". This was accomplished through the training of more than 700 elected team leaders, the creation of over 400 additional UAW co-management partners who meet regularly in the Congress, and the weekly meeting of the Leadership Team. Over 1100 leaders, almost 20% of the membership, have formal partnership roles. The result is a dense communication and coordination network among production middle management which I hypothesize may have a significant impact on quality. This communications infrastructure exists within a context in which union members fill positions traditionally occupied by management, and yet bring different values to the governance of the workplace. As union members protected by a collective bargaining agreement, they may be freer than their non-represented counterparts to express independent judgment and disagree with upper management without fear of reprisal. Further, the managers who share a union affiliation have different opportunities for interactions than do their non-represented counterparts. These interactions are social, educational through union organized training, and related to an internal business planning process directed by the local and conducted through forums like the Congress. This union context may produce managers with different relationships and different patterns of communication than exist between non-union managers. The
expectation is that the organization will benefit from this communications network through a greater flow of ideas in solving the complex problems facing high performance team-based work systems.

Considerable variation exists in the extent to which the governance principles and co-management dimensions of the partnership are implemented across and within the three business units. This research design will test whether the variation observed within the co-management system of the partnership is systematically related to quality performance.

I chose three dimensions of the partnership to analyze empirically through surveys. The first, *communications and coordination behavior*, while directly observed is derived from network theory (Granovetter 1973, 1985, 1992; Aoki 1988, 1990), as well as the literature on quality (Ishikawa 1985), and high performance manufacturing systems (Trist 1981; Mintzberg 1983; Shimada and MacDuffie 1986; MacDuffie 1995). Since team-based manufacturing systems rely on frequent and effective internal horizontal communications to reach high levels of performance, we would expect high levels of communication to be systematically related to higher levels of quality.

The second dimension *balance*, is related to Saturn's attempt to transform traditional industrial relations. While in the rest of General Motors supervisors manage production, and grievance committee members handle "people problems", at Saturn module advisors are responsible for both. No formal
division of these responsibilities is made for the union and non-represented module advisors who in partnership manage each module. Therefore, by analyzing the balance for each manager between time spent managing production, and time spent managing people we can see whether Saturn truly departs from tradition, and if balance is related to performance.

Some industry observers believe that while over half of the middle management positions are indeed being filled by union members, Saturn has simply bought labor peace at a high price. They contend that only the non-represented managers are truly functioning in that role, while the union members are either free riders or acting as grievance committeemen focusing exclusively on people issues. These data allow us to test whether union managers are indeed managing people and production. If both union and non-rep module advisors balance their time between managing people and managing production, Saturn will in fact have departed from the traditional industrial relations of General Motors. I hypothesized that those departments practicing this new industrial relations would produce higher levels of quality.

The third dimension alignment, is a result of my participant observations of the partnership relations. It also has roots in the human resources management literature which presents goal alignment as essential to well functioning, conflict free organizations. Theory (McGregor, 1960; Walton and McKersie, 1965; Walton, Cutcher-Gershenfeld and McKersie, 1994) suggests the ability to resolve conflict
and achieve agreement on goals leads to improved organizational performance. I hypothesized that those union and non-rep partners who had the greatest level of agreement on goals, priorities, tasks and responsibilities would also have higher levels of quality than did partners with less alignment.

Some industry observers have suggested Saturn's quality performance is the result of a new "effort bargain" struck between GM and the UAW (i.e. workers simply work harder). These data allow us to test which, if any, of the specific attributes of the partnership (i.e. communications, task balancing, alignment between represented and non-represented partners, etc.) explain quality performance.

Through a review of internal Saturn performance appraisals and quality data I identified the highest and lowest performing modules in each of the three business units. I then spent time in each of these six modules observing and interviewing the union and non-represented module advisors. For example, the windshield wiper panel example described in Chapter 2 was observed in one of the highest performing modules, while in one of the lowest performing modules union advisors refused to wear radio communications equipment because they thought it would draw them into production problems, which they saw as the responsibility of their non-represented partners. It was through these experiences, as well as other interviews and field work that I came to speculate that the network of
communication and coordination, the balance of time spent on various managerial tasks between partners, and the alignment of views and attitudes between partners were critical to Saturn's performance.

**Methodology**

In order to analyze Saturn's system of co-management, represented and non-represented operations department-level middle managers were studied. I chose to focus on module advisors for several reasons. Theory suggests that supervision plays a critical role in team based production systems, particularly through coordination (Mintzberg, 1983), and boundary management (Trist, 1981). Studying how union members fill this role and impact performance allowed the testing of my hypothesis regarding the value added by the union through its communications network. Also, since Saturn operates at the leanest (50:1) direct to indirect ratio of workers to supervisors in the auto industry world-wide, I wanted to understand whether this was related to union members filling management positions. Finally, this partnering arrangement never appeared in the original design developed by GM and the UAW in the Memorandum of Agreement. Instead it had been developed by the local parties in response to the challenges of creating an institutional partnership to govern and manage a high performance team-
based work system. I came to believe that this was a key innovation which tied transformed industrial relations to high performance manufacturing, and that understanding the dynamics of this co-management process could be useful to others attempting such a transformation.

Therefore, a detailed analysis of the supervisory system at the department or module level (across 3 business units/plants, 2 crews, 57 production and maintenance departments and 150 represented and non-represented managers) allowed us to test whether the variations in the co-management system and quality performance are systematically related. I analyzed the relationship between the behavior patterns and supervisory methods of both union and non-union middle managers, attributes of their individual union-management partnerships, differences in the patterns of communication and coordination of each group, and performance outcomes, in particular first-time-quality. I also studied time use including the balancing of social and economic tasks, as well as the division of labor between represented and non-represented management. Specifically, I examined whether union managers were managing their time, priorities, and communications differently than were their non-represented partners. I also analyzed whether the nature of the individual union and non-represented module advisor partnerships had an impact on quality performance.
SURVEY INSTRUMENTS

I collected first-time-quality performance data by department and crew for all 3 plants (assembly, body systems and powertrain) over an 18 month period covering 1992 and the first half of 1993. I have analyzed these data against survey data collected from all department level middle managers. The survey is comprised of three distinct parts:

Part A included demographic information, and focused on how managers viewed their roles, responsibilities, priorities and relationship to their partner. The specific responsibilities explored are listed below. They range across a wide array of supervisory duties drawn from Saturn's performance appraisals and job descriptions as well as my interviews and observations of module advisors in action. (See appendix for survey instruments).

- Managing daily production
- Cost, waste and scrap reduction
- Quality control
- Leading department problem solving and continuous improvement
- Personnel, counseling and conflict resolution
- Training work teams
- Department business planning
- Planning and implementing process and product improvements
- Ensuring teams have adequate resources
• Work redesign
• Developing teams for self management
• Coordinating with internal and external customers and suppliers
• Coordination with technical resources

I also explored individual partnership relations by investigating the agreement/alignment and differences between union and non-represented partners values and attitudes toward their jobs. Human Resource Management theory (McGregor 1960) argues that the interests of labor and management can become aligned through appropriate management systems, leadership, rewards and organizational structures. HRM theory posits that alignment can lead to both higher performance and reduced conflict. To test this I surveyed union and non-represented partners on the following issues:

• Levels of authority
• Access to information
• Responsibility for production
• Responsibility for people
• Similarity of work tasks
• Alignment of priorities
Part B breaks down the job of a manager into discrete tasks and asks participants to indicate how much time they spent daily on each. In this way the priorities identified in Part A can be validated by time actually spent on each task. The specific areas included in this analysis of management time were derived from my own observations of module advisors at work. I also used categories identified by the Japan Iron and Steel Institute which appeared in a study of Japanese foremen in team based production systems (Japan Iron and Steel Institute, 1982). A list of the areas measured appears below:

- Production management
- Safety and health
- Cost control
- Initiating or facilitating team problem solving
- Personnel management
- Team training
- Meetings
- Administration

Part C is a study of communication and coordination patterns among managers, and between managers and support staff referred to at Saturn as "resources" (quality engineering, maintenance, upper management, etc.) Included here are communications with:
- Other department managers/module advisors across all three business units
- Upper management (represented and non-represented)
- Technical resources (quality engineering, supplier engineering, manufacturing process engineering, product engineering, etc.)
- Maintenance
- Outside resources (training, safety, purchasing, etc.)

Communications were analyzed by:
- Subject (quality, build schedule, manpower, technical, supply, people, maintenance, etc.)
- Purpose (coordination of work tasks, sharing technical information, problem solving)

Responses to Part A were received from 143 of the 150 managers surveyed. Multiple regression techniques were used to analyze these data, and to test for the relationship of these specific aspects of the co-management system to first-time-quality performance.

Managers were asked to fill out Part B, the time use portion of the survey, for each day worked over a two week period. Average work schedules were normally 4 ten hour days per week. Responses were received from 127 managers. A total of 705 surveys were returned which averaged 5.6 returns per respondent.
Managers were asked to fill out Part C, the communications portion of the survey, at the end of each day worked over a two week period. I received 3827 records of communication links from 121 managers which were then verified (by cross checking with the other party to the reported communication) to establish reliability. These data were studied using a communications network analysis tool (George and Allen, 1993) that allows the organization to be partitioned in order to analyze differences in the patterns of communications and coordination between represented and non-represented managers within each of three business units. Measures of communications density (the proportion of regular communication partners to the number of possible partners) and centrality (the number of unique partners measured both across the site and within the business unit) were analyzed against quality performance outcomes.

Two measures of quality will serve as the performance outcomes to assess the impact of the Saturn partnership arrangements: 1) first time quality; and 2) quality improvement.

- First time quality (FTQ) is defined as the percentage of product which meets quality standards without rejection, repair or rework. It is measured at the level of each team. Defects not detected by a team and discovered downstream by another team are charged against the FTQ of the team responsible for the defect.
• Data were gathered and analyzed weekly for every production department/module on each of two crews from January 1992 to May 1993. Department/module FTQ levels were calculated by averaging the daily team statistics and aggregating them across all teams in the department.

• First time quality data reported here represent the average first time quality for each department over the first 5 months of 1993.

• Improvement in first time quality is calculated as the improvement in average first time quality over the first 5 months of 1993 compared to the first 5 months of 1992.

• The correlation between first time quality and quality improvement is .470.

The time period was chosen because in June of 1993 a third crew was put into the schedule which entailed changes in assignment of crew or partner for the vast majority of module advisors. Since virtually all modules had new pairs of module advisors, the tracking of these partnerships with performance outcomes would have to start all over in June 1993. Similarly, all survey data on attitudes, priorities, time use and communications were collected in May 1993 before the changes involving the third crew were announced.
RESULTS

THE COMMUNICATIONS AND COORDINATION NETWORK

Figure 7 contains a graph of the communications network of the module advisors. It is partitioned into the three business units (plants) with Vehicle Systems (assembly) in the upper left, Body Systems in the center, and Powertrain (engine and transmission manufacturing) in the lower right. Each plant is further partitioned between union and non-represented module advisors. For purposes of comparison communications densities within each group of union and non-represented module advisors for each business unit are reported. In both Vehicle Systems and Body Systems the union module advisors have significantly higher communication densities than do their non-represented counterparts. Powertrain densities for both groups were the same.
### Communications Density

<table>
<thead>
<tr>
<th></th>
<th>Vehicle Systems</th>
<th>Body Systems</th>
<th>Powertrain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Rep</td>
<td>.176</td>
<td>.237</td>
<td>.333</td>
</tr>
<tr>
<td>Rep</td>
<td>.263</td>
<td>.294</td>
<td>.330</td>
</tr>
</tbody>
</table>

![Graph showing communications density across vehicle systems, body systems, and powertrain categories.](image)
COMMUNICATIONS FREQUENCY AND CENTRALITY

Based on their level of improvement in first-time-quality, I divided Saturn's production departments into two groups - **High First Time Quality Improvement** and **Low First Time Quality Improvement**. As we can see from Figure 8, the grouping of departments with the highest level of quality improvement also had significantly higher levels of communications by the represented module advisor. This was true for communications centrality (the overall level of communications), and for group centrality (communications with other represented module advisors within each plant). Most striking are the differences in communications frequency, specifically on the subject of quality. The represented module advisors in the high quality improvement departments had almost two and half times the number of regular communications on quality than did their counterparts in the departments with low levels of quality improvement. The data showed no significant difference in overall communications centrality, group communications centrality, or quality communications between non-represented module advisors in the high quality improvement group compared with those in the low quality improvement group.

I also divided the departments into two groups based on their 1993 level of first time quality (see Figure 9).
### Figure 8

**Communications and Quality Improvement**

<table>
<thead>
<tr>
<th></th>
<th>High Quality Improvement</th>
<th>Std. Dev.</th>
<th>Low Quality Improvement</th>
<th>Std. Dev.</th>
<th>T-statistic</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall Centrality</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rep Wuma</td>
<td>21.5</td>
<td>8.13</td>
<td>15.8</td>
<td>6.19</td>
<td>2.117**</td>
<td>32</td>
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<td>Non-Rep Wuma</td>
<td>19.2</td>
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<td>17.9</td>
<td>4.99</td>
<td>0.508</td>
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<tr>
<td><strong>Group Centrality</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rep Wuma</td>
<td>8.7</td>
<td>4.02</td>
<td>5.4</td>
<td>2.11</td>
<td>2.751**</td>
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<td>Non-Rep Wuma</td>
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<td>4.1</td>
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<td><strong>Quality Communications</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rep Wuma</td>
<td>4.1</td>
<td>2.08</td>
<td>1.7</td>
<td>1.41</td>
<td>2.789**</td>
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<tr>
<td>Non-Rep Wuma</td>
<td>1.5</td>
<td>1.32</td>
<td>1.9</td>
<td>1.11</td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td>Production &amp; People</td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td>Rep Wuma</td>
<td>0.948</td>
<td>0.41</td>
<td>0.957</td>
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<td>0.044</td>
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<tr>
<td>Non-Rep Wuma</td>
<td>1.309</td>
<td>0.83</td>
<td>2.247</td>
<td>1.62</td>
<td>2.158**</td>
<td></td>
</tr>
</tbody>
</table>

* significant at the .10 level  
** significant at the .05 level  
*** significant at the .01 level
**Figure 9**

**Communications and First Time Quality**

<table>
<thead>
<tr>
<th></th>
<th>High FTQ</th>
<th>Std. Dev.</th>
<th>Low FTQ</th>
<th>Std. Dev.</th>
<th>T-statistic</th>
<th>N</th>
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</thead>
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<tr>
<td><strong>Overall Centrality</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rep Wuma</td>
<td>18.62</td>
<td>6.98</td>
<td>11.43</td>
<td>5.4</td>
<td>2.897***</td>
<td>32</td>
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<tr>
<td>Non-Rep Wuma</td>
<td>14.47</td>
<td>6.04</td>
<td>15</td>
<td>5.79</td>
<td>0.232</td>
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</tr>
<tr>
<td><strong>Group Centrality</strong></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Rep Wuma</td>
<td>7.438</td>
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<td>6.125</td>
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<td>1.09</td>
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<tr>
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<td>4.647</td>
<td>1.41</td>
<td>3.727</td>
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<tr>
<td><strong>Group Density</strong></td>
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<td>Rep Wuma</td>
<td>0.102</td>
<td>0.036</td>
<td>0.059</td>
<td>0.024</td>
<td>4.006***</td>
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<tr>
<td>Non-Rep Wuma</td>
<td>0.091</td>
<td>0.031</td>
<td>0.104</td>
<td>0.033</td>
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<tr>
<td><strong>Quality Communications</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Rep Wuma</td>
<td>3.46</td>
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<td>1.44</td>
<td>2.170**</td>
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<td>1.12</td>
<td>1.05</td>
<td>2.603**</td>
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<td><strong>Balance:</strong></td>
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<td></td>
<td></td>
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<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rep Wuma</td>
<td>1.171</td>
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<td>0.736</td>
<td>0.42</td>
<td>2.121**</td>
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</tr>
<tr>
<td>Non-Rep Wuma</td>
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<td>1.24</td>
<td>1.987</td>
<td>1.62</td>
<td>0.495</td>
<td></td>
</tr>
</tbody>
</table>

* significant at the .10 level  
** significant at the .05 level  
*** significant at the .01 level
As we can see from Figure 9, the level of communication and coordination appears to be related to first time quality performance. The overall site-wide communications centrality of the represented module advisors is significantly higher in the High FTQ group. Similarly, the density of communications among represented module advisors within each plant was significantly higher in the High FTQ group. Communications on quality was significantly higher for both represented and non-represented module advisors in the High FTQ group, although the represented level of 3.46 quality communications was greater than the non-represented level of 2.21.

BALANCE AND QUALITY PERFORMANCE

Figures 10 and 11 show the difference between represented and non-represented module advisors' use of time on a variety of tasks. I believe two findings are of particular importance. First, represented module advisors are indeed engaged in supervisory activity. They spend an average of almost 29% of each day managing production. This includes "firefighting, troubleshooting, dealing with production bottlenecks, dealing with equipment failures and downtime, expediting, direction to teams on production schedule, record keeping, and giving work assignments". Second, represented and non-represented module advisors differ significantly in their use of time. Represented module advisors spend significantly more time managing people problems - "attendance, manpower, counseling, listening to team members,
Figure 10

Wuma Time Use
### Figure 11

**Time Use**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Rep Wuma</th>
<th>Non-Rep Wuma</th>
<th>T-statistic</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing People</td>
<td>0.342</td>
<td>0.259</td>
<td>3.876***</td>
<td>96</td>
</tr>
<tr>
<td>Managing Production</td>
<td>0.289</td>
<td>0.383</td>
<td>3.213**</td>
<td>96</td>
</tr>
<tr>
<td>Training</td>
<td>0.041</td>
<td>0.025</td>
<td>2.065**</td>
<td>96</td>
</tr>
<tr>
<td>Administration</td>
<td>0.071</td>
<td>0.05</td>
<td>2.099**</td>
<td>96</td>
</tr>
<tr>
<td>Managing Costs</td>
<td>0.029</td>
<td>0.04</td>
<td>1.423</td>
<td>96</td>
</tr>
<tr>
<td>Problem Solving</td>
<td>0.015</td>
<td>0.009</td>
<td>1.381</td>
<td>96</td>
</tr>
<tr>
<td>Meetings</td>
<td>0.149</td>
<td>0.159</td>
<td>0.775</td>
<td>96</td>
</tr>
<tr>
<td>Other</td>
<td>0.042</td>
<td>0.051</td>
<td>0.755</td>
<td>96</td>
</tr>
</tbody>
</table>

* significant at the .10 level
** significant at the .05 level
*** significant at the .01 level
resolving personnel conflicts, morale building, representing peoples' needs". Represented module advisors also spend more time on training and administration - "review and analysis of performance data, helping teams track performance, hiring, and team leader development". Non-represented module advisors spend significantly more time on production, but also spend almost 26% of their time managing people problems.

