Gaining Competitive Advantage through Collaboration:
Options for Minority Architecture and Engineering Firms

by

Denise Lewin

B.S., Civil Engineering
B.S., Architectural Engineering
University of Miami, 1992

Submitted to the Department of Civil and Environmental Engineering in Partial Fulfillment of the Requirements for the Degree of

Master of Science
in Civil and Environmental Engineering

at the Massachusetts Institute of Technology

May 1994

Signature of Author ______________________________________
Department of Civil and Environmental Engineering
May 13, 1994

Certified by ______________________________________
Dr. Henry G. Irwig, Senior Lecturer
Department of Civil and Environmental Engineering
Thesis Advisor

Accepted by ______________________________________
Joseph M. Sussman
Chairman, Departmental Committee on Graduate Studies

Gaining Competitive Advantage through Collaboration:
Options for Minority Architecture and Engineering Firms

by

Denise Lewin

Submitted to the Department of Civil and Environmental Engineering
on May 13, 1994 in partial fulfillment of the
requirements for the Degree of
Master of Science in Civil and Environmental Engineering

Abstract

Some minority design firms have received business because of set-aside programs that were enacted to increase participation of underrepresented groups in the construction industry. However, despite these opportunities, many firms continue to fail. The structure of the programs in most cases, results in minority firms and majority firms working together. There are many ways in which firms can collaborate, and in order to gain competitive advantage, there needs to be an understanding of what the available options are and which ones best suit the needs of the firm.

The organization of the firm and the way in which it is marketed is determined by many factors within and outside of the firm including the firm's goals and needs. Once the firm's needs and goals are established, the firm can determine what type of option is best suited for it. However, the options chosen must be examined in light of programs and policies that exist to support the firm's growth. All three aspects, the firm organization and marketing, the type of collaboration chosen and the program governing the endeavor must work toward the firm's goals.

The concepts developed within the thesis suggest that firms that develop and consistently apply a strategy that supports their goals will be more successful than their competitors. Further examination of the collaborative options and affirmative action programs available is necessary to verify the conclusions herein. Some steps that might be taken include case studies with majority and minority firms that are in the process of collaborating or have collaborated, interviews with the heads of said groups or compiling statistics on the use of minority-majority collaboration in the private realm.

Thesis Supervisor: Dr. Henry G. Irwig

Title: Senior Lecturer of Civil and Environmental Engineering

Acknowledgment

I would like to thank my advisor, Dr. Henry G. Irwig, for his patient understanding and guidance throughout this entire process. I would also like to thank my family and friends for both their silent and vocal support. Finally, I would especially like to thank Clarence Williams, Jr., my thesis writing cohort, for synergy.

Table of Contents

1. Introduction

1.1. General Background

The legislature for many states have goals set for minority involvement in building projects. The policies governing this participation have grown and changed over a period of many years. Throughout that time they have constantly been challenged, and depending upon both the legislative and judicial leaders at the time have either been upheld or struck down. Partly due to this problem, the pressure for non-minority firms to actively solicit minority firms has not been constant. As a result of this, the opportunities for minority firms have also not been constant. In the face of all these changes, some minority firms have a hard time growing and maintaining capacity. Despite the problems, however, these programs have served to some degree to increase minority participation in a field that has been difficult to enter. On one level, this certainly creates opportunities for minority business, however, without financial and organizational support many firms formed in order to take advantage of the opportunity, fail. Recently, some larger non-minority firms have begun working with minority firms voluntarily. Some groups have entered into joint ventures with smaller minority firms in order to gain an edge over their competition or for other reasons. These collaborations work differently than the traditional ones, so in order to get the most out of collaborating, minority firms should understand the advantages and disadvantages of pursuing any option from the outset.

Collaboration with other firms, has been used in the industry for some time. Traditionally through single project joint ventures for bonding purposes. In a collaborative situation, usually all the firms involved benefit to some extent from the work performed. This cooperative relationship can also be used to benefit both minority and majority firms. However, partly due to the history of the circumstances of these firms working together, the motives of the firms are questioned. In addition, the needs to be addressed by the collaboration also differ from traditional ones. Because of this, the collaborative effort and its organization will probably be different. It is important for all groups involved in the collaboration to understand those differences so that they may be effectively managed. Different types of collaborative efforts will bring different benefits. The positive cooperation of majority and minority groups within the industry will not only benefit those involved individually, it will lead to greater diversity within the industry.