The balance between time spent on production management and time spent managing people problems is critical in evaluating the Saturn partnership arrangement. If represented module advisors spent virtually all of their time on people issues then it could be argued that they are simply filling the traditional role of grievance committeemen in spite of the difference in title. Similarly, if non-represented module advisors spent the vast majority of their time managing production they would essentially be operating as supervisors in the traditional sense.

The partnership arrangement at the department level requires a balance both between represented and non-represented managers, and between production and people for each individual module advisor. Figures 8 and 9 show that this individual balance is significant. For the non-represented module advisor excessive time managing production at the expense of managing people problems has a negative impact on quality improvement. Similarly for the represented module advisor, excessive time on people at the expense of managing production has a significant negative impact on the
level of first time quality. For quality performance the data suggest the most effective balance between time on production and time on people may be close to 1:1 for both represented and non-represented managers.

ALIGNMENT AND QUALITY PERFORMANCE

The third set of variables mentioned above which has a significant effect on quality performance concerns the alignment of attitudes and behaviors between the represented and non-represented partners in each department/module. Where there is agreement between the partners on priorities, responsibilities, work tasks, and balance of time use on production and people we see the highest level of quality performance. Alignment is measured by taking the standard deviations of the partners in each module - the lower the standard deviation, the greater the alignment between the partners.

As we can see in Figure 12, the group of departments with the highest level of quality improvement had significantly higher alignment in the balance the partners exhibited between time spent on people and time on production. Similarly, quality improvement was greatest in those departments where partners were in agreement on their level of responsibility for team performance. Also significant for quality improvement was agreement by the partners that they have the same priorities in their work.
## Figure 12

**Alignment and Quality Improvement**

<table>
<thead>
<tr>
<th>Alignment:</th>
<th>High Quality Improvement</th>
<th>Low Quality Improvement</th>
<th>T-statistic</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance of Production and People</td>
<td>0.548</td>
<td>1.098</td>
<td>1.963*</td>
<td>30</td>
</tr>
<tr>
<td>Responsibilities</td>
<td>0.253</td>
<td>0.707</td>
<td>2.521**</td>
<td>34</td>
</tr>
<tr>
<td>Priorities</td>
<td>0.455</td>
<td>1.061</td>
<td>2.696**</td>
<td>34</td>
</tr>
<tr>
<td>Accountability</td>
<td>0.253</td>
<td>0.46</td>
<td>1.233</td>
<td>34</td>
</tr>
<tr>
<td>Tasks</td>
<td>0.657</td>
<td>0.813</td>
<td>0.655</td>
<td>34</td>
</tr>
</tbody>
</table>

* significant at the .10 level  
** significant at the .05 level  
*** significant at the .01 level
### Figure 13

**Alignment and First Time Quality**

<table>
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<tr>
<th>Alignment:</th>
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<th>Low FTQ</th>
<th>T-statistic</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance of Production &amp; People</td>
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<td>1.046</td>
<td>0.87</td>
<td>30</td>
</tr>
<tr>
<td>Responsibilities</td>
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<td>0.629</td>
<td>1.134</td>
<td>34</td>
</tr>
<tr>
<td>Priorities</td>
<td>0.663</td>
<td>0.943</td>
<td>1.161</td>
<td>34</td>
</tr>
<tr>
<td>Accountability</td>
<td>0.265</td>
<td>0.471</td>
<td>1.226</td>
<td>34</td>
</tr>
<tr>
<td>Tasks</td>
<td>0.619</td>
<td>0.864</td>
<td>1.04</td>
<td>34</td>
</tr>
</tbody>
</table>

* significant at the .10 level
** significant at the .05 level
*** significant at the .01 level
While not statistically significant, the same pattern of results appears for agreement by the partners on their accountability for team performance, and on whether they believe they have the same work tasks. Figure 13 shows the same pattern of results for first time quality, although the differences were not found to be statistically significant.

**Predicting Quality Improvement**

Figure 14 shows the correlation matrix for the variables discussed above. Figure 15 below shows seven regression models using these variables to predict quality improvement. In models I and II we find that overall communications centrality is significant for both represented and non-represented module advisors. Model IV shows the effect of the represented partner's communications on quality, and model V combines this variable with representative centrality. An F test for the significance of the increment to $R^2$ shows that this model explains significantly more variance than model IV. Model III introduces the represented partner's centrality of communications with other represented module advisors within his/her plant. Model VI includes represented and non-represented centrality and represented quality communications. Finally in model VII we introduce a control variable for business unit. This control is also highly correlated with a control for technology, so only one can be introduced into the model (see the correlation matrix in figure 14 and the box plot in figure 16). While business
unit is not significant itself, both represented overall site-wide centrality and represented quality-specific communications are, and these variables can explain over 60% of the variance in quality improvement.

**Figure 14**

**PEARSON CORRELATION MATRIX**

<table>
<thead>
<tr>
<th></th>
<th>Rep Centrality</th>
<th>Non-rep Centrality</th>
<th>Rep Quality Communications</th>
<th>Rep Group Centrality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rep Centrality</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NR Centrality</td>
<td>0.271</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rep Quality</td>
<td>0.388</td>
<td>0.106</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Rep Group</td>
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<td>0.560</td>
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</table>

n=23

<table>
<thead>
<tr>
<th></th>
<th>Business Unit</th>
<th>Technology</th>
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</thead>
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<td>Business Unit</td>
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<td></td>
</tr>
<tr>
<td>Technology</td>
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</tbody>
</table>

n=43
Figure 15

Predicting Quality Improvement

<table>
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<th>III</th>
<th>IV</th>
<th>V</th>
<th>VI</th>
<th>VII</th>
</tr>
</thead>
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<td>.003**</td>
<td>0.002</td>
<td>.002*</td>
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<td>[1.721]</td>
<td>[1.915]</td>
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</tr>
<tr>
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<td>0.001</td>
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<td></td>
<td>(.421)</td>
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<td>(.232)</td>
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<td>[2.272]</td>
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<td>Rep Group Centrality</td>
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<td>0.009**</td>
<td>.008**</td>
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<td>(.474)</td>
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<tr>
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<td>0.177**</td>
<td>0.352***</td>
<td>0.262***</td>
<td>0.389***</td>
<td>.574***</td>
<td>.638***</td>
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<tr>
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<td>0.175</td>
<td>0.143</td>
<td>0.329</td>
<td>0.235</td>
<td>0.342</td>
<td>0.499</td>
<td>0.518</td>
</tr>
<tr>
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<td>26</td>
<td>30</td>
<td>29</td>
<td>29</td>
<td>21</td>
<td>21</td>
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<tr>
<td>Change R2</td>
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<td></td>
<td></td>
<td></td>
<td>.1268**</td>
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</tr>
<tr>
<td>F Change</td>
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<td></td>
<td></td>
<td>5.3945</td>
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</tr>
</tbody>
</table>

* significant at the .10 level
** significant at the .05 level
*** significant at the .01 level

Note: [Std Coef] [T-statistic]
Figure 18 includes fourteen regressions models predicting first time quality. Figure 17 shows a correlation matrix of these variables. As in Figure 15, representative overall centrality is a statistically significant predictor as shown in model I. Alignment of priorities and tasks are significant in models II and III. Model IV introduces the density of communications between non-represented module advisors within each plant. Model V shows the effect of non-represented group density combined with the communications density of represented module advisors with others outside of
their plant across the manufacturing site. Models VI through XIV estimate combinations of these variables, with the best fit appearing in model X since the increment to $R^2$ did not show significant change when other variables were introduced. Thus, we can explain almost 30% of the variance in first time quality with this predictor (represented module advisor communications density).

The variable "balance" was not significant in the regression analyses since it is a non-linear ratio of time spent managing production divided by time spent managing people. However, the extremes, too much time on people or too much time on production, proved to be related to poor performance through the use of t-tests. Balance was significant when using t-tests to compare the group of modules with high first time quality (FTQ), with the group of low FTQ. It was also significant in the comparison of the group with high levels of quality improvement to the group with low levels of improvement.

**Diagnostics and Sensitivity Analysis**

Once again in controlling for business unit (assembly, powertrain and body systems) no effect was found. I also controlled separately for the impact of technology on quality in each module, and found no significant effect on first time quality.

I analyzed residuals using box plots, histograms as well as kurtosis and skewness statistics, and found them to be
normally distributed. Plots of the residuals were examined to confirm the assumptions that they had equal variance across all x values, and that the errors were unbiased confirming linearity. The Durbin-Watson statistics were found to be in the normal range indicating independence among the errors. The Cook's D statistic identified a few outliers with high leverage. I adjusted these values so as to retain their relationship to all other cases, yet minimizing their leverage using the method outlined in Tabachnick and Fidell (1989).
**Figure 17**

**PEARSON CORRELATION MATRIX**

<table>
<thead>
<tr>
<th></th>
<th>Rep Outside Density</th>
<th>Rep Centrality</th>
<th>Non-rep Group Density</th>
<th>Task Align</th>
<th>Priorities Align</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rep Outside Density</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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<td>Rep Centrality</td>
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<td>1.000</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Non-rep Group Density</td>
<td>0.190</td>
<td>0.204</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task Align</td>
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<td>-0.417</td>
<td>-0.357</td>
<td>1.000</td>
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</tr>
<tr>
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<td>-0.229</td>
<td>-0.057</td>
<td>0.530</td>
<td>1.000</td>
</tr>
</tbody>
</table>

n=22
Figure 18

Predicting First Time Quality

<table>
<thead>
<tr>
<th>Model</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
<th>VI</th>
<th>VII</th>
<th>VIII</th>
<th>IX</th>
<th>X</th>
<th>XI</th>
<th>XII</th>
<th>XIII</th>
<th>XIV</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0.003</td>
<td>0.005**</td>
<td>0.006**</td>
<td>0.005**</td>
<td>(.471)</td>
<td>(.300)</td>
<td>(.385)</td>
<td>(.424)</td>
<td>(.387)</td>
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<td>[1.546]</td>
<td>[2.183]</td>
<td>[2.280]</td>
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<td>(-.119)</td>
<td>(.007)</td>
<td>(-.110)</td>
<td>(.048)</td>
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<td>[-0.626]</td>
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<td>-0.034</td>
<td>-0.019</td>
<td>-0.022</td>
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<td>(-.255)</td>
<td>(-.259)</td>
<td>(-.145)</td>
<td>(-.168)</td>
<td>[1.990]</td>
<td>[-1.447]</td>
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<td>[-.679]</td>
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<td>0.253*</td>
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<td>(.322)</td>
<td>(.330)</td>
<td>(.471)</td>
<td>[1.673]</td>
<td>[1.697]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rep Outside Density</td>
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<td>1.367***</td>
<td>1.221***</td>
<td>1.105**</td>
<td>1.118**</td>
<td>1.521***</td>
<td>(.327)</td>
<td>(.530)</td>
<td>(.493)</td>
<td>(.446)</td>
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</tr>
<tr>
<td>R2</td>
<td>0.222***</td>
<td>0.107*</td>
<td>0.110*</td>
<td>0.190**</td>
<td>0.251**</td>
<td>.235*</td>
<td>0.278**</td>
<td>0.232**</td>
<td>.278**</td>
<td>0.281***</td>
<td>.293**</td>
<td>.306**</td>
<td>.304***</td>
<td>.337***</td>
</tr>
<tr>
<td>Adjusted R2</td>
<td>0.196</td>
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<td>0.082</td>
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<td>0.179</td>
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<td>0.223</td>
<td>0.173</td>
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<td>0.257</td>
<td>0.238</td>
<td>0.222</td>
<td>0.251</td>
<td>0.266</td>
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<td>0.0016</td>
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<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

* significant at the .10 level  ** significant at the .05 level  *** significant at the .01 level

Note: (Std Coef) [T-statistic]
PREDICTING COMMUNICATIONS AND COORDINATION

Given the impact of communication and coordination on quality, and the variation detected across the corporation, the question of what predicts these variables deserves further study. We can investigate this by using individual level data from the survey of module advisors.

Figure 19 shows a few predictors of communications. While developing a module quality plan, training, and priority alignment appear to explain some of the variance in communications, much more significant predictors are business unit and whether a module advisor is a member of the union. While high levels of communications are not universal across module advisors, the variance appears to be related to the union organization as well as the nature of the partnership dynamics and governance systems of the individual plants (see box plot in figure 20). This finding along with the network analyses supports the hypothesis that union members have higher levels of communications. Further, the regression analyses show how these levels of communications are systematically related to quality performance.
### Figure 19

**Predicting Communications**

<table>
<thead>
<tr>
<th>Quality Commun.</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>Overall Centrality</th>
<th>I</th>
<th>II</th>
<th>Group Centrality</th>
<th>I</th>
<th>II</th>
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* significant at the .10 level  
** significant at the .05 level  
*** significant at the .01 level  

Note:

*Std Coef*  
[T-statistic]
SUMMARY

Three groups of variables have been shown to have a significant impact on quality performance - both quality improvement and first time quality. These variables are:

- The amount and type of communications and coordination activity;
- The balance between time managing production and time managing people; and
- The alignment of priorities and work tasks between the union and non-represented partners.
The regression analyses show that we can explain almost 30% of the variation in first time quality, and more than 60% of the variation in quality improvement by examining communications and alignment variables. Most significant in these analyses were the communications of the represented module advisors, which gives further support to the proposition that the union, through its role in co-management, is providing a dense communications network which has an important affect on quality performance.

Theory suggests that high performance team-based manufacturing is highly dependent on tight and effective linkages between departments that serve as internal customers and suppliers to one another, upstream and downstream in the production process. Quality produced in this system depends upon rapid feedback on performance. By creating a communication and coordination network among its members, providing a strong commitment to quality, and devoting significant resources to a strategy of constant internal organizing activity, the institution of the local union may have pre-adapted the Saturn partnership arrangement to a quick response infrastructure for quality management. I will discuss this further in future chapters.

Union and non-represented managers balancing both production and people needs indicate a significant departure from past practice in General Motors. What we are seeing in Saturn is not a resurrection of the traditional supervisor and grievance committeeman system, but the creation of a co-
management structure through the partnership arrangement. Both union and non-represented managers have created a new set of roles and a dynamic between themselves which can have a significant effect on quality performance. Significant increases in performance occur when represented and non-represented partners are aligned in these roles. However, while the human resources literature predicts the elimination of conflict when labor and management are able to align goals, the industrial relations literature suggests that conflict is a normal aspect of employment relations and will always be present. While Saturn has achieved remarkable quality performance through alignment between union and non-represented module advisors, conflict has surfaced around the question of representation. This will be discussed in detail in the next chapter.
Chapter 4

Partnership and Representation:
Conflicting Roles for the Local Union

Overview

We have seen in the first three chapters how the union-management partnership contributes to Saturn's quality performance. We have also seen how crucial the work unit modular advisor co-management system has been to this result. Yet, this system of co-management and joint governance presents two key dilemmas for the union because it puts the new partnership relations in tension with the traditional forms of representation that union members experienced in GM.

The first dilemma has to do with the selection of the union leaders who fill the on-line management positions in the partnership. Up until 1995 these representatives were jointly selected by the union and company. The evidence presented in Chapter 3 suggests it would have been difficult to have realized Saturn's level of quality performance with a system where more traditional elected grievance committee members and supervisors served as modular advisors. But, as will be described below, pressures for better representation of individual member interests built up in this system, and led to the election of a set of crew coordinators to perform a
representation function. Therefore, a key question for the future of this partnership arrangement is how the tension between a joint selection process to fill key management positions, and a process by which the members themselves elect their represented managers, will be worked out.

The second dilemma for the local is one of resource allocation. Since its inception, this local focused most of its resources around representing the collective interests of the membership in business decision making. The governance structures of SAC, MAC, and the business unit decision rings were designed and implemented with this purpose in mind. Further, the creation of on-line partnerships throughout the manufacturing system were also an attempt to integrate the collective voice of the membership in operating decisions. However, a critical question is whether this focus on collective representation comes at a cost to individual representation and advocacy. This chapter will explore these dilemmas for the local with qualitative data gathered through extensive interviews with union members.

A number of researchers have raised questions about the consequences for the membership when unions expand their role into traditionally managerial activity. Some predict that these new roles will "undermine the representative role of the union at the workplace" (Kumar, 1987). Others suggest that unions have difficulty in representation when they accept the logic of management or the focus of the enterprise as the logic of the union (Koike, 1983, 1988; Shirai, 1983;
MacDuffie, 1995). Dissidents within the union movement argue that when local unions adopt the logic of management as their own, they can no longer defend the interests of labor (White, 1985; Parker and Slaughter, 1988; Katz, 1988). They see this contradiction as part of the fundamental conflict between the interests of management and those of labor.

Evidence exists that the question of the local union's ability to provide adequate representation is an issue at Saturn. During the 1993 local elections (the second in Saturn's history), one of the opposition caucuses ran on a platform of increased representation through direct election (in a fashion consistent with the UAW tradition for shop committee representatives) of all union module advisors and crew coordinators. The incumbent leadership took the position that electing module advisors and crew coordinators would politicize the partnership, diminishing the ability of individuals in these positions to balance the needs of people with the needs of the business, and that popularity not skills, knowledge, and ability would become the dominant qualification. These leaders argued that politicizing the process would lead to a return of the old grievance committee structure, an increase in adversarialism, and movement away from consensus decision making and joint problem solving. If excluded from the selection process, management would likely require a more traditional non-represented supervisor as a counterpart, with no union input in selection.
The incumbent leadership sought to continue the process of joint selection by management and union representatives. A referendum on the question of electing crew coordinators and module advisors took place in early 1993, with 71% of the membership voting to continue the process of joint selection. This vote appeared to reaffirm the commitment of the rank and file to the principles underlying the Saturn partnership.

In the spring of 1993, the local union election resulted in a run-off, with the president and his executive board being returned to office after a close race. However, the issue of appropriate representation continued to surface. A member-to-member survey was conducted by the local in the summer of 1993, in which almost 6,000 members were interviewed (approximately 90% of the entire membership) for an average of 30 minutes each. Out of the top ten issues raised, representation was the 6th, with 31% raising concerns. A majority of these respondents complained that 'they had not seen their elected representatives since the elections, and wanted to see them more often', and electing jointly selected union representatives was again raised. Another frequent complaint dealt with whether union leaders were performing their duty of fair representation. Concern was expressed about the 'need for consistent interpretation and application of the Memo of Agreement [contract] and Guiding Principles' by different union leaders.
Specifically, the application of the attendance policy was seen as unfair or inequitable, and was the top issue raised in the 1993 member-to-member (mentioned by almost 50% of those surveyed by the union). When work units were originally organized, they were empowered with the authority to manage absenteeism and implement attendance guidelines. However, as the number of work units grew to 700, problems of inconsistency arose. A common practice in one work unit might be a violation in another. Therefore, members expressed concern that discipline for absenteeism was not being handled in an equitable way. The local leadership saw the member-to-member as a call for stricter guidelines or enforcement of current policy. The union led an effort to develop new company-wide attendance guidelines, and put them to a vote by the membership in 1994. However, while the new policy adopted by the membership has resulted in the lowest non-contractual absenteeism in the U.S. (Saturn is reported to have less than half of GM's average), individuals can now be disciplined for behaviors which were previously acceptable. As a result members increasingly express the need for individual representation, even though their collective interests were represented (through the local union) in both drafting the policy and ratifying it through a referendum.
INTERVIEW METHODOLOGY

In order to better understand the effect of the union's partnership arrangements on the membership's perception of representation, I conducted a series of interviews. I asked about the nature of representation in decision making, and the forms of representation comparing the roles of team leaders (work unit counselors/WUCs) and module advisors at Saturn with the grievance committeeman structure at GM. I asked questions about members' perceptions of equity and fairness in the administration of policies or procedures that the union might or might not have had a role in developing. I also asked about whether people preferred the work system of the Saturn Partnership to the work system they experienced in General Motors.

The interview design was based on a stratified random sample using 10 focus groups which included 42 participants. Saturn provided the names of randomly selected union members in groups from every business unit on each shift. Groups were also included for maintenance, and for union module advisors. The interviews were conducted during May and June of 1994. Each focus group lasted for about one hour. I recorded the dialogue and then transcribed the tapes, and have selected comments that reflect both the common themes that emerged and the differences in points of view expressed.
SUMMARY OF FINDINGS

The overall themes that emerged can be summarized as follows:

- While the union is perceived as having significant input into strategic, policy, and operating decisions, the rank and file do not see this as a substitute for the type of individual advocacy they enjoyed under the grievance committee structure of GM. Under Saturn's original design, only the president and four vice presidents could file formal grievances. A comparable GM facility would typically have one grievance committeeman for each 250 members. These committeemen represent individuals who believe their rights under the contract have been violated. Committeemen in GM can file formal grievances with the company on behalf of individual members who they represent. If Saturn followed this model it would have approximately 30 full time grievance committeemen. While Saturn has no official grievance committeemen, as mentioned elsewhere in this study, a contract change allowed the election of 14 crew coordinators in 1995 who have the authority to file grievances on behalf of individual members.

- In particular, when a policy that the union has had input into is perceived as inequitable or unfair, the issue of individual member representation becomes even more acute.

- The jointly selected union partners are not seen as representatives of individual members. Rather they are seen
as managers who represent the union as an institution in operations decision making. Their role is not perceived to be that of individual representation or advocacy as is a grievance committeeman in GM.

- While individual representation is a concern, widespread support for the partnership structure remains with the vast majority of members expressing preference for Saturn over General Motors.

Excerpts from these interviews appear below. In the sections that follow, I present representative comments on each issue.

PARTICIPATION THROUGH COLLECTIVE REPRESENTATION

Most of the members interviewed saw value in the representation of the interests of the collective by the local in business decision making, and approved of the union's performance in this arena. Most representation of the collective takes place in the decision rings: SAC, MAC, business unit or module. Representation of collective interests can also take place as jointly selected union members represent the institution of the union in management positions within the partnership. The following excerpts show the value placed on participation in governance through managerial decision making:
Skilled Trades

I believe we’re seeing a lot of input. One thing we said early on is as UAW members, we have a heck of a lot of power around here. We can change some decisions and make decisions. But, better have your information correct and your ducks in a row. You need to be right. And if you do, if you are right in what you think the decision can be or should be, you can buck the management folks and change it. And I’ve been part of doing some of that.

We’re quite proud of the fact that the whole shop was put together from ground up and organized by UAW, and runs today, with UAW people only. We do not have any input from any management folks on daily affairs.

I think our leadership....on the represented side, through the years has concentrated and gotten too involved in running the business from a business standpoint, and thereby kind of got off the track from what they’re really here for and that’s to represent the folks. They’ve been putting more emphasis on the business and getting cars out the back door.

In the following excerpts, voice opportunities at Saturn were compared with those in GM:

Powertrain A Crew

I would like to say it being a joint venture, a sensitive issue like [the attendance policy] was brought up...and we the membership have a chance to vote on it. In the old world decisions [like] that would have been made for us...I am participating in the decision.

Body Systems B Crew

I believe that's one attribute they do have, I mean our business is thriving, they're [the union's] not doing anything wrong in that aspect of it.

I would hate to lose that if we had to go the traditional ...that's right up there with the quality.
Vehicle Systems A Crew

There is somebody out here looking [out] for me and all these other folks, and they're gonna be up there with the MAC and SAC making those decisions.

A good example [is] job setup. The teams are going through workshops setting up their jobs to be efficient. In the old days [at GM], the engineers used to do the time studies and everything used to be dictated - 'this is your job'. If you felt your job was overloaded you'd write a grievance on it and send it in. And here...the teams have people they designate to go represent them [across] all three crews and they go to the workshop and they do the timing and jobs and the layouts and everything to try to make the job efficient. So it's good for business, but it's not going to kill the people.

More of the way that our system of representation works though is in a form of information-sharing more than representing you (individually) and your interests. We know more about the business than probably we ever have.

Sometimes you find things out that in the old world you'd know about and didn't have that stuff to worry about. Sometimes here you find more stuff out that really gets you. It's good that you know, but sometimes you don't really want it.

The tension between collective representation through participation in strategic level governance decisions and individual representation was reflected in the comments of these groups:

Vehicle Systems B Crew

I can see them (union officials) being business, you know being in there helping [to] decide it. But they're not representing the people on the floor...I never see them on the floor. At the other plant, they were always on that floor talking to you, finding out what's going on. It's not like that out here.
Powertrain B Crew

We're actually supposed to make decisions on things that pertain to us...Those people [elected union officials] are the ones that I expect to do my representing, but those people are distant, away from us. They do not understand the situations where we work. They only understand up here [strategic level], 'oh well Saturn's going to make it if we do this, or they're not going to make it if we do that'.

Vehicle Systems C Crew

There's times where I feel like the union's doing us real good, and there's times where it makes me wonder if it's not bending more towards the management because it's a power thing and maybe it's a step ahead.

Summary

Most of the members interviewed did not have complaints with the representation of collective interests by local leadership in making business decisions. While some showed a lack of knowledge regarding what actually takes place at SAC, MAC, and business unit decision rings, many were satisfied with the union's impact on strategic level decision making. The most supportive comments came from the assembly plant (Vehicle Systems) and the engine and transmission plant (Powertrain). Yet, this raises a dilemma for the union as it devotes its resources to representing the collective interests of the members. Does this collective representation come at the cost of reduced representation for individuals? The next section will explore this issue.
REPRESENTATION AS INDIVIDUAL ADVOCACY

While members accept the value of collective representation at the strategic level, as indicated above, their primary concern was a perceived lack of individual representation by union officials. On the floor, representation in day to day issues is valued more than input into the broader strategic questions. This representation can be thought of as a form of advocacy which they experienced with grievance committeemen in GM, where the traditional committeemen can almost always be counted on to stand up and fight for members' individual rights and interests. This form of individual representation can be considered "personal advocacy". While the main focus of UAW Local 1853 has been to represent collective member interests through its institutional involvement in policy decision making, many members appear to be looking for individual representation when their treatment is felt to be inequitable or unfair. This raises a question as to whether systems of self-directed work teams also tend toward self-representation:

Vehicle Systems A Crew

Without having supervisors here, you're left to .... deal with your own conflict. To manage [our]selves and watch over and make sure everybody does right.....most part people here fare pretty good. But...it's really hard for people to deal with certain types of team issues. When...somebody's really screwing up, we got to deal with setting this person straight. Some teams may be doing okay in that. But it's been my experience that a lot of teams would rather have somebody else deal with that in the way that the supervisor used to. I thought
we'd be able to come down here, and if you were having an absenteeism problem we could all sit around as adults and say "Gee you know you're really affecting the team in this manner," and everybody give their input and talk to you, and try and help you out. But in reality how it's actually happening, at least in my team and in the others I've worked in [is] people start to lean more towards the WUCs [team leaders] to dish out the discipline. When everybody gets together, people start to quiet up, and generally leave the Lone Ranger [team leader] out there hanging and dishing out the discipline....[it] begins with the team having the backbone to be able to stand up to somebody who's not necessarily doing the team right. They are afraid it might make this guy mad, and then this [other] guy mad. I think there are a lot of issues in some teams that are not dealt with.

Powertrain B Crew

I feel personally that there is an inconsistency in crews, between WUMAs...depending on circumstances...it could be that two people leave early but [there are] two different WUMAs and then two different penalizations.

At the old plant your committeeman argues for you, he gets answers for you. There's someone back behind you. You get in the process here, and you go to somebody who is a represented WUMA to start out with. He's really like talking to management. Then you go around him and they're no better.

Even though the guy might be totally wrong, [the WUMA] still has to represent [him]. The real difference in my eyes is that the committeeman, what you would call the WUMA, is not looking at what you're saying as being something he has to deal with. They need to be more looking out for our needs as a committeeman would. And knowing that they don't have to please both sides.

The WUMA is supposed to be like a committeeman, and some of them don't even play the part of trying to be a committeeman. You deal with the committeeman, the committeeman will fight almost to the end with you. But here's it's a little different. One of the WUMAs is part of the situation, the problem that my team encountered. So I feel that it's uneven.

There was an inconsistency in the way one WUMA was treating [people], and now they have to make rules. As far as the old world, I'd never had to have someone
represent me. But it was nice to know that there was somebody there to hear if you were ever in trouble...

Criticism was surfaced regarding the perceived lack of representation of members who feel they have been treated unfairly as a consequence of business decisions. Members also expressed a desire for more direct and visible communications with union leaders, and for more opportunities for bottom-up input.

Vehicle Systems B Crew

Last week I went to the union office and I said I wanted to write a grievance, and I was told that I can't write a grievance because the decisions made were not solely management...they were union and management. So, therefore, you cannot write a grievance...And when I was told that I couldn't write a grievance, I thought well what am I paying union dues for?...Because if I can't write a grievance, then I may as well just accept what they are telling me and go about my business whether it makes me happy or not.

They're not separate the way they used to be. You used to be able to make a complaint and have the complaint go all the way through. And they discussed it all the way through. It's not like that anymore. And there's nothing on the floor representing the person...You don't have the right to vote for the person representing you.

Our situation is that they're combining teams...they take volunteers first, then if not they go by Saturn start date which is seniority. They try not to use that word around here but that's what Saturn service date is, it's your seniority...then later on openings come up they won't use seniority to fill the positions. People have a problem with that. Why would you build a team based on that, and then turn around and say "no, replace people."...They're trying to tell us now that it's causing a rippling effect, so what they need to do is replace someone that's low in that slot. And people that are from the regular union can't understand that. That's how we were brought up in GM, you know seniority...You can't be making up rules around using your seniority. You either use it or you don't...They're trying to go to the union. And they're saying, "well this is a
partnership decision, you guys bought into it at the D-ring."

The committeeman, he just called and listened to what your problem was or what was going on. Catch the story from the other side, and then represent you. And the system we have here where you don't have a committeeman, you have the same person to represent you as is usually involved in the problem also. So that tends to make it biased. I mean if you have a problem, and you go talk to the OMA about it...usually they're involved in the problem somewhere anyway...She's going to the OMAs and saying why this, why that, to the person who's also supposed to be representing them. That's kind of a conflict of interest. You don't have...any neutral ground here, nobody neutral to listen to both sides and help you out.

**Powertrain C Crew**

I'm not sure if it has anything to do with consistency, because that's been a big word around here, consistency. And I don't believe in consistency, I think you should have individuals, you know, each team can do something different, and they want everyone to do the same exact things, and we have nothing but conflict. We could call your representation in to settle the conflict. They're not there like the committeemen used to be. The committeemen used to back you up if you were wrong. I don't think I'm looking for a committeeman.

You can't be consistent [with] individuals...The people that miss, miss, miss -- it's gonna catch up with them. But we're going to say that this guy here, he comes to work every day, every day. But he comes across a run of bad luck, just because of circumstances in his life, and he gets nailed, he gets nailed, he gets nailed -- boom! He's on the street. They're going to look at his last two months of attendance. They're not going to look at his last six years or whatever.

Do you see your union elected officials very often, you know? They're always in meetings, determining our future. We don't have enough of 'em [elected officials]-- the only time you have input with them is at the town hall and there ain't enough time at the town hall.

The rep-OMAs [module advisors] seem to be too tight with the nonrep-OMAs, and they just want numbers anymore. Have you looked at a MAC NOD [notice of decision] log lately...That's from our partnership up there making
decisions that affect us, that we had no input into...This is what your union leader said you will do, -- and there ain't nothing you can do about it, cause there's no grievance procedure here.

**Skilled Trades**

We’re supposed to have a six step process. They can pass all six steps and send you out [on] one offense....just to give you an example, a guy had recently made WUC [team leader]. One day, I think it was on a Saturday, the people had ran their production and they wanted to leave an hour early or something like that. The team said, well we’re going, we’re done, we have nothing else to do, why should we just hang around for another hour? So being the WUC, he said okay, I’ll take the responsibility, we’ll all leave an hour early. So he left with them. They fired him and they put the whole team under red zone or something like that. Now he should have been warned or given a chance and told: you can’t do that any more. And that’s the reward you get for taking on responsibility.

**Powertrain A Crew**

Still that favoritism going on. There was no question in the old world. The old world was by no means better than Saturn, but there was a clearer understanding if something were to happen. If I were to have an attendance problem, you go through the steps. In the old world it didn't really work, because they were so broad, but at least you had the process. But [here] there is the possibility, and I know situations where people are in [it]. They go from nothing to D-day. There should be some guidelines and some flexibility, because being so rigid it almost advocates favoritism, because this guy's a good worker and this happened, and the rule says...we’ve gotta fire him.

Members felt that team leaders could not represent them since they were not trained sufficiently, did not have adequate time, and did not see it as their role. Module advisors were not seen as adequate representatives because they were perceived as too business/production oriented,
lacking in authority, and worried about non-rep approval. They are also not elected by the membership they represent. Module advisors were often involved in the very issues for which members were seeking representation. For example cuts and displacements in team manning, and the consultation process, all typically involved module advisors.

Body Systems B Crew

You want to call [the WJC/team leader] your first line of representation? He's got too much other stuff to do. He's out there building cars, he's running the meetings...you need somebody out [whose] job is to represent people out there on the floor, not to build cars, not to be chasing down that other stuff somebody's got him doing. He needs to take care of people...only the people. They're doing too much, they don't have time to represent you.

Same with the OMAs. They're management as far as I'm concerned. I don't care [what] they call them...They're not representative of the people. They add every kind of value to the management. They are taking our union worker and making them do managerial functions. I mean they're needed as far as management is concerned, but [as] to us being represented...they aren't valuable at all. They don't write grievances. They don't put it down on paper where somebody will have to come up with the answer.

If you were being represented by what you call your committeeman, [and] you thought he wasn't giving you the right answer, you could go higher and higher until you really get real representation, not just one guy but it's the book that's your guideline. We all live with the fear that you can get fired...There isn't anything that you can do about it. I have never had any trouble. I come to work all the time, but there's always...I feel a threat of being fired.

No one fights for you. You could be driving a tow motor and accidentally bust a water pipe. It'll go right to the red zone and the red zone is one step away. You happen to have one more accident and they think, you know, that you have no representation to fight for you...there goes your job. I'm afraid of being fired...
I hated old world, when I saw the union representative helping the troublemaker all the time. I hated that. And, I don't ever want to see that come back, but I do want some representation. Something that you can count on, that you know will be there to help you if there is a problem. That doesn't seem to exist over here.

Really we need two managers where that representative is doing management's job. It shouldn't be a representative guy doing that. It should be two managers and then our representative helping us.

There's no way to balance it; one guy can get something, another guy can't. You get somebody representing everybody and, listen, you gave this guy a day off last week, this guy wants it this week...we don't have a system of being fair. It can be unfair.

There was two jobs on our team; two positions they combined into one. There's a person out if you know what I mean. It's too much to do right -- both those jobs, .... no representation; you say, "Hey, you ain't eliminating those jobs, we need those two people."

A contrasting view of module advisor representation was presented by Vehicle Systems C Crew:

I think they [rep Wumas] put in a little bit more of a fight for something that you want. They really hear you out. They hear what you have to say.

Another perspective on this issue of representation and advocacy issue was provided by the focus group of module advisors themselves:

Union Module Advisors

In some aspects I think they have some team members that have not been treated fairly. And I’ve got to say it because it’s true, some have not been treated fairly in the process of -- attendance is the biggest one that I can speak on, because before we had this new attendance policy, there may be one person that may have missed 300
hours, and then you’ve got another person that’s missed the same amount of hours. Where the one person may have been in a consultation process, and the other one hasn’t even been talked to. So you tell me what’s wrong with that picture. They each have the same amount of reasons why they were off. Maybe they were sick or their wife or their husband was sick. But for some reason whether it’s good old boy syndrome...I don’t know. In some instances I got to say it was good old boy syndrome because you knew that person and you covered for them, even in a leadership position. And I saw this when I first became a module advisor. I could not understand how come some individuals had so many hours and they were not in a consultation process, where another person who may have had less than that was in a consultation process.