Before the type of option to be pursued can be determined, the firms involved must understand their own needs and goals. This not only affects the choice of collaborative option, it should affect almost every aspect of the firm. From conception, firms should be secure in the knowledge of what they would like to accomplish and how they plan to achieve their goals. Consistency of plan and actions across the range of the firm's activities, is one of the firm's best strategies for success.

The ways in which the firm, collaboration and programs interact will be explored in detail. It is this correlation that forms the basis for the hypotheses in the conclusion.

1.2. Methodology

The task of obtaining as much information as possible about the three major topics that encompass the body of the thesis was undertaken in a two step manner. First, to understand the theory or history behind each subject, the theoretical literature related to each topic was reviewed. Information written about the practical applications of these theories was also identified and explored. Then, in an effort to understand the practical effects of these efforts, particularly at a local level, interviews were conducted with Managers of Disadvantaged Business Enterprise participation of major building groups in the area. From the cumulative of this information, hypotheses related to the interaction of these three topics were extrapolated. These are presented in the conclusion. Further research must be conducted in this area, to establish the validity of these hypotheses.

1.3. Outline of Thesis

First the concepts of business organization and marketing are presented. The organization of the firm directly affects many aspects of the firm. In starting out, firms may either make conscious decisions about how they would like the firm to be structured, or let the firm grow and develop seemingly on its own. The latter option may be dangerous, however, because the way in which a firm is organized or structured, plays a major role in the capacity and type of work the firm does. Each organizational structure has potential positive and negative effects on different areas of the firm. With an overall firm strategy, the firm will have priorities about what goals are most important and what feasible structure will make achieving those goals most attainable. Both reasons for and effects of pursuing a particular organizational type are presented. This will give firms an idea of what they should do or at least the perceptions others have of what they are doing. Firms employ different marketing strategies to achieve different goals. The marketing strategy is based on the firm's ideas about the purpose of marketing and the firm's general strategy. The different benefits to be obtained through using different marketing strategies will be addressed.

The choice of collaborative option is also based on the firm's overall purposes and the goal to be achieved through collaborating. The definition of collaborative options will be explained, and reasons that firms consider collaborating will be identified. In order to be able to decide on the best option, types of collaborative options will be identified. The key issues or advantages and disadvantages of using each option will be detailed. How the concepts behind the firm organization are used to determine the collaborative option to be pursued will also be discussed. Finally, important issues to consider when entering into a collaborative situation and how to organize and manage it, will be explained.

Programs created to promote affirmative action within the construction industry have been at the root of many collaborations between majority and minority firms. With the goal of understanding how these programs have evolved to the current options available to both majority and minority groups, a history of the development of these programs will be developed. The specific examples, in most instances, relate to the construction industry. The relatedness of design firms to construction and the examples available therein, make it an excellent choice of groups from which to draw parallels. The programs used to promote affirmative action, whether ordered, volunteered or suggested, also seem to affect the way in which these groups work together. The different programs are able to supply different benefits to the groups involved which are necessary because needs change from group to group. So, it is important to factor in the ability of the program that governs the relationship to provide for the firm's needs.

These three concepts, the firm's organization, the type of option chosen and the program governing the interaction, can be tied together to develop a framework for choosing the collaborative option best suited to a firm's needs. Therefore, the interaction between these areas will be developed in the conclusion.

2. Organization and Marketing of Architecture and Engineering Firms

2.1. Introduction

Many factors can affect the performance of a design practice. These can come from the outside environment in which the firm works or from within the firm itself. The market in which the firm operates is one such factor. Two others that have considerable effect are the values and goals of the firm's principal. Also, the way in which the firm is organized, affects the firm's output. This chapter will look at general issues which distinguish design firms from other businesses. Specifically, however, it will focus on organization and marketing issues of design firms.

The single greatest source of management problems inside engineering and architecture firms lies not in management choices that are poor in an absolute sense, but in inconsistency and incompatibility between the various systems the firm uses. The most successful firms appear to be those with a consistent approach to doing the work and operating the firm.[1]

2.2. General Issues

2.2.1. Design Practice Management versus Business Management

In organizing and managing an architecture or engineering design firm it is important to understand that there is a "bottom line" involved in all the decisions that are made. Most businesses have a quantitative bottom line. Their goals and decisions are monetarily based. Design professionals often have a different "bottom line". They are frequently more concerned with "qualitative" output. In addition, "professional firms often have a difficult time setting goals because of their different bottom line."[2] This difference can be seen in project and practice management. Project management is the interaction between the firm and client on the client's