People are accustomed to [a] committieemen to be able to write a grievance. We’re not set up on that same system, and that’s where the problems are occurring. We have a lot of people here that have a lot of seniority, and they’re accustomed to that committieeman being right there to answer whatever their call may be, petty or whatever, they’re used to him being there. Writing a grievance regardless of what it is. They want that grievance written, even if it’s not even worth writing, they want that, because they got that at their old plant.

Here you don’t have that...We as resources to them...we get the matter resolved. Now it’s not through the grievance process all the time. You don’t have to have a grievance to solve every issue. You get them tied in with the right people. You direct them in the right direction, get the information for them, and they’ll still come up with the same results. It’s not the grievance process, not necessarily the committieeman that’s going to be out there. Just management against the union. The committieeman always stood hard and fast, even if he went in the back room and joked with the manager at the end of it, or even before, "this is the role I’m going to play while we’re in front of this person that we’re grieving for," and they play that role...So they were still kind of playing games, in my opinion. I saw that happen a lot.

We [OMAs] are like committieemen, but we just don’t have that name...Because first of all, we do grieve whatever it is, but we don’t put it all down on paper. It’s just in a different perspective of how we handle it...Whereas we don’t file a grievance, we try to deal with the issue, and resolve it where it will be a win-win for all of us.
You still can grieve, if someone still wants a grievance, you can still go through the process through the VP and have them do that for you. But it’s not the automatic. For the committeeman, that was automatic. He had his grievance pad out, he was writing. He was waiting and ready.

I consider myself a resource to the people, and the object is if they’ve got an issue, it’s up to me to help them resolve it. It may not always be to their satisfaction, and I think that’s where the committeemen keeps coming up, because a lot of people feel that “because it doesn’t come out my way, then I want a committeeman.” The committeeman still couldn’t insure them that the grievance would come out in their favor, but for some reason...there’s just something about that grievance pad and that committeeman that people are stuck in that frame of mind.

I tell them that I represent. If you’ve got an issue, then I’ll find out what your issue is. I’ll find out the resources that need to be involved, and we’ll go from there. If you are wrong, I’ll let you know you’re wrong. If something that you did was not appropriate, then I’ll let you know that. Some people want to go wrong, and they want you to say it’s okay, but you can’t do that all the time because it’s...totally against the guidelines or the Memorandum of Agreement that we here at Saturn...treat each other with respect.

As a represented module advisor, we can have a decision that was made, let’s just say people leaving early. I’m not going to stand at the back door, or stand in the alley way, or stand in the parking lot, looking at seeing who leaves. My non-rep partner will. If my partner catches them, and they know they’re not supposed to leave, that’s it...I’m supposed to stop them before they get to that door. That’s my job. I could say, "you’re asking for trouble. You go out that door, this is what’s going to happen." Now if they continue out the door, that’s on them. They know what’s going to happen. I have to forewarn them, but I’m not standing out in the parking lot, that’s not my job. But the management non-rep can do that.

Neither one of us [rep and non-rep OMAs] has more authority. I say how we carry things out is different. Yeah, there are certain things that I can, and there are certain things that I cannot, do. Because I must always remember that I have to represent that team member. If the team member’s wrong, I sit down and tell them, "you know, that wasn’t right, you shouldn’t have done that." But I can’t sit up and know somebody did something wrong, and try to make it so that they don’t get in
trouble. I can't do that. They're politicking for these committeemen. "You wouldn't have that problem if you had a committeeman, because he would have filed your grievance and you would have got paid for that."

While various alternatives to the traditional committeemen structure were discussed, all included the election of representatives. Some saw this as a way to increase authority when dealing with non-rep module advisors, since elected representatives would be directly responsible to a constituency.

**Body Systems A Crew**

In the old world they were referring to, every day you went into work you had a set of rules to play by. Here, the rules you start out with at 6:00 this morning ain't the same rules you got when you leave here at 4:00.

Well in the old world, if you had a problem, an issue, a grievance or whatever, you had a cycle to go through to get it resolved. Here you kinda go talk to somebody and they kinda brush it off and some cases you know that's the way it is.

The non-rep should be doing the discipline...Right now the rep is doing more than the non-rep. With GM it was management, now it's people carrying union cards.

To me that's what's good about committeemen and grievances. People get fired here, they can just kiss the world good-bye. You won't come back. To me that was what was good about the old world. You know you [might] get fired, you might make a mistake and get fired. But if you have the committeemen fighting for you, you know you get your job back. Here you don't.

Personally, I've got over nineteen years with GM and Saturn. In that nineteen years, I've missed less than forty-eight hours, not counting vacations and stuff like that. I'm talking missed work. I come to work. This attendance guideline has scared the hell out of me. Because I'm getting to the age right now, as you get older your health's going to start to deteriorate. And
right now we've got a young workforce out here. But that's not gonna be forever. There's gonna be a day when everybody's gonna start getting old. And these damn rotating shifts are killing me. That's gonna make me get older a hell of a lot faster.... As a representative in the old world, I've seen it happen time and time again. People would come to work. They had good attendance and was a good worker, but they go through family problems. Here your head's liable to be handed to you. And that's dehumanizing people.

It all comes under representation. What we need in my opinion is a bargaining committee. Because there you've got the checks and balances. That's what a bargaining committee is in the old world. You've got the administrative - the President and Executive Board, and the Bargaining Committee over here. You've got checks and balances. Here there are no checks and balances. You need administrative UAW people to do the business type things. You need a bargaining committee over here to represent the people, and take care of contractual type issues. That should be two separate functions. You cannot do both. I don't mean that these two groups don't work together and meet regularly. But one's main focus should be on being involved in the business, and [the other on] the bargaining unit to be involved in contractual type issues.

**Body Systems B Crew**

The problem lies, and this is my own opinion, [in] the representative OMA not having anyone to answer to in the membership, because he knows as long as he sides with management he's got his job. Whereas in the old world, if he was elected and he, for lack of a better term, screwed one of us, he knows that would get around and he wouldn't be in that position come the next election.

**Powertrain C Crew**

They need a certain amount elected, not everybody, a certain amount. They need somebody that is hired for me. We got two factions here. We got MDU [Members for a Democratic Union] and we got the Vision Team. Right now I wear a Vision Team badge because I sure don't like what MDU stands for, because they're strictly foremen's time clock committee, old world. That's what they want, and I don't. But, I don't want to, how can I put it, kiss management's ass either. Have someone elected,
besides our vice-presidents. Have someone down there
that we can call who is elected.

A lot of people want all WUMAs elected. I don't believe
in that. I believe we need a crew leader elected, like
a committeeman-at-large, so that elected person would
keep our rep-WUMA in the right place. Because if you
have a problem, that is the person I'd call. I'd call
the rep-WUMA first.

I had a committeeman in the old world that just totally
screwed me right up, you know? The guy just put me off,
just put me off, and I had a major problem. But, he
just put me off and put me off until he was already
gone. So the old world didn't work either.

Vehicle Systems C Crew

Committeeman, having or ' on the floor, I wouldn't
necessarily think of it as going back to the old GM way.
I think it would be good because then this person could
bring issues back to the other .... people and let them
know what's going on the floor, what's the likes or
dislikes. Sometimes we do the member-to-member and then
people find out things that way. You give your opinions
and what you feel is a problem, and what you like about
Saturn. Those are only every once in a while, and I
think if there's a person in the union that can come out
and do this once in a while, that would be great. But
like I said, it might be an overwhelming job to have
maybe like one person per module. That could be a
stressful job. And then again things may be going
great, and that might not be bad at all.

I'd say maybe elect them...elections are nice because
then you know if a person got it, they got it fairly,
kind of because they were voted for.

Summary

Members compare the visible presence of the committeeman
in GM to the lack of visible representation at Saturn. Many
were looking for accessible advocates who could write
grievances for them if they felt treatment was inequitable or
unfair. Complaints were voiced regarding the perceived lack of representation after decisions were made. Examples included inadequate representation in the consultation process (i.e., fear about job loss), inability to get questions answered and decisions made, inconsistency or favoritism in treatment by module advisors (i.e., manpower reductions, transfers, etc.) Members also reported frustration that they could not grieve decisions the union was party to, for example the attendance policy.

**THE LOCAL UNION IN THE JOINT SELECTION PROCESS**

There appears to be a perception among some members that the joint selection process for partnered positions (module advisors and other jointly selected partnership positions) is not strictly merit or skill-based, and that politics plays a role. Since approximately 400 full time jobs for union partners are filled through the joint selection process, the stakes are high. The significant re-assignments and new appointments following the 1993 election and the hiring of C-crew were cited as examples (changes in 46 out of 48 partnerships).

*Body Systems A Crew*

I don't think you're ever going to please everybody, no matter who's elected in this plant. There's always going to be a group who's not happy with current leadership. I think electing union reps is a good idea. But would it solve all our problems? I don't think so. I don't think the whole system needs to be changed, because there's a lot I like about it for myself...I like the shift rotation. People spoke who didn't like
it. I love it. I wouldn't trade it for the world. I can't stand being on one shift. For myself I wouldn't give up five-day weekends for nothing. I get to go home.

You've got to take politics out of it, and if you've got somebody on the floor that's in a leadership position or whatever position and they're disagreeing with you, you don't remove them because they're disagreeing with what you're saying. You've got to understand where they are coming from and work with them. Try to resolve the issues...And the only way that is going to happen is to take it out of political appointment and let the people elect them. They got to be elected so that if they are going to represent the people they are responsible [to the electorate] and not to a political organization. If we're gonna have WUMAs, have them elected so they are responsible to the people. Their responsibility is to the people, that is why you have two, a rep and a non-rep. They are not jointly selected...bottom line. Take that snow job out. That don't fly. That dog don't hunt. They are not jointly selected. The union selects them.

**Powertrain B Crew**

I would say that neither one [rep or non-rep WUMAs] are doing any real representing. They're just trying to sort out the problems and give you their idea, their point of view. I don't get any feeling of representation from my WUMAs. That's not their job. Since they're appointed, they want to do good for the person who appointed them.

**Vehicle Systems A Crew**

I believe it's a power struggle. Those who are in charge and those who wish to be. You get up there, you get a lot of power. Because all the people that's under you will be appointed. You get 800 people below you appointed. You're going to get the support. Just about any issue that comes through. If you were looking for a leadership position, and you didn't go along with your top UAW leadership with that view-point, personally [I'm] not so sure of what your chances are of receiving that job.

As you change leadership you get different people who really don't know where they're gonna stand on a particular issue. I strongly believe that your UAW leadership at least needs to be in that position to
build up the relationship for the people to be able to trust him. It just seems like people are in that position for such a short time that the relationship does not develop there... It just takes a while to get to know him. It's really pretty much been our experience for a while people have moved through the system rapidly, so for about [every] six, eight months we've had a different representative.

I've always felt that time is probably the biggest factor. Back in the old days, when we weren't hardly building [but] a few cars, damn, we were busy. Planning and working, doing this and that, and we had time to go over every stone. Some guys sat there and talked for hours and hours a day. Stuff [got] worked on. These days you build cars 9 1/2 hours [a day].

We had time. Now, if you really, really wanted to make yourself involved here, [if] the whole team was committed to really using the structure and everything we have, we could really make it work. But time is such a big factor, when we do these things.

It started out where a lot of things were in the team's control, and you looked at [the] team's performance in dealing with some of these real tough issues. I think one of the reasons why we don't have so much control [now] is because teams failed to be able to handle [it] in the way that they should have. I'm not trying to blame the teams or anybody specifically for it, but you're talking about putting a group of people together with a whole lot of roles and responsibilities, a new work environment, in a new state and all these different changes happening here in their lives, and having to deal with issues that they never had to deal with at work. In some ways too much to be able to deal with at times.

Confusion exists between the managerial and representational roles and responsibilities of union partners. Also, module advisors were now reported to have less experience in module-specific operations than they did before the addition of the third crew, when for the most part they were selected out of the modules they were advising. Concern was also expressed about a trend toward
recentralization and bureaucratization. Members were frustrated at having less decision making authority than they did in Saturn's early years. They perceived that module advisors, union leaders and the MAC were recentralizing control and decision making authority at the expense of the teams.

Here is a view from the Skilled Trades group protesting the erosion of their autonomy:

There's more favoritism shown here than any place I've ever seen...certain people can have more freedom than others...if you get a person that's disliked by the WUMAs, then they're scrutinizing that person, they're always singling that one out.

In the old world you had...the committeeman to fall back on. If you were being treated unjustly, you called the committeeman and the union would fight for you. In this plant...the union members are taking care of the other union members with positions, not people on the floor. The WUMAs are taking care of the WUMAs, the counselors or whatever you call them are taking care of themselves. They're working up the ladder, they're looking for a day job, they're not looking to rotate.

I have one WUMA that's a rep, and I think he's one of the best we have. He is concerned about people. And he stays around us, he communicates with us, and he talks to us, and he's a good representative to us.

They've got represented folks doing management's job, which is policing other UAW folks.

[The union leadership] has too much power....cronies everywhere, and they....got their little cushy job. Half of them don't rotate. They're not going to buck the system. There's too much power at that level here. If you started electing people, people will elect people to represent them. It will be a people's place again.

Things have changed quite a bit. Us lowly folks on the floor used to be considered trustworthy and being responsible for our own actions. Slowly but surely everything, every decision that comes about has to be
approved more and more by our WUMAs, and the decision making has slipped away from the teams.

A tradesman knows what his job is, he knows there’s a problem here, and he knows how to go fix it. He does not need anyone telling him what to do. Now maybe on the op-tech side, on the line and in the production areas there’s probably more of a necessity for a person in that position to help organize things and keep things rolling correctly. We run more cars on Saturday than we do any other day of the week. Whose here on Saturday? ...... None of the resources, just the people that work for a living. It’s a proven fact, night shift always runs more cars, more engines than day shift. What’s that tell you? Leave the people alone, they’ll do the job. But just leave them alone.

Vehicle Systems B Crew

He should be voted into that position, …the group should be able to vote the person they want. They have an appointed person… and that’s unfair. They’re not representing the people on the floor… they’re representing themselves. As far as the rep or the non-rep OMA, and I’ve heard this lately, they are not your union representative, they are represented by the union. It makes a difference. They’re not like a committee man. They are in the union, they represented their union, but they are not your union representative. You gotta understand that.

In our area, they were better years ago, the WUMAs, I believe, represented you more. The rep….you felt like they’d come off the line. You felt like they’d come off the line and they’d understand your problem.

I know with ours [non-rep Wuma], he had never been a WUMA or in that kind of a position. He had the education, but he had no experience. Now, the rep had the hands-on kind of experience in the build of that car that was uppermost in everybody's mind, ergonomics. So, they depended on each other heavily. They did not dabble in the business of the team as much as they want to be involved with the goings on in the team now. They feel like they, in order to find something to do with themselves, they got to be in the teams, as opposed to allowing the teams to run their own business. Like decision making was taken more away from the teams, and a lot of what they'd been preaching right along as far as the teams having a say in everything, you run the business. Now, it's you run the business, but I'm going to tell you how to do it. I think it got worse after the
C-crew split. It just recently started trouble, real fast downhill. With the implementation of the AMA's role. From a business standpoint, they're the ones that actually run the D-ring meetings. And, hence, you go to a D-ring meeting, and decisions are already made and now they're just dispersed among the OMAs. And now that paperwork is beginning to go down to the WUCs. It's just paper. You got to do this. You got to do that. And less and less time toward building the car. And as we then complain about the build issues, they kind of go on deaf ears because everybody's taking about administrative issues. You get in the computer and you have to sit there all day trying to do administrative stuff. The local management put a big push on getting this place lean. Getting it as lean as they can so it can show the biggest profit.

Summary

Frustration was expressed concerning the selection process for full-time union positions in the partnership, which were perceived by some members as creating a new privileged class within the local. In addition, members believed that the teams have lost autonomy and decision making authority. Saturn "old timers" worried that the decision making authority and opportunities they experienced in the early years no longer existed. They "thought we had a say, and now we don't", perceiving that control was being centralized and decisions which used to fall within the authority of the team were now being made at higher levels.
Support as well as criticism was voiced regarding the impact of the partnership arrangements on union membership. While a serious question of representation appears to exist, as identified above, the majority of those interviewed preferred the Saturn partnership work system to that of General Motors, and did not want to return to GM. For example:

**Skilled Trades**

It's a good system, it could work if it was used properly. But what's happening, I think, is that we're getting these people down here with these old attitudes of "I'm the boss, you do it this way." They feel like they're back in the old world.

All in all, this is probably the best place I ever worked. Best, but sometimes it is the most screwed up place.
I'd rather work here than to go back to GM.
I'd rather be here.
I'd rather work here too.
I would go back; it would depend on where I was going.
I definitely would rather be here. I've been here from the beginning and the basic concept of this whole thing is terrific.

**Body Systems A Crew**

I don't have seniority, the way some of these people here do. I joined GM in 1985. I was fortunate, I hardly ever got laid off. I came to Saturn as my plant was announcing it's closing. But I like the fact that down here we rotate jobs. And everybody at least on our team is encouraged to pull their share. You got a bad job, one day, and a good job the [next]. Nobody has to do the same jobs. It's not somebody's got a cushy job all day like the other [plants].
I agree with that. I agree 100% with that. That's one thing that we are doing right.

In the old world, you could if you had enough seniority fit into a cushy job.

I just want to say, we're doing a lot of good things. We're doing a lot of positive things. And we can fix the system we got here without going back completely to the old system. But we cannot exist without the people on the floor being represented. This is like a lawyer. You hire a lawyer and you've got insurance and you hope you never need it. But you've got to have that insurance. If my contractual rights are being violated, I've got to have a system to go through. You don't have to go back to the old committeemen system, you don't have to do that. But bottom line you have to have a procedure, or a system in place to address grievances. And you have to have somebody that has the clout and the guts to process it.

**Powertrain A Crew**

The structure here is good. Implementing the structure there are rough roads. The difference is the responsibility never changed. You cannot pass the buck in the old world. If you didn't do the job, your foreman was responsible to get you to do the job, or to put you in a disciplinary action. Here, it's up to the teams, and a lot of times the teams don't function well in that capacity because we're all representing union people. I say the structure is fairly good. I like the structure. It's who is the manager of certain situations that sometimes causes the problem. Who is the person that is empowered in that situation, and who is responsible? I would [say] that 85% of it I prefer, and there's possibly areas that we need to improve on and I imagine that will be an ongoing thing. We're never going to get it perfect.

I prefer this structure. Even though it has errors [that] gotta be roughed out a while. I prefer this.

**Vehicle Systems A Crew**

From what I'm used to [at GM] the business had a supervisor for every thirty people or so. With our system, how many people we have in a module, 100? And there's two people that are over [us]. They can cover a lot more ground and equal out the business part, the rep
and non-rep. They work good together, they see things from a different perspective. The supervisor was mainly concerned with making sure the cars went through the area. That was generally it.

[Even with] the conflict and everything we have down here, [it] is still a heck of a place to work. I wish I got here twenty years ago really, because I can afford a little conflict once in a while. You do have a lot of it, but it's still a good place to work. We are not there in heaven yet, we're not in utopia. It's been a good place to work.

Body Systems B Crew

Quality is not our problem. I have as much right to turn that line off, being nobody, as the representative WUMA. I have that much power in my hand. If I see a quality error and it's bad enough that I don't want to run the line, I have that power. I don't need to ask anybody. My manager cannot make me turn that line on until a viable solution is in place, and is in agreement with me...That is one thing they haven't taken away from us. We can stop that line as long as we have just cause. That's what makes this plant successful, by the way. The sole reason it's successful.

Vehicle Systems C Crew

I'd have to say that I prefer the way things are now. I feel like we run our own little business in our team. I think the more responsibility we show, the more that you're kind of left on your own to do what you need to do. We have a really great team, and we handle things real well. We're almost to the point to where we could probably be self-directed. I know that's something right now that we can't do, but we're striving for that later in the future. Every once in a while we might still need a little bit of help, but I like that because I just kind of felt with the old world you were in your job but you didn't know for how long, and you didn't feel really like you were involved as much.

I feel that the powers are more enhanced now, and that being represented, they let us make a lot more decisions on things...I think we're represented pretty well. If you don't get involved with the other people around you, or with the situation, then things are going to pass by, quality is going to slip down. I think it's a lot happier atmosphere. Everybody gets along. You don't
have to be whistling and hugging each other every day, but I like being involved. I like the open communication and we have good communication in our area. I'd like to have more communication with my union and with the higher ups such as AMAs and others.

**Powertrain A Crew**

There's more stress here than any other area I've ever dealt in.

This particular process, the partnership, the team concept, it requires more, don't let anybody fool you, of the worker than old GM work [system]. When I say more I didn't say stress, but I mean overall work and looking at your quality. You have people in point roles. There's the training. Old GM world, you went in, found your machine and you watched your schedule. People say stress. I have not experienced the stress. Maybe those people have. What I was referring to was responsibility. No you don't work harder. More responsibility [is] delegated to you.

[Quality's] better because we have a decision to say "no, we're not going to run that crap." "No, these parts aren't clean enough from the vendor." I was in a blower department, in [former GM plant]. You guys know what happened [there]. Right down the tubes. They were running stuff through there we knew was no good. I'd tell my foreman, "this is not working out. It's not gauging right." "Run it." I'd just look at him. He'd say to run it. If you didn't, that was your job.

[Here] the company is letting us. Here again they are allowing us this ability. The company is allowing the union workers a joint venture. A 50-50 or whatever supposedly to control the quality.

So, union has brought a dignity to the workforce, and without that dignity the workforce wouldn't be able to produce it's quality products if they wanted to.

**Union Module Advisors**

They want the traditional world. They said they wanted Saturn when they came here, but a lot of them just wanted a job. They didn't care where it was. They came here for the wrong reason...They felt that "okay, I'm going to get my feet in the door, but then I want it to be the traditional way. I want the timecards, I want the
committeemen", because a lot of them, some of the individuals out there, were ex-committeemen. They'll tell you, "well in the old world I was committeeman for 15 years and this is how we handled it." But you're not in the old world, and you're not a committeeman any more.

I think you've got a mixture. You've got the people that were first hired, 91, 92. Really happy. They wanted to be here because the majority of them you'll find were working at other General Motors plants or working outside of GM. So they wanted to come, but they didn't have to. It wasn't like they were desperate for a job. Something new, different. It wasn't like the old world. You could use your mind. And that was unusual because at GM they don't want anything but your body. Strong back, strong hands, that's all they ever wanted from you.

The last people that we're hiring, I did hire a few of them, they just wanted a job. Hadn't worked in four or five years. A lot of them came in with attitudes and they didn't like what we were doing. But they didn't display that until after they got the job. A lot of them said what they felt needed to be said. By that time we had interviewed so many thousands of people, you could talk to a couple of people and they could tell you what you were going to face when you came down here. The interview process didn't change so dramatically...They bought into a job, and you don't know how desperate it is until you've been laid off. And that was the problem. Those people needed a job, and I can't blame them. They had to feed their families. But then it should have been up to them to comply.

We're always doing things to cater to people's needs. Now back in January...we had too many cars. So what they did was they said, you could either take [time off] without pay, use vacation time or come in here and do some training. That wasn't good enough for these people. They should have laid them off, because when they got ready to do anything they had to go down to the bowling alley and get them and bring them back in here because they weren't doing what they were supposed to be doing... That wouldn't have happened in GM. [If] GM had too many cars, lay you off, go on to the unemployment office, short work week or whatever... get no pay for it. We ran 800 cars a day...Well if you're on a good roll you can milk that probably by first break when you're on days. So that means you got from probably 12:30, one o'clock to 4:30 that you can do training. There's not too many places that's going to do that for you. Every day we did that from March through April. So everybody got a chance. That meant you had extra training hours, that you could get your training done...
You could have used your vacation, you could have taken it without pay, or you could have come in. You had all kinds of options.

The majority of the people took the come to work option. ...But when they got caught leaving [early], not going to class...they don't want to admit their fault, that they were supposed to have been in here that ten hours. But because you caught them, that's when they wanted to get an attitude. And that's what I think it is, making people grow up.

Vehicle Systems L 'rew

Everybody will agree with me here, or maybe not, but what we have here is not all bad.

And I'm not saying all is bad. I'm totally grateful for my job here at Saturn. I think we build a good car, there's good people here.

Powertrain B Crew

Management is better here, I mean as far as letting us make some decisions without the foreman telling us "look you got to do this all day." Management is pretty good. I've enjoyed working with the engineers. I enjoy, you know, being here. But as far as union representatives, and I've never gone to one, I've never had a problem either here or in the old world...I would like some sort of representation if I ever needed it.

I like it here too. Getting away from the old structure which was seriously rigid and unbending...to a bending one, was a good idea, but I think that the bending has stopped now. Management's set and the people are where they want them, and "let's try not to make any waves and make all the cars we can." In other words, the comfort zone. I think management is trying to get into the comfort zone, I think they're sitting in their comfort zone and they don't want to get up and listen because they might have to do some leg work. I just think that they want to see the system work.

I think most of the people here like what we've got. There're just things that need to be worked out.
Summary

In all of the ten focus groups I heard strong support for the Saturn partnership. This finding is consistent with the 1993 member-to-member survey which indicated significant satisfaction with the partnership arrangements, 84% responding that Saturn was "great", or "headed in the right direction", and only 10% stating that it was "headed in the wrong direction", or "I wish I could find another job."

Still, some evidence exists that there is a difference between the early Saturn hires and those hired more recently in their attitudes toward the partnership arrangements.

Conclusions

1) The local union gets recognition, but little credit for its role in representing the collective in business decision making, strategy development, and policy making with Saturn management.

2) In addition, criticism has been directed at the local's inability to provide individual advocacy to members who feel they have been treated unfairly as a consequence of decisions in which the union may or may not have participated.

3) A trend toward centralization of decision making authority within the leadership at the business units, local
union, or MAC has left some team members feeling frustrated and "dисempowered". Certain centralizing tendencies, which perhaps mirror the bureaucracies of both General Motors and the UAW, may be unintentional yet counterproductive.

4) Concern exists about the equity and method by which the union "selects" members for the full time partnership positions. The substantial power and influence these selections provide have been a subject of the internal politics of the local, as well as the disputes between the local and international union.

DISCUSSION

It is clear from interviews, observations and empirical data that this local union has focused its time, energy, resources, and attention on organizing an institutional role in the governance and management of the Saturn Corporation. However, this focus on direct collective participation, in the eyes of many members, may be occurring at the expense of individual membership representation.

Clearly when judging the performance of the local, members are comparing their representation experience to the grievance committeeman structure they worked under at GM. This raises the question as to whether employees who had not previously worked under the committeeman structure at GM
would be as critical of individual representation at Saturn. While it is not possible to answer that question empirically, since every member of Local 1853 was formerly employed by GM, there are some theoretical frameworks which might be useful in considering this problem. In some ways the designers of the partnership arrangements, appear to have accepted the logic of human resource management (HRM) especially with regard to the generation and resolution of workplace conflict. In accepting the HRM logic they may have traded away some representational democracy for participatory democracy (extensive participation in governance and management through self-directed teams or union co-management partnerships).

While industrial relations (IR) theory assumes conflict to be a natural outcome of the differing interests of labor and management, HRM theory sees conflict as pathological, a consequence of misaligned goals, or poor management practices which ignore the principles of humane leadership and treatment of employees. This unitary perspective of HRM challenges both the Marxist literature which views capitalism as generating irreconcilably conflictual employment relations, and pluralist/institutional IR theory, which sees conflict as manageable with both labor and management having legitimate interests (Cutcher-Gershenfeld 1991). IR theory not only sees conflict as a natural aspect of employment relations but also as a potentially beneficial one. Walton and McKersie (1965) theorized labor-management relations as
mixed motive, a combination based on both conflict and cooperation.

HRM theory has roots in Weberian principles of bureaucracy which allow for centralized power, organizational design and rational-legal authority to eliminate conflict efficiently (Perrow 1986), and on scientific management which did not accept conflict as legitimate (Kochan 1980). Barnard (1938), a pioneering member of the Human Relations school, theoretical predecessor of HRM, argued that organizations were essentially cooperative systems, not products of engineering. He emphasized communications, authority from below, leaders as coordinators, common goals, and the importance of work groups. While goals could be established top-down, compliance was seen as bottom-up (Scott 1987). Thus, the critical role of management was to establish unity of goals, and effective organization-wide support for focusing resources toward their achievement. Rather than mobilizing resources through command and control, the Human Relations school proposed coordination and motivation.

As the Human Relations school evolved into Human Resources Management, scholars like McGregor (1960) pushed even further on the subject of organizational goals and motivation arguing that it was possible to align the interests of labor and management through the use of organizational structures, rewards, and leadership style (Cutcher-Gershenfeld 1991). While the classical Human Relations school assumes workers are motivated by more than
economics, HRM assumes they want to contribute to goals they have participated in establishing, and that they can exercise more creativity and control over their own work than management traditionally allows (Miles 1975).

This HRM literature provides the basis for a theory of participation in work systems design to enhance motivation and performance. At Saturn the Union appears to have extended high participation work systems through focusing its energy on organizing input, institutional (through joint labor-management decision rings), and direct (through member participation in managerial decision making-partnering).

The intent, I believe, was to better represent worker interests through direct participation in policy and decision making (alignment of goals and interests in HRM terminology).

The union and management architects of the partnership design theorized that in this form of union democracy the need for individual representation would be reduced since direct union input would avoid most conflict. Representation was in a sense "front loaded" by focusing on policy and decision making for the collective membership, with the expectation that in the end this would serve individual needs as well. Thus, the resources of the union were devoted to designing and implementing more sophisticated forms of participation rather than forms for representing individuals in conflict situations or 'representational democracy'.
This focus on organizing for common goals and consistent policies to achieve equity and the collective interest, may explain the tendency (described above) to recentralize decision making from the team and module levels to the business unit leadership and MAC. Further, theoretical assumptions about the source and resolution of workplace conflict may explain the partnership design which concentrates power in a few elected leaders who represent the union in partnership business decision making (SAC, MAC), approve over 400 jointly selected full time union partners, and function as the only formal grievance filers. This question of local union structure will be further addressed in Chapter 5.

Yet even with the concerns expressed, the majority of workers continue to indicate a preference for the Saturn partnership over the option of returning to the traditional GM/UAW system of shopfloor relations. They seem to be calling for an alternative that maintains a direct union voice in collective decisions affecting the enterprise, and provides worker input into day to day operations that affect product quality and the way work is done. And they also appear to like the flexibility Saturn and the UAW have shown when crisis or unanticipated problems arise, such as the options offered as alternatives to temporary shutdowns. At the same time, they want an option for individual advocacy and they want to elect those who represent them in this capacity. In short, they seem to want both direct
participation in decisions that affect the common goals of
the enterprise, and an independent voice to represent their
individual interests and concerns in the day to day
implementation and management of the organization.

**Actions Taken Since the Interviews**

These interviews were completed in June, 1994. At that
time as part of the action-research relationship between MIT
and Saturn, the following recommendations were made:

- The election of some form of "advocate" by module, area,
or crew. These people should receive training in problem
  solving, the consultation process and grievance counseling or
  writing. They might report to the union vice-president
  assigned to each crew.

- Upgrade the role and training of WUCs and module
  advisors in representing team members frustrated by the
  impact of a business decision. This might include problem
  solving, the consultation process, and grievance writing or
  counseling. The allocation of additional time to handle these
  responsibilities would also be needed. The election of some
  Omas in each module to perform this role could also be
  considered.

- In order to deal with the communications issues raised
  in the interviews, some additional forms of direct
  communication between the local leadership and the floor
  should be considered. These include more frequent member-to-
  member opportunities. In addition to the site-wide surveys,
these could also be organized by Omas at the module level or Crew Leaders at the business unit level.

- In addition, increasing the amount of exposure to local leadership through direct meetings at the module, crew and business unit level could be useful at this time.

- The issue of recentralization and loss of autonomy may require attention by the local leadership. To some extent this was understandable with the maturing of the Saturn organization. However, the erosion of team authority has impacted morale and performance, and certain centralizing efforts may be unintentional and counterproductive. Therefore the local should look for opportunities to expand team autonomy in new directions.

Several months after these interviews and recommendations the local conducted a written survey, by questionnaire, of 420 randomly selected members where 53% reported that they were dissatisfied or very dissatisfied with the current level of representation from the local. This quantitative finding supports the qualitative data reported.

During the negotiations that followed in the fall of 1994, the contract was modified to allow for 14 union crew coordinators to be elected by the membership in April, 1995 with the authority to write grievances. After the contract was ratified we suggested to the MAC that these new crew coordinators and their partners be trained in "interest based" or "mutual gains" negotiations techniques. Our idea
was that this might help provide the type of representation
members were calling for without reverting back to the "old
system", and thereby creating an environment of low
trust/high conflict that eventually would drive out the
problem solving features of the partnership. The first such
training was held at MIT in January, 1996 and more sessions
are planned for the future.

The local union at Saturn continues to reorganize itself
in an attempt to find ways of representing individual needs
while at the same time representing collective interests in
business decisions. Another example of this occurred in
February, 1996 when the President of Local 1853 resigned his
position as president, but retained his dual role as union
MAC advisor. The First Vice President took over the
presidency thus creating for the first time the type of dual
leadership seen in other UAW locals, where power is split
between the president and the chairman of the grievance
committee. It is unclear at this time how this division of
power will unfold at Saturn, however the MAC advisor will
have authority over the newly elected crew coordinators, as
the chairman does in a traditional plant. This restructuring
of the union organization does reflect an ongoing recognition
of the representation issue, and may provide the necessary
balance between a participatory and representative form of
union democracy. Even in a highly participative organization
such as Saturn, a strong separate channel for representation
in conflict resolution may be required alongside strong union
institutional participation in governance and management. The question is, can this representative role be structured and implemented effectively without driving out the participatory features of the partnership, or further intensifying the political conflicts within the local union. These are issues that warrant analysis as experience with the new structure unfolds.
Chapter 5

Learning From Saturn: The Politics and Diffusion of Innovation

While Chapter 3 analyzed the quality performance outcomes of the partnership arrangement between the UAW and General Motors, Chapter 4 illustrated some of the challenges this model of management and governance poses for the local union. This chapter will explore issues related to diffusion and learning from Saturn by the UAW International Union and General Motors. Since we do not yet have the level of detail required to draw definitive conclusions about the extent of learning and diffusion of the Saturn experience within GM, the material in this chapter will be presented more as a series of questions or hypotheses to inform future work.

Ambivalence Toward the Saturn Model

While GM's management concluded that the corporation could not competitively manufacture a small car domestically under the existing labor contract and management policies, Saturn appears to have achieved its goal of providing General Motors with a viable alternative that could compete
effectively with Toyota and Honda. Yet, within both the UAW international union and the GM corporation, Saturn remains a controversial organization. For more than a decade, a debate over whether Saturn is, or should be, a model for the future of General Motors and the UAW has ensued across both organizations.

Roger Smith, GM's CEO during the creation and early development of Saturn stated its goal as:

Improving the efficiency and competitiveness of every plant we operate...Saturn is the key to GM's long-term competitiveness, survival, and success as a domestic producer".12

Yet, GM management has taken an ambivalent stand toward Saturn. On the one hand, the corporation relishes in the positive image that Saturn has achieved, and has urged other divisions to learn from Saturn's experiences. Saturn has marketed its products and image as: "A Different Kind of Car, A Different Kind of Company", and GM has gained enormous public relations benefits from this approach and from Saturn's quality performance to date. There is evidence that a few GM Divisions are attempting to duplicate some of Saturn's systems and principles. Saturn officials have documented hundreds of technical and process innovations that have already been transferred to the parent corporation. Further, Saturn's retailing experience has impacted new marketing approaches, particularly within the Oldsmobile organization.
Saturn builds on its partnership with the UAW, as well as other distinctive features, in positioning the company and its products in the minds of consumers. To date this approach has been very well received. On the other hand, while technical and marketing innovations have been adopted, there is little evidence that significant learning from or diffusion of Saturn's organizational innovations to other parts of GM and/or the UAW has occurred, particularly those around team concepts, co-management, and the partnership arrangement for joint governance. Based on this research, the lessons from Saturn to date would appear to include:

- The importance of designing on-line and off-line roles for both union leaders and members.
- The value of on-line co-management through partnerships of union and non-represented module advisors.
- The potential value-added of the union infrastructure providing a dense communications network.
- The strains to individual representation of a union partnership focus.
- The advantages and disadvantages of joint selection and direct election of partnership leaders.

And as we have seen, some of Saturn's quality performance can be attributed to the unique role of the UAW in the partnership design. Thus, the partnership arrangement itself may have real market value. Yet, to date neither GM nor the UAW international union have embraced Saturn and
attempted widespread diffusion of its partnership design and innovative industrial relations.

Moreover, GM has not committed funds requested by Saturn (and part of the original Saturn business plan) to design and build a second generation model, and expand production facilities to meet the strong demand for its cars. At 332,000 vehicles per year, Saturn's total capacity is currently at only 60% of its original business plan. A decision on expansion, scheduled for 1992, has been delayed each year and as of this writing has still not been announced. While Saturn management's recommendation was to expand the Spring Hill facility, GM is considering retooling an existing assembly plant elsewhere to produce Satrns.

Ambivalence toward Saturn as a model for the future has been equally strong within the UAW International. During 1994 when GM was deciding on whether to support Saturn's request for capital to expand production at Spring Hill and design a new model to replace the original, UAW International leaders argued against expanding the Spring Hill facility and favored an alternative proposal to build vehicles under the Saturn nameplate in another plant that was under consideration for closure.

According to Skip LeFauve, if Saturn expansion is outside of Spring Hill in an existing assembly plant, the expansion facility will be covered under a traditional UAW contract. Referring to a conversation with UAW President Steve Yokich, LeFauve reported in July 1995:
His words with me [were] "We can build quality cars [at] low cost under the national agreement," and [he] wants to prove that.13

However, LeFauve said that the Partnership Agreement operating in Spring Hill would remain intact. He also stated his belief that the same cooperative spirit could be achieved under the GM-UAW national agreement. Many inside Saturn believe the expansion will take place outside Spring Hill at GM's Wilmington, Delaware assembly plant, where the new Saturn will not be based on the current space frame design, but rather on the Opel GM currently producer in Europe. The plant manager from Saturn's assembly plant became Wilmington's plant manager early in 1996. A new contract has been negotiated for this facility that embodies some of the teamwork principles found at Saturn (and a considerable number of other UAW local agreements) but has kept the local agreement under the provisions of the national contract. Key features of the Saturn partnership such as co-management and joint governance were not included, limiting the diffusion of Saturn's model of a labor-management partnership.

While only preliminary, this evidence supports perceptions within Saturn that neither GM nor the UAW International is anxious to expand capacity at Spring Hill, or extend the Saturn partnership agreement to other plants. Further, the problem is complicated by the fact that the diffusion dilemma is a dual one, involving both the GM and UAW organizations.
DILEMMAS OF DIFFUSION

The problem of organizational learning and diffusion of innovation is a critical issue for contemporary industrial relations theory and policy (Locke and Jacoby, 1995). Researchers have struggled with the problems of diffusion for decades, first focusing on the adequacy of the work systems models (Walton, 1975, 1977), and later on the necessary support and commitment of top management and union leadership (Kochan, 1987). Further, Kochan and Cutcher-Gershenfeld (1988) found that in order to sustain and institutionalize innovation, the union leadership must be involved in strategic level decisions which impact economic performance, accompanied by workforce participation at the shop floor.

The literature also differentiates between evolutionary and revolutionary (exceptional) innovations, with the latter threatening existing technologies, routines and organizational competencies, and thus generating both resistance and limited results (Tushman and Anderson, 1986; Pils and MacDuffie, 1995). Further, Heckscher (1994) describes the phenomenon of the "successful failure" in which innovation fails to diffuse even after meeting its goals. He ascribes various causes to this pattern including resistance by managers who are threatened by or do not fully understand the innovation, inadequate succession planning, provincial competition between functional units that are motivated to
reject anything "not invented here", and inability to give up established control systems during a transformation effort.

Based on this literature and preliminary data collected at Saturn, GM, and the UAW, several alternative hypotheses can be generated to explain the ambivalence of GM and the UAW toward diffusion of the Saturn model. Five in particular will be discussed in this chapter. These include: I) The question of profitability; II) Maintenance of standards; III) Leadership succession and ownership of innovation; IV) The internal contradiction of exceptionalism; and V) Organizational boundaries. Further, since struggles exist within the local, and between the local and the international union, over the control and direction of the partnership model, I will also discuss the politics of the union as they relate to questions of diffusion.

HYPOTHESIS I: THE QUESTION OF PROFITABILITY

One possible explanation for the slow diffusion of the Saturn model is the question of its profitability. Despite profit sharing bonuses to employees, and statements (reported in Chapter 2) by Saturn's new president, Don Hudler that the company made profits in 1993, 1994, and 1995, many inside and outside GM question whether the original investment will be adequately amortized. In part this depends on whether any of that investment is shared by other GM divisions who benefited from innovations at Saturn. It also depends on whether the additional plant capacity is funded, which would lower per
unit costs. Data is not currently available to judge Saturn's profitability independent of General Motors'. Therefore, despite doubts about this hypothesis, we can not at this time determine whether inadequate return on investment is the explanation for ambivalence toward Saturn.

HYPOTHESIS II: MAINTAINING NATIONAL STANDARDS

Clearly the UAW international union has an ongoing interest in maintaining the standards that it has struggled for over the last fifty years. Saturn departs from and threatens to erode a number of principles and standards in significant ways. For example, seniority rights, job classifications, grievance committee structures, overtime and compensation plans are all areas where the Saturn model does not follow the national pattern. From the international's viewpoint, these are deviations from national patterns that may lead to whip-sawing and the undermining of its bargaining power in the industry. Therefore, it is reasonable for the international union to be cautious in embracing a new set of policies which depart from those in place in almost every other plant.

Further, Saturn represents innovation in a "greenfield" setting. While all UAW members transferred from other GM locations, they were still hired into and accepted a new work system within the new organizational and governance structure. While these practices may work well as a "complete package" in a "greenfield", a question remains about their
applicability in an ongoing "brownfield" operation, where employees might perceive the change process as an erosion of standards and a loss of their hard fought rights. To the extent that incumbent workers/members have equity built up in these standards, they would likely oppose new practices in their plants. Thus, a clear reason for ambivalence on the part of the international union is an effort to protect and maintain national standards and pattern bargaining. Additional research is necessary to determine whether these concerns are a cause for the International's ambivalence toward Saturn.

HYPOTHESIS III: LEADERSHIP SUCCESSION AND OWNERSHIP OF INNOVATION

As both Kochan (1987) and Heckscher (1994) point out, top management and union commitment is critical to the successful diffusion of innovative work organization. However, commitment often depends on the degree of involvement and "ownership" these leaders have in the creation and implementation of the innovation. If an organizational innovation is "inherited" through succession, without adequate planning to ensure continuity of understanding and ownership by the next generation of leaders, commitment to sustaining and diffusing the innovation can be lost.

In 1992 General Motors experienced a significant change in top management when long term Saturn supporters Chairman Robert Stempel and President Lloyd Reuss were replaced. After
these changes an announcement was made that Saturn would be integrated back into GM. Saturn's top management was able to convince the corporation to allow it to maintain its status as an independent corporation, however concern over future autonomy was expressed by many local leaders. The changes in GM's top management left Saturn without its originators in the leadership of the corporation. GM was now run by managers who had inherited, not created, Saturn.

*Business Week* (1992:86) put GM's challenge over Saturn as follows:

Saturn's sudden blast up the sales charts is heartening for its troubled parent. ...As foreign rivals continue to flood the market with new models, Saturn is meeting these head-on. Almost overnight, Saturn has become the highest quality American-made brand, with as few defects as Hondas and Nissans. It's stunningly successful at satisfying the customer, trailing only Lexus and Infiniti, according to researcher J.D. Power & Associates.

So the auto maker clearly has a winner on its hands. Now the question is: Will GM know what to do with it?

In October, 1994 Saturn was integrated into the GM's new Small Car Group (see Chapters 1 and 2), and Saturn lost some of the autonomy it enjoyed as a separate corporate entity. Saturn President Skip LeFauve was appointed executive in charge of the Small Car Group while he maintained the Saturn presidency. While this move could have been interpreted as an effort to diffuse the Saturn model into GM, UAW Local Union President Michael Bennett expressed the concerns of many when he said, "It could mean that GM ends up swallowing Saturn."14.
General Motors' new CEO Jack Smith justified the reorganization as an attempt to share components and engineering, and gain greater economies of scale in purchasing. Saturn leaders expressed dismay over this loss of autonomy, and the possibility of expanding capacity outside Spring Hill. Some saw this move as indicating an erosion of GM's commitment to the principles and organizational design of the partnership model.

As in the case with corporate management, the original architects of Saturn from within the national union are no longer in positions of power. Don Ephlin, the UAW international official most closely identified with Saturn's initiation and early development retired early from the union, in part because of differences with other top UAW leaders. As noted above, the current president of the UAW has been critical of Saturn, and opposes adopting the Saturn contract in other local unions. In addition, ideological opposition takes the form of a debate within the labor movement over the wisdom and viability of the type of labor-management partnership embodied in the Saturn model of transformed industrial relations. This debate is particularly strong within the UAW (Parker and Slaughter, 1988; Katz, 1988). Whether leadership succession is a cause for ambivalence toward Saturn will require additional research to answer.
HYPOTHESIS IV: THE INTERNAL CONTRADICTION OF EXCEPTIONALISM

Learning and diffusion is as much a political question as an economic one. The development of Saturn was completely dependent on the initiative and resources of the UAW and General Motors. Yet the greater and more exceptional the innovation, the more dependent on continued resources and support from the parent organization, the more vulnerable the island of innovation. Saturn and UAW Local 1853 are so different from their parents, GM and the UAW International, that the differences (exceptions) are what is highlighted, not the lineage. With GM and the UAW under such scrutiny and criticism over the past few years, the comparison is often seen as a liability. Even with the original creators of Saturn in positions of leadership, these conflicts inherent in organizational change and innovation would occur. However, with a new generation of leaders who inherited Saturn, the resources and desire to minimize tensions is reduced. Saturn's future, or that of any other organization far removed from the traditions and standards of its parent organization, may depend upon easing the organizational friction inherent in the process of innovation.

Struggles between local autonomy and centralization can also be seen as examples of corporate parents attempting to reign in innovative/exceptional offspring. Significant conflicts between local and international union interests have arisen at Saturn. Some of these involve the degree of
autonomy that the local should be afforded to depart from conventional UAW practices. But some also involve differences in philosophy and strategy as illustrated by the debate in 1992 between local and international leaders over the effects of strikes in UAW organized plants that supply components to Saturn (Wall Street Journal, 1992). While differences between local and national leaders are not unique to Saturn, the degree of autonomy the local at Saturn requires is probably greater than that of other locals more closely tied to pattern bargaining or national contract negotiations in the GM and UAW structure (Katz and Sabel, 1985; Katz, 1992). Thus, the potential for local-national conflicts may be higher than in more traditional local-national relationships.

Since its early history, the UAW has faced a problem of tension between local autonomy and democracy on the one hand, and a tendency toward national control and centralization on the other. These struggles continue today in the dissident "New Directions Movement" (opposing both the national and management on the issue of labor-management cooperation and joint programs), and in the pattern breaking contracts and production relations established at NUMMI and Saturn. While militants and political activists played a crucial role in the grass roots organizing of the UAW, as power was finally concentrated in a single political caucus, efforts to centralize control materialized. This reduced dissension, but also limited local autonomy to a certain extent. With
increasing centralization came departmentalization and a rise in the use of staff specialists.

The very process of innovation often requires local autonomy, decentralization, and a revolutionary "greenfield" approach. Often the more innovative the experiment, the more exceptional or "deviant" it is with respect to the traditional parent organization. Thus, barriers to sustaining and diffusing innovation can be created by tensions over centralization and evolutionary piecemeal approaches, as the parent organization tries to digest the change process. Additional data are required to assess whether the exceptional nature of Saturn has created problems for its diffusion back to GM and the UAW.

Hypothesis V: Organizational Boundaries

As Hecksher (1994) points out, another barrier to diffusion can be organizational boundaries which result in the "not invented here" syndrome. Managers or union leaders critical of the attention or resources devoted to innovative organizations often reject rather than embrace the "new model". Therefore, managing innovation across organizational boundaries is often key to sustaining and diffusing it. A question for future research is whether GM and the UAW have created organizational boundaries which limit diffusion. Some preliminary evidence indicates this may be the case.
Ambivalence toward Saturn may be limiting the transfer of innovation, even though one of Saturn's stated objectives was to serve as a learning laboratory for experimentation by the corporation. One anecdote illustrates this point. In 1995 we briefed a group of senior GM executives on the results of our study of the impact of the partnership on quality, and discussed how others in the company might learn from these data. One executive said:

It's ironic but unfortunately true that Ford has written a better report on Saturn than has anyone in GM.

Another stated:

Is there some way we can present these data in a more generic form so that our managers won't know they are from Saturn? Once they know you're talking about Saturn, they'll just tune you out and say, "they're different."

Similarly, organizational boundaries exist within the UAW. As the UAW international union moved from an organizing model in the 1940's to a servicing model in the 1950's and 1960's, the role of the vice presidents became increasingly more important. Vice presidents head each of the three major departments - GM, Ford, and Chrysler. Vice presidents, like the president, regional directors and other national officers are elected by delegates at the conventions, not by rank and file elections. These three main departments are administered independently of one another, with vice presidents each managing their own staffs to service contracts and prepare for negotiations. UAW vice presidents are much more powerful than are the regional directors, since the former negotiate
the major contracts. The vice presidents are also natural rivals competing with one another for the presidency. The result has been a certain degree of intra-organizational competition among the leadership.

For example, the well publicized strikes in plants such as Lordstown in 1972 by younger workers reflected dissatisfaction with local working conditions, pace of production, and control over work (Barnard, 1983; Katz, 1985). GM and the UAW under Irving Bluestone's leadership of the GM Department, initiated experiments designed to combat alienation and improve labor-management relations which were not being addressed through collective bargaining, by increasing direct involvement of the workforce in identifying and solving factory problems. The first effort, known as Quality of Work Life (QWL), began in the Tarrytown, N.Y. assembly plant in 1973 and was focused on providing workers and supervisors with training in problem solving, team building, and communications. It also provided the local union with a voice in the governance of the effort through a joint union-management policy committee. While exclusively off-line and directed by labor relations not operations, QWL efforts lowered both absenteeism and grievances (Kochan, Katz and McKersie, 1986). However, competition between the UAW vice presidents also entered the QWL arena. As vice presidents moved between the departments they would often substantially change the QWL program (known as Employee Involvement in the Ford Department) of their predecessor.
In the late 1970's and early 1980's with increasing pressure on costs and quality by Japanese automakers, GM and the UAW expanded the QWL agenda from labor relations to performance (Kochan, Katz and McKersie 1986). In addition, by the late 1970's GM began to experiment on-line with an alternative form of production organization known as the operating team system. This system of work organization reduced production classifications and provided a pay for knowledge compensation system, multi-skilling, job rotation, and a new role for supervision. At the time of Saturn's design process, this operating team system was in use in at least ten plants (Katz, 1985). Thus, Saturn was the beneficiary of over ten years of attempts by GM and the UAW to transform industrial relations and production organization first off and then on-line.

In May, 1993 Steve Yokich, while UAW vice president of the GM department, wrote to Saturn management stating his intent to modify the Memorandum of Agreement, Saturn's contract negotiated by his predecessor, Ephlin. The International's effort to modify the Saturn agreement continued until December, 1994. This was interpreted by local union leaders as an attempt by the International to pull Saturn back under the national pattern. (Also during 1993, a new GM/UAW National Agreement was negotiated which called for a union initiated feasibility study for a new small car, specifically not to be built by Saturn.) The International made proposals to: change Saturn's team hiring responsibiltys,
make transfers based on seniority, elect crew coordinators, and work five day/eight hour shifts. Also included was a proposal which made the ability to modify the contract the exclusive right of the International and not UAW Local 1853. These proposals were rejected by the membership 75% to 25%, and 60% to 40% in votes held in November and December, 1994. After the second vote the local union president and vice presidents were brought into the negotiations. A new agreement was developed with two significant changes to the original contract - the election of crew coordinators, and the inability of the local union to initiate modifications of the agreement. The membership ratification vote took place in late December when one of the three crews was already on vacation. With 70% of the membership voting, the agreement was passed 54% to 46%.

Thus, the organizational boundaries within the UAW and GM may contribute to the politics of diffusion, as innovations become the battle ground for intra-organizational rivalries between competing leaders. Whether these structural features affect the ability of GM or the UAW to learn from and diffuse the lessons of Saturn will require additional study.
Historically, the sustainability of efforts at labor participation in managerial decision-making has been tested by internal political challenges to the union leadership. Indeed, the need to be responsive to the membership is one of the democratic checks that help assure that union participation does not devolve into simple co-optation and lack of responsiveness to rank and file concerns. True to this tradition, there is an active internal political process within the local union at Saturn. Caucuses have arisen similar to other UAW local unions. For example, in the 1993 local elections three new dissident caucuses (the Mission Team, the Clear Vision Team, and the Members for a Democratic Union) challenged the incumbents (the Vision Team). Issues of contention included the electing vs. selecting of union partners, rotating vs. fixed work schedules, overtime and shift premiums, adequate representation on the floor (Chapter 4), and the relationship to the international union. At least one of these caucuses was reported to have strong support from the International.

Active politics continued after the 1993 election with the caucuses joining a 1994 debate over whether Saturn should seek needed capital from sources other than GM. Concern over GM's delay in providing additional capital for expanding capacity and new model development resulted in an unprecedented proposal by the incumbent leadership. In an
April, 1994 newsletter to the membership Local Union

President Michael Bennett wrote:

Now, some within General Motors and the U.A.W. are not sure what to do with your success story. They can't live with the success and they can't live without it, especially, if Saturn's failure lays at their own door step. One way to kill Saturn, without being indicted, is to cut off the organizational life blood supply of capital. Without adequate capital, Saturn will slowly die. With capital, Saturn would have already had a right hand drive for export. With capital, Saturn would have new models and platforms. With capital, Saturn would have additional manufacturing capability to build and sell 500,000 plus units annually. ... the best way to predict our future is to create it, and create it we MUST. Saturn's success belongs to you; and if you have an interest in creating your own future, then maybe we need to consider innovative ways of doing just that. If General Motors doesn't have the capital we need or want to provide it, then maybe we could find other investors in America who are interested in our future. Maybe you, the Membership, are interested in becoming owners of Saturn. Maybe our retailers and suppliers are interested in becoming real owners of the business. Maybe General Motors would be interested in selling Saturn to the people who made her a success, if they don't know what to do with her.

A proposal to have the local union study alternatives for obtaining needed capital was presented in the May, 1994 monthly union meeting which I attended. A floor vote was taken on the question of whether to hold a membership referendum which would authorize the bargaining committee to research new opportunities for capital investment and discuss these with General Motors. The referendum received the overwhelming support of those present, with only three dissenting votes out of approximately three hundred. The membership-wide referendum scheduled for June, 1994 was the subject of fierce political fighting by competing caucuses.
within the local union. Rumors were circulated that Bennett was already negotiating the sale of Saturn to a Japanese automaker. The proposal to authorize the study of alternative sources of capital was a complicated and unfamiliar concept to most of the membership. Many saw it as an immediate step toward separating from the deep pockets of GM, upon which they had relied for their entire careers. After vigorous campaigning the proposal was defeated with 42% voting to support such a study and 58% against.

Further, the 1996 elections were hotly contested with Mike Bennett, the incumbent president and MAC advisor, resigning as president two months before the election which allowed vice president Joe Rypkowski, to seek the presidency as an incumbent. When he resigned as president, Bennett retained his position as MAC Advisor with responsibility to approve joint appointments and lead the elected crew coordinators. Both Bennett and Rypkowski were re-elected by sizable margins.

Political challenges such as these are a normal part of the democratic process. To date no dissident caucus has advocated the dismantling of the partnership. Rather, each has advocated its own approach to managing the union's role. The real question for future research is whether the partnership is institutionalized sufficiently to withstand these internal political contests, or the turnover of elected officials.
These are only isolated examples of the broader reality: the Saturn partnership is the most controversial innovation in labor-management relations of the past two decades. It has ardent supporters and vigorous critics, both inside and outside the UAW and GM. It challenges deeply ingrained ideological principles, traditions and legal doctrines. It therefore serves as a symbol for a "different kind of company" with all the advantages and risks attendant to such a position. Saturn's ultimate fate probably depends less on its objective performance than on how these external and internal political dynamics are managed and play out.

Within Saturn, the failure to manage conflicts effectively could also threaten the viability of the partnership. The union at Saturn was instrumental in the creation of the organization, and has continued to play a critical value-added and representational role in managing and governing the firm, and implementing the terms of the employment contract. Over time local union leaders have had difficulty finding an appropriate balance between their role as a representative and their role as a co-manager. Both appear to be essential to the sustainability of the partnership. Workers want the union to play both roles. A majority of workers continue to endorse the partnership model over the more traditional model of management and union-management relations. However, they also want their interests
represented forcefully (see Chapter 4). The intensity of internal union political battles and local-national union conflicts weaken support for the partnership model, both within the union and the corporation and among critical outside observers. Managing the politics of both the local union and the local-national relationship remains a significant challenge facing these union leaders.

The features of union partnership incorporated into the original design, and that evolved at Saturn, reflect both the historical legacy of the New Deal industrial relations system and the history of union management relations between the UAW and GM. Further, Saturn illustrates the tensions for union structure in stakeholder models. On the one hand, employees are more heavily invested in the future of the firm, and thus some American adaptation of enterprise unions would seem to be a better match than national or international unions. On the other hand, enterprise unions, standing alone, are not able to withstand pressures to compete by driving down wages and other labor standards in the industry, nor are they able to provide political, financial, and expert resources needed to sustain this model in a relatively skeptical to hostile environment. Moreover, the legacy of company unionism in the U.S. prior to the passage of the New Deal labor law, and the continued strength of anti-unionism within the contemporary American management culture make it difficult to find ways to experiment with an independent local or enterprise body in the U.S.
From the perspective of the international union, Saturn has provided jobs to members either out of work or transferring from plants which were downsizing. It has further increased UAW membership by organizing the amalgamated units, and by providing work for GM and allied UAW plants. Saturn provides over 8,300 UAW jobs in Spring Hill, Tennessee, and Troy, Michigan, including the new amalgamated local units. In addition, it has already created an additional 3,500 UAW jobs in existing GM allied-division component plants, 350 UAW jobs in non-allied suppliers, 250 union non-UAW jobs in suppliers, and over 2,500 non-union jobs in supplier operations across the U.S.

However, beyond increasing membership does the international union see any value to Saturn? Does the Saturn approach, with its focus on the competitiveness of the company, challenge the international's broader perspective of labor's interests throughout the auto industry? Rather than serving as a model for the local union of the future does Saturn really represent the reinvention of "company unionism"? These are questions which will require further study.

The international's degree of involvement in Saturn has varied over time. At the early stages of development, the international union and GM led the effort by creating the joint study team, and by developing the organizing principles articulated in the 1985 Memorandum of Agreement which provided enabling language. Absent this response by the UAW
to GM's request to explore new contractual arrangements for small car production, Saturn would never have been created. The enabling language and guiding principles allowed the parties, both union and management, to move beyond the boundaries of traditional agreements and organizational arrangements. In later years full time international staff representation was withdrawn, and replaced only when efforts to modify the contract were underway.

This raises additional questions regarding the appropriate relationship between the local and the international union. What support, resources, and guidance from the international continue to be needed? How can the equities built up by members in "brownfield" plants be protected if they adopt some of Saturn's practices. How are the policies and practices of Local 1853 to be coordinated with that of other local unions? To be effective, how much independence does a local union such as this require in its negotiations and institutional arrangements, and how much can it be expected to adhere to broader national policies and concerns for solidarity?

As was demonstrated in strikes at selected plants in 1992 over issues of outsourcing, international union leaders clearly have the ability to exert pressure on GM through strategic strike action. In this way they can play a unique role influencing policies such as sourcing, contracting out, and employment/income guarantees. Through their ability to
coordinate action they can also provide some protection against whip-sawing.

On the other hand, local unions such as UAW 1853 have found new sources of power in their relations with management through the acquisition of essential skills and information, the development of managerial competency among local leaders, and their ability to organize and mobilize human resources. This power can then be exercised not through strike threats or other traditional tactics, but by challenging the positions taken by management that are believed to be against the long term interests of the membership and perhaps of other stakeholders as well. This power has been increasingly valued as critical to the successful operation of fragile, "lean", high performance work organizations (MacDuffie, 1995). The very nature of these joint governance systems, based on the problem solving and decision making competency of the local work force, may require that they be created locally. In fact it appears that in recent years locals have initiated far more innovations in industrial relations and work systems design than have the nationals (Locke, 1992).

Local institutional arrangements, and the flexibility to adjust rapidly to changing competitive environments may be critical to the survival of contemporary manufacturing organizations. It may no longer be possible to take wages out of competition in international markets. Therefore, unions must both respond directly to the interests of their members, and generate power locally to protect those
interests. However, the international union is critical to the local's success in achieving these objectives through its coordinating, educational, policy making and leadership roles. Thus, in the long run, the performance of the local union will be dependent on local and international leaders working together to find the right mix of local autonomy, international leadership support, and mutual organizational learning.

**Organizational Learning and Diffusion of Innovation**

If GM or others simply judge Saturn or its local union on traditional financial or product success criteria, the opportunity to learn from the organizational innovations at Saturn will be lost, and the full value of Saturn will not be realized. Saturn can be seen as a learning laboratory (Senge, 1990; Nonaka, 1991) for both GM and the UAW International to test, learn, and transfer innovations to other settings. Learning from Saturn must emphasize not only what aspects of the partnership have succeeded, but also what have failed. In addition, learning involves evaluating what may be working as part of Saturn's overall "greenfield" model, but would not transfer to a "brownfield" setting. Both the local union and Saturn management have questioned whether the Saturn model is currently being viewed as a learning opportunity, and whether processes will be put in place to make this happen.
The ambivalent support from both parents (UAW International and GM) leave the future of Saturn somewhat uncertain. Clearly the appropriate relationship between, on one hand, a local union that departs so much from tradition in order to jointly govern and co-manage an innovative organization, and the parent national union on the other hand, which itself planted the seeds of this innovation, has not yet been fully worked out at Saturn. Further, the very features which make Saturn exceptional (the way it breaks with the traditions of its parent GM) may severely limit the diffusion of its experience. For management, relinquishing production control is offset by the promise of performance gains, in this case quality. Likewise for unions, the Saturn model challenges many of organized labor's entrenched assumptions about the distribution of their power and authority. Yet if politics collide with economics it is unclear that higher performance will win out (Hancke and Rubinstein, 1995). Additional data are needed to make this assessment of the Saturn case.

Saturn's future may be as dependent on politics, organizational learning, and diffusion as it is on economic performance. If this is the case it will have to find ways for successive corporate and international leaders to feel a stake in Saturn, perhaps ironically through on-going innovation efforts. GM and Saturn must also find the right mix of autonomy and centralization to allow for local flexibility and responsiveness, as well as coordinated
corporate policy, organizational learning and diffusion. And the UAW local and international union must still search for the right balance of power sharing to allow for local co-management and joint governance as well as national protection from whip-sawing. Otherwise, Saturn may become another "successful failure" in industrial relations reform. These issues will form the basis of future research.
Chapter 6
Conclusions and Implications

SUMMARY OF FINDINGS

In this study I have explored the depth of U.S. restructuring of industrial relations and production systems by analyzing the development and performance of General Motors' Saturn Corporation. Designed and implemented as a partnership between GM and the UAW, Saturn breaks new ground in firm governance, management and industrial relations. Through detailed research of Saturn's partnership arrangements I have found that the local management and union leaders have not only implemented the contractual joint governance institutions which involve labor in business strategy, product development, supplier and retailer selection, and manufacturing policy, but have also created a system of co-management which gives hundreds of jointly selected union members the responsibilities of operations management. In order to understand the impact of the involvement of union members as management, I analyzed the relationship between the behaviors of both union and non-represented middle managers, the dynamics of their individual
union-management partnership relations, differences in their patterns of communication and coordination, and Saturn's quality performance. I also examined management's use of time to explore the balancing of social and economic tasks between represented and non-represented partners. These data were combined with analyses of the tensions within the union between its traditional role in membership representation, and its new role in management and governance.

I found three groups of variables to have a significant impact on quality performance. These are:

- The amount and pattern of communications and coordination activity;
- The alignment between the partnered represented and non-represented managers;
- The balance of time spent managing people and production. (While this variable was not significant in the regression analyses, it was significant in the t-tests comparing high performing and low performing modules, see Chapter 3).

Further, union managers had a higher level of communications and a greater impact on quality performance than did non-represented managers. Using network analysis techniques I was able to describe and measure a dense communications network built on the union organization throughout Saturn's management structure. I have argued in this study that by providing this communications and
coordination infrastructure through the partnership institution, the local union is adding significant economic value, a point I will return to later.

I also studied the impact on the membership of the union's extensive involvement in firm management and governance. Using extensive interviews I found that while Saturn's governance and management systems have provided the union access to management's strategic and day to day operational decision making, it may have come at some cost to individual representation. Members, while acknowledging they have representation of their collective interests in the decision making of the partnership, have voiced concern that equal attention has not been paid to representation of their individual interests and problems. This is particularly difficult when individual interests and the policies the union has advocated for collective interests are in conflict. Thus, while the partnership arrangement may produce significant performance gains and provide new access to decision making, the system is incomplete as the union searches for ways to enhance individual representation. The Saturn partnership arrangement is still evolving with significant changes having taken place over the past few years, particularly with regard to this representation question. Further study is necessary to assess the impact of these changes.
Finally, I explored questions about organizational learning and diffusion of innovation from Saturn to General Motors and the UAW international union. Clearly the extent of innovation, and in fact the very existence of Saturn, would not have been possible without the vision, resources, and early involvement by the UAW International and GM executives. However, while all of the data is not yet in, early evidence suggests that there is great ambivalence about, and therefore limited diffusion of, the partnership model of industrial relations and operations management within General Motors and the UAW. Several alternative hypotheses were suggested to explain these barriers to the diffusion of the partnership model. However, the ultimate degree of learning from the Saturn model can not be determined at this time, and will be the subject of further study.

THEORETICAL IMPLICATIONS AND FUTURE RESEARCH

A FRAMEWORK FOR ANALYZING PARTNERSHIP DYNAMICS

Much of the research on union-management joint efforts over the past two decades treats new institutional arrangements such as those at Saturn as a "black box", and fails to differentiate between dramatically different processes. Often the substance and dynamics of union involvement in decision making are not analyzed, nor are the
means by which unions affect organizational performance. This study introduces a new theoretical framework for analyzing governance and co-management of high performance team-based work systems within a unionized setting, which flows directly out of the findings. Specifically, the framework (see Figure 5, Chapter 2) separates the union's institutional role from that of the membership, and differentiates between activities that occur off-line (outside of normal operations in times and forums specifically designated for problem solving or joint consultation), and activities that occur on-line (part of day to day production or managerial processes). Using this perspective we can see the difference among consultative, operational, governance, and managerial arrangements in a system of transformed industrial relations. Researchers need to differentiate among these processes because they are likely to have different effects as well as complementary features, and all require balance with the need for representation.

**THE UNION AS A SOCIAL NETWORK**

Further, I am attempting to contribute to the literature on organized labor's impact on managerial processes. Industrial relations scholars have put forth economic, political and social theories regarding the effects of labor unions. By examining in detail how the union functioned within the partnership arrangements, the evidence suggested
that the union is operating as a dense social network among
the represented partners filling managerial roles. Union
representatives communicated frequently with each other
within and across departmental lines to solve problems
affecting quality and other aspects of the production
process. In turn, these on-line communications were
supported by the personal and political relationships built
up among union representatives in the various union meetings,
congresses, membership surveys, and politics that make up the
governance process of this local union. Together, these on-
line communications and the supporting union governance
processes are presented here as an organizational theory of
the effect of unions on firm performance in labor-management
partnership and team-based manufacturing settings.

This study demonstrates the power of combining
quantitative and qualitative research methods in an attempt
to understand, analyze and describe a union-management
partnership and its impact on performance of both the
corporation and the union. I found employing network analysis
particularly useful in describing the role of organized labor
in the management and governance of team-based work systems,
and hope this provides a methodological contribution to our
study of transformed industrial relations. Future study of
the internal dynamics of the partnership arrangements is
necessary to see how they change over time, further
developing and extending the concept of this union as a
network.

Since this research focused on the Saturn Corporation, follow-up studies are necessary to test its generalizability to the rest of GM, as well as to organizations in other industries. While attempts were made to explain variation within and across three plants, additional research in other facilities is necessary to determine if the lessons learned at Saturn apply elsewhere. Testing these network techniques on other firms will deepen our understanding of the nature of unions as network organizations.

This research should also be extended by studying the performance impact of the communications and coordination patterns between self-directed work teams themselves. Further, this work should be expanded to comparisons of the patterns of communications and coordination of team-based work systems in both union and non-union plants to test the theory of the union as a social network.

**Balancing Representation and Management**

This research also seeks to contribute to industrial relations theory by engaging the debate on whether there are limits to organized labor's growing involvement in management. This study separates the question of what management does from who management is. The data have shown the need for a balance of participation and representation in labor-management partnerships, by identifying the
consequences to individual representation when the union focuses the majority of its organization and resources on collective representation through joint governance and co-management.

DIFFUSING INNOVATION

I have also raised theoretical questions about the prospects for the diffusion of innovations introduced at Saturn, suggesting that organizational politics may be an especially important barrier. Because the co-management features of the partnership challenge longstanding traditions of both the union and management, as well as doctrines embedded in labor law, they are likely to prove to be particularly difficult to replicate in existing union-management relationships. Moreover, in the absence of strong champions for these practices in either the union or the company, these features are not likely to be designed into new organizational settings if and when such opportunities arise. Thus, it is ironic that precisely the features found to contribute to the quality performance of the Saturn partnership may be the least likely to be replicated in the future. This study illustrates the dilemma between on one hand, the potential of radical reform to industrial relations practices, and, on the other hand, the inherent difficulty in reintegrating these reforms back into the existing industrial relations system. How these politics and this dilemma are
managed are important issues for future research. Specifically, a study of the ways in which the Saturn model has diffused within the General Motors organization is planned.

**Saturn as a Stakeholder Organization**

In a broader sense this work seeks to contribute to a stakeholder theory of the firm, in which the union representing the collective interests of the workforce has a legitimate claim on resources and decision making authority. What Saturn illustrates most clearly is a new model of organization that goes well beyond the principles of "lean production." While Saturn's manufacturing policies embed lean production principles, they introduce features that are specifically responsive to worker and union concerns, providing greater voice opportunities and a significantly expanded decision making role through joint governance and co-management arrangements. It, more than any other U.S. case, suggests a type of organizational partnership and employment system that is likely to be created when a union with a vision of its own participates in the design, governance and management of the enterprise. Workers have a strong voice on both traditional labor-management concerns, and broader managerial and strategic issues. Principles of teamwork, continuous improvement, quality, safety, ergonomics, and customer satisfaction are given high
priority. Conflicts occur both within and across traditional labor and management boundaries, but are managed and resolved differently than by relying on the traditional contract negotiations or grievance arbitration processes. The governance, managerial, communications, coordination, representational, and internal organizing processes introduced in this study all contribute to a grounded theory of an organization built on a stakeholder model. Developing and testing such a model is also a task for future research.

**RESEARCH PARTNERSHIPS**

Finally, I believe the action-research model created by Saturn and MIT gave us tremendous access and cooperation, and provided management and union leaders with early results, input into research questions and design, and maximized learning opportunities for everyone involved. This type of partnership in research design could be increasingly useful in fostering experimentation, and will hopefully have application to others studying organizations which are open to, and find value in, learning about themselves as they evolve.
The labor-management partnership at Saturn is especially relevant to those concerned about the future of American industrial relations and worker representation, since it provides an approach for filling the void in worker representation that has resulted from the steady decline of traditional unions in the United States. Thus, it adds another chapter to the research on alternative forms of worker representation, team-based work organization, employee involvement, and joint union-management participative structures (Piore & Sabel, 1984; Kochan, Katz, & McKersie, 1986; Rubinstein, 1987; Heckscher, 1988; Hoerr 1991; Locke 1992; Jacoby & Verma, 1992; Bluestone and Bluestone, 1992).

It is interesting, however, that some of the most innovative aspects of this model may be inconsistent with doctrines embedded in current labor law. For example, the use of a joint study team such as the "Committee of 99" serves as one way of avoiding the adversarial conflicts that often accompany the question of union representation in new facilities. The UAW was recognized as the bargaining agent before the Spring Hill facility was constructed. By bringing the union in as a partner in the design process, a potentially difficult issue was taken off the table in a way that promoted innovation in the new organization, and
reinforced efforts to sustain worker and union participation in innovations underway in existing GM plants. The legality of the pre-hire agreement that resulted is, however, open to question under prevailing labor law. The National Right to Work Committee pursued a legal challenge to this arrangement, arguing that it was inconsistent with voting procedures contained in the current labor law. While this challenge was dismissed by the National Labor Relations Board, uncertainty over the legality of this arrangement remains.

Similarly, the co-management role the union plays at Saturn appears on its face to be inconsistent with the sharp separation of labor and management roles assumed to exist under the current law. In the 1980 NLRB v. Yeshiva University case, the U.S. Supreme Court determined that employees performing managerial work were not covered under the National Labor Relations Act. While the Yeshiva case related to academic faculties, Saturn represents an example of blue collar industrial relations where large numbers of union members are performing work traditionally the responsibility of managerial employees. In this way it challenges the current statute and serves as another example of the need to update and transform current labor law so it encourages and facilitates rather than constrains innovation in American industrial relations.

Yet Saturn is not presented as the only new approach for worker representation which will fit all circumstances, or
remedy all the shortcomings of traditional U.S. industrial relations. One issue, for example, that the Saturn model does not address is how to provide equivalent voice and representation to the white collar, middle management, professional, and technical workers who lie outside the UAW's jurisdiction, or beyond the coverage of existing labor law. Empowering these workers may require further institutional innovation through experimentation with other governance arrangements such as the American equivalent of European style works councils.

Thus, the partnership between Saturn and UAW Local 1853 is an example of one new form of worker representation that, along with other models, should be not only sanctioned but actively encouraged and promoted by policy makers, as well as business and labor leaders. Only through additional experiments that, like this one, test departures from long-standing practices and traditions, are we likely to develop the organizational forms, governance arrangements, and labor-management relations' principles that are suited to the current and future needs of the American workforce, economy, and society.
NOTES


4. Interview with Skip LeFauve, President Saturn Corporation, July 14 & 17, 1992.

5. Ibid.

6. Ibid.

7. Ibid.

8. Ibid.


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APPENDICES

SURVEY INSTRUMENTS

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WUMA Survey

I. Background Information:
Name ___________________________ Module _____________ UAW Represented ______yes ______no
Years at Saturn _____________ Were you a CTM or WUC prior to becoming a Wuma ______yes ______no
Years as a Wuma _______________ Years as Wuma in your present module _______________
Were you employed by GM prior to joining Saturn ______yes ______no Crew ______
Previous GM Plant ___________________ Job at previous GM plant ____________________

II. For each of the following items, please indicate its importance to you in accomplishing your specific responsibilities as a WUMA.

<table>
<thead>
<tr>
<th>PRODUCTION/SCHEDULE</th>
<th>How Important is it Now?</th>
<th>How Important Should it Be?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Tracking performance against module's production goals.</td>
<td>Least Important 1 2 3 4 5</td>
<td>Most Important 1 2 3 4 5</td>
</tr>
<tr>
<td>2. Working to identify and reduce production bottlenecks within the module.</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>3. Directing and controlling the production activities of work units.</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>4. Meeting cost, quality, and delivery objectives.</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>5. Firefighting and managing daily problems in the module.</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>6. Developing and implementing a module plan to continuously improve quality, cost, schedule and people performance.</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>

COST

1. Developing a realistic budget for the module. | 1 2 3 4 5 | 1 2 3 4 5 |
2. Tracking and making improvements to the relationship between cost, profitability and needs of team members in terms of amount of scrap generated within the module. | 1 2 3 4 5 | 1 2 3 4 5 |
3. Assisting the work units in budgeting and cost control. | 1 2 3 4 5 | 1 2 3 4 5 |
4. Evaluating and implementing cost reduction suggestions. | 1 2 3 4 5 | 1 2 3 4 5 |
5. Tracking and communicating the cost of waste within the module (parts scrapped or thrown away). | 1 2 3 4 5 | 1 2 3 4 5 |
| QUALITY |
|---------------------------------|---------------------------------|---------------------------------|
| 1. Developing, implementing, and |
  monitoring a plan to improve |
  quality.                        |
| Least Important | 1 | 2 | 3 | 4 | 5 | Most Important | 1 | 2 | 3 | 4 | 5 |
| 2. Encouraging and assisting work |
  units and the module in |
  implementing Saturn's |
  established problem |
  solving process to |
  identify the root causes of |
  quality problems.         |
| 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 3. Planning and implementing process |
  or product improvements.     |
| 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 4. Developing a plan to transfer |
  knowledge of total quality |
  management throughout the |
  module.                      |
| 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |

**WORK UNITS**

| QUALITY |
|---------------------------------|---------------------------------|---------------------------------|
| 1. Counseling members when they |
  have personal problems in their |
  work units.                      |
| Least Important | 1 | 2 | 3 | 4 | 5 | Most Important | 1 | 2 | 3 | 4 | 5 |
| 2. Developing a plan to transfer |
  implementation of the 30 work |
  unit functions to work units.    |
| 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 3. Managing conflict between |
  work units.                      |
| 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 4. Participating in the setting |
  and monitoring of work unit |
  goals and objectives.           |
| 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 5. Ensuring resources are |
  available for work units to |
  produce quality products on |
  time.                           |
| 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 6. Providing information to |
  work units.                      |
| 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 7. Giving authority to work |
  units.                           |
| 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 8. Holding work units accountable |
  for performance results.        |
| 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 9. Implementing the 30 work unit |
  functions as outlined in the |
  Memo.                           |
| 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |

**TRAINING**

| QUALITY |
|---------------------------------|---------------------------------|---------------------------------|
| 1. Developing a plan to develop |
  WUC skills.                      |
| Least Important | 1 | 2 | 3 | 4 | 5 | Most Important | 1 | 2 | 3 | 4 | 5 |
| 2. Participating in training |
  WUCs.                            |
| 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 3. Developing work units by |
  coaching them in the 30 work |
  unit functions.                  |
| 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
| 4. Making sure work units members |
  have the training needed to work |
  effectively.                     |
| 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 |
5. Developing the work units so that they can manage their day-to-day operations without me.  
   | Least Important | Most Important | Least Important | Most Important |
   | 1 2 3 4 5 | 1 2 3 4 5 |

6. Helping the work units redesign their work to make Saturn more competitive.  
   | 1 2 3 4 5 | 1 2 3 4 5 |

7. Participating in training the work units in problem solving skills.  
   | 1 2 3 4 5 | 1 2 3 4 5 |

**BUSINESS PLANNING**

1. Representing the needs of the work units at the business team decision-making level.  
   | 1 2 3 4 5 | 1 2 3 4 5 |

2. Developing and implementing a module plan to balance process/product/people needs.  
   | 1 2 3 4 5 | 1 2 3 4 5 |

3. Setting business team goals and objectives.  
   | 1 2 3 4 5 | 1 2 3 4 5 |

**COMMUNICATIONS**

1. Coordinating with customer and supplier modules.  
   | 1 2 3 4 5 | 1 2 3 4 5 |

2. Coordinating and communicating needs with the other crew in the module.  
   | 1 2 3 4 5 | 1 2 3 4 5 |

3. Regularly initiating face-to-face meetings between work units and their customers.  
   | 1 2 3 4 5 | 1 2 3 4 5 |

4. Coordinating and communicating with module resources.  
   | 1 2 3 4 5 | 1 2 3 4 5 |

**PROBLEM SOLVING**

1. Facilitating joint problem solving between work units or modules.  
   | 1 2 3 4 5 | 1 2 3 4 5 |

2. Discussing specific data about their performance with the work units on a daily basis.  
   | 1 2 3 4 5 | 1 2 3 4 5 |

3. Identifying what the module and/or work units need in order to improve their performance, stressing continuous improvement.  
   | 1 2 3 4 5 | 1 2 3 4 5 |

4. Leading the work units in their problem solving activities focused on production, quality, rework and scrap related problems.  
   | 1 2 3 4 5 | 1 2 3 4 5 |

5. Encouraging the use of trend analysis to identify quality problems.  
   | 1 2 3 4 5 | 1 2 3 4 5 |
III. For each of the following items, please indicate the priority of each to you in accomplishing your responsibilities as a WUMA.

1. ROLES & PRIORITIES

<table>
<thead>
<tr>
<th>Activity</th>
<th>Current Priority as it is Now?</th>
<th>What I Feel Priority Should Be?</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Production/Work Control.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b) Firefighting (emergency problem solving, trouble-shooting, &amp; decision making).</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>c) Expediting (dealing with parts shortages, stock chasing).</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>d) Direct supervision &amp; direction to work units.</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>e) Module &amp; work unit record keeping.</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>f) Giving work assignments to people.</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>g) Responding to revisions in production schedule.</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>h) Maintenance &amp; improvement of safe conditions &amp; practices (ergonomics).</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>i) Investigating causes of accidents.</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>j) Module budget planning &amp; tracking.</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>k) Planning &amp; implementation of cost reduction measures.</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>l) Monitoring &amp; analyzing work unit scrap reports.</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>m) Reviewing module spending.</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>n) Initiating, facilitating and promoting 6 Step problem solving and improvement activities by the work units.</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>o) Attendance/manpower: back filling &amp; balancing for absenses &amp; restrictions.</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>p) Representing the needs (stakes and equities) of the people in my module.</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>q) Counseling work unit members on personal issues.</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>r) Resolving personnel conflicts in the work units.</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>s) Counseling work unit members to head off problems before they lead to consultation process.</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>t) Giving formal training and informal coaching to work unit members, WUC’s, and point people on 30 work unit functions.</td>
<td>( \begin{array}{c</td>
<td>c</td>
</tr>
</tbody>
</table>

2. Which letter (a thru y above) indicates your highest priority in doing your job as a wuma? __________

IV. For each of the following items, please indicate your level of agreement or disagreement.

**RESPONSIBILITIES & PARTNERSHIP ORGANIZATION**

<table>
<thead>
<tr>
<th>Item</th>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. As a wuma I am responsible for the performance of the work units in my module.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>2. As a wuma I am held accountable for the performance of the work units in my module.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>3. When compared to my partner, I have more responsibility for people issues.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>4. I have a greater level of authority than my partner.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>5. I get more relevant information than my partner.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>6. When compared to my partner, I have more responsibility for schedule attainment.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>7. A wuma should emphasize quality of products over quantity of output.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>8. My partner and I have the same specific wuma work tasks, we have exactly the same jobs.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>9. My partner and I have the same priorities in our work as module advisors.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>10. Do you have opportunities, on a regular basis, to interact with other wumas outside of normal working hours?</td>
<td>yes  no</td>
<td></td>
</tr>
</tbody>
</table>

For example do you interact with other wumas in any of the following Saturn/UAW sponsored activities?

- [ ] Softball  [ ] Basketball  [ ] Bowling  [ ] Hope House  [ ] Vandy Children's Hospital
- [ ] Spring Hill School System  [ ] Spring Hill Children's Home  [ ] Boy/Girl Scouts
- [ ] Other (please specify) ____________________________________________________________________

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11. To improve first time quality (FTQ) in your module, which of the following would be most helpful?

____ Help from my leader in developing a plan to improve quality in my module.

____ Better understanding of what a quality improvement plan is.

____ Additional support from technical resources (engineering, etc.) to make improvements and solve problems that are hindering our FTQ.

____ Additional training for me in quality methods (SPC, design of experiments, root cause analysis, etc.).

____ Additional training for me in the 6-Step Problem Solving Process.

____ Better information on quality performance (audit data, warranty data, SMMS charts, etc.).

____ Additional training for optechs on quality measurements.

____ Other (please specify) _______________________________________________________________
Time Allocation Survey

To be filled out each day worked Wednesday, May 19 - Saturday, May 29, 1993. Date ____________________

Name ___________________________ Module ______________________ Crew ____________

Please indicate the amount of time you spent today on each of the tasks indicated below. Also calculate the % of time spent on each sub-category:
Production, Safety, Cost, Problem Solving, People, Training, Meetings, Administration
We are also interested in your estimate of the Ideal % of time you would like to spend in each activity.

Total hours worked today ____________

<table>
<thead>
<tr>
<th>Amount of Time Spent Today</th>
<th>% of Total Hours</th>
<th>Ideal % of Time</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Production/Schedule</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firefighting (emergency problem solving, trouble-shooting, &amp; decision making)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dealing with production bottlenecks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dealing with equipment failures, downtime, calling trades, etc.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expediting (dealing with parts shortages, stock chasing)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct supervision &amp; direction to work units ensuring they produce to schedule</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Module &amp; work unit record keeping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Giving work assignments to people</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time spent working production (performing direct labor)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Production:</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<p>| <strong>Safety/Health</strong> |                  |                |
| Maintenance &amp; improvement of safe conditions &amp; practices (e.g. ergonomic) | | |
| Investigating causes of accidents | | |
| <strong>Total Safety:</strong> | | |</p>
<table>
<thead>
<tr>
<th>Category</th>
<th>Amount of Time Spent Today</th>
<th>% of Total Hours</th>
<th>Ideal % of Time</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost Control</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Module budget planning &amp; tracking</td>
<td></td>
<td></td>
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<tr>
<td>Planning &amp; implementation of cost reduction measures</td>
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<tr>
<td>Monitoring &amp; analyzing work unit scrap reports</td>
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<tr>
<td>Reviewing module spending.</td>
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</tr>
<tr>
<td><strong>Total Cost Control:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Formal Problem Solving</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Initiating &amp; facilitating 6-step problem solving (Total)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>People Management</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allocating Overtime</td>
<td></td>
<td></td>
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<tr>
<td>Attendance/manpower:</td>
<td></td>
<td></td>
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<tr>
<td>back filling &amp; balancing for absences &amp; restrictions</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Counseling work unit members on personal issues</td>
<td></td>
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<tr>
<td>Communicating with/listening to work unit members</td>
<td></td>
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<tr>
<td>Resolving personnel conflicts in the work units</td>
<td></td>
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<tr>
<td>Counseling work unit members to head off problems before they lead to consultation process</td>
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<tr>
<td>Moralebuilding</td>
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<tr>
<td>Representing peoples' needs (stakes &amp; equities)</td>
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<tr>
<td><strong>Total People Management:</strong></td>
<td></td>
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<tr>
<td><strong>Education &amp; Training</strong></td>
<td></td>
<td></td>
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<tr>
<td>Delivering formal training to work unit members, WUC's, point people on 30 work unit functions</td>
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</tr>
<tr>
<td>Informal 1:1 coaching/training to work unit members, WUC's, point people on 30 work unit functions</td>
<td></td>
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<tr>
<td>Delivering on-the-job technical skills training</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Activity</td>
<td>Amount of Time Spent Today</td>
<td>% of Total Hours</td>
<td>Ideal % of Time</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>---------------------------</td>
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</tr>
<tr>
<td>Attending formal classes for your own training</td>
<td></td>
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<tr>
<td><strong>Total Education &amp; Training:</strong></td>
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<tr>
<td>• Meetings</td>
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<tr>
<td>Attending Business Unit Decision Ring Meeting</td>
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<tr>
<td>Attending Module Decision Ring Meeting</td>
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<tr>
<td>Attending Daily Build Meeting</td>
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<tr>
<td>Attending Work Unit Team Meetings</td>
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<tr>
<td>Attending Formal Meetings with Wucs</td>
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<tr>
<td><strong>Total Meetings:</strong></td>
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<tr>
<td>• Administration</td>
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<tr>
<td>Reviewing &amp; Analyzing SMMS Data</td>
<td></td>
<td></td>
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<tr>
<td>Assisting in Implementation &amp; Use of SMMS Process by Work Unit</td>
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<tr>
<td>C Crew Hiring</td>
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<tr>
<td>Development of C Crew Wumas and WUCs</td>
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<tr>
<td><strong>Total Administration:</strong></td>
<td></td>
<td></td>
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<tr>
<td>• Other Activities/Tasks (please specify)</td>
<td></td>
<td></td>
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<tr>
<td><strong>Total: Must equal total hours above &amp; 100%</strong></td>
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</tbody>
</table>
Communications Network Survey

To be filled out each day worked Wednesday May 19 through Saturday May 29, 1993.

Name ___________________________ Module _____________ Date ___________ Crew _________

This survey is intended to sample work-related communication that you engaged in today. This may be an unusual day for you, and your communications today may not be typical. However, we will be sampling all week and, therefore, please do not be concerned that today’s survey does not capture your typical communication patterns.

In the following pages a set of columns (categories) are provided against the names of the participants in this survey. In addition to the names of all Saturn wunas we have included the positions of module resources who you might have communicated with. The categories ask about the following:

A) Frequency of communication

Please think back over all your activities today. If you communicated with anyone on the following lists about a work-related matter today, please fill in the number of communications (phone, face-to-face, radio, etc.) in the appropriate space (cell), under Category A, in the row across from the person's name or resource position. Please place a number in each cell in Category A that applies, indicating the number of communications with each person indicated in the row across.

B) Subjects of communication

Problems or Issues related to: Build and Schedule, Manpower, Quality, Equipment/Technical, Supply, People/Personal, Maintenance, Other

In the Category B (above), please place a check mark (✓) in each cell that applies. (Only one check mark (✓) per row. Indicate the average category for the day, it is not necessary to categorize every communication with a particular individual.)

C) Purpose of Communication

Your estimate, as an average for the day, on whether your communication with a particular person helped in:
- coordination of work-related tasks
- acquiring new information
- problem solving

In Category C (above), please place a check mark (✓) in each cell that applies. (Only one check mark (✓) per row. Indicate the average for the day, it is not necessary to categorize every communication with a particular individual.)
## Communications Network Survey

<table>
<thead>
<tr>
<th>A</th>
<th>Number of Communications</th>
<th>B</th>
<th>Average Subject of Communications (Check ✓ the cell that applies)</th>
<th>C</th>
<th>Average Purpose of Communication ✓ the cell</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Schedule/Build</td>
<td>Manpower</td>
<td>Quality</td>
</tr>
<tr>
<td>WUMA</td>
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