---

[1]Coxe, Weld; Hartung, Nina; Hochberg, Hugh; Lewis, Brian; Maister, David; Mattox, Robert; Piven, Peter; Success Strategies for Design Professionals: SuperPositioning for Architecture and Engineering Firms, The Coxe Group, 1987, p.7.
[2]Coxe, Weld, Managing Architectural and Engineering Practice, 1980, John Wiley and Sons, New York, p.20.

project. Many firms get caught up in project management because clients are coming in with needs to be met. The firms focus on the "task or result" and not the process. Practice management relates to the process by which the firm is able to handle its projects. A firm with good practice management understands that the business goals are sometimes counter to the needs of a client. They realize that trying to be all things to all clients may jeopardize the business and act accordingly. "The role of management in architectural and engineering practice is to provide an environment in which design can flourish," which includes both good project and practice management.[3]

2.2.2. Stages of Firm Growth

Like people, practices are evolving entities that react to internal and external stimuli. A number of stages which many firms seem to approach or pass through have been identified. Although these stages are not all inclusive, they are useful in helping firms recognize the current stage of their practice. The stages usually represent times at which the firm needs to make a decision about growing as an entity or maintaining their present work load. These stages demonstrate that size is dependent upon firm structure, and the larger a firm becomes, the harder it is to maintain an informal organization structure.

Firms with four to five people can be effectively managed by the principal who oversees all aspects of all projects. This firm may be limited in the size of projects it can undertake. After that point, however, to grow further, the principal will have to delegate certain tasks to others in order to have more time for pure management. In multiprincipal firms with a staff size of fifteen to twenty where all the partners are involved with clients and have a "delegated role" in other areas such as "production, design or field observation", there comes a time when they are too involved in all areas to be concerned with organizational management. If this firm desires to continue growing at least one person will have to accept the role of "prime-time" manager and relieve himself or herself of the responsibilities related to clients and projects. The other partners

---

[3]Ibid., p.6

will have to give up some authority in other areas and let the manager make decisions without having to constantly call meetings. Another situation in which decisions about firm growth need to be made occurs when a single designer who feels the need to oversee all designs leaving the organization, becomes overwhelmed with the quantity of work and has difficulty meeting schedules as a result. In this situation, the firm can accept the level of work the designer is able to oversee or the designer can switch to a role of quality control rather than direct control. Two other decision making situations arise when the founders of the firm have not given enough power to those beneath them as the firm grew. They are now left wondering what will happen to the firm when they retire. Sometimes they do retire and the firm is left in confusion because of the lack of leadership.[4] This situation can be handled by either dismantling the firm when the principal retires; selling the firm to another group with similar visions; or training or hiring new leadership with similar visions.

It is important to know the stage of your firm before you begin formally managing the company because different strategies will be used for different stages. In order to know where your firm is you must do a firm assessment. This can be done by asking the partners or principals to assess the group or by asking other employees or clients. Asking clients for their input can also be a useful marketing tool.

2.2.3. Goals

The most important and first step for the organization is deciding who will make the decisions. This person or these persons will determine the goals of the organization. Goals give the organization vision. However, it is important to distinguish between goals, objectives, strategies and tactics. The goals are the desired result. Objectives are milestones that must be passed en route to that goal. Strategies are the theories you think will help you achieve the objectives, and tactics are the step by step actions taken to carry out the strategy.[5] A manageable goal is one that has a measurable end result. The strategies, objectives and tactics take you from

[4]Ibid., p.12
[5]Ibid., p.20.

the concept of the goal to the reality of the goal. By breaking down the goal into step by step actions there is less chance of those within the firm becoming overwhelmed by the concept of the goal. Once the goal has been defined, it must be translated into objectives for different aspects of the organization such as "markets, volume, firm size, firm capabilities, [and] financial and personal goals of the decision group".[6] Although the decision maker determines the goals, it is important that they be agreed upon by the partners or it could cause significant problems in the future with the firm. A retreat is a good way to bring together the partners outside of the regular day to day setting to discuss the vision for the firm.

2.2.4. Quality and Standards

Quality is a subjective term, and different firms provide quality work in different ways. The key to maintaining an image of quality work is through consistency. The firm should have a "consistent standard of professional performance from project to project."[7] Setting standards for the firm to follow makes this goal more possible. This can best be managed by looking at one or all of the following areas: quality review; project handling; dealing with the client as a leader or a follower; and responsibility for the last word.

The firm should desire standards that promote professionalism without stifling creativity and independent judgment. Some of these standards may include looking at two or three design alternatives before deciding on the best one, having a written statement of the problem to be addressed approved by the client, or setting standards for all communicated information like letters, reports, models, specifications, construction documents, etc.

The project manager approach places one project manager in charge of a project from start to finish. They have the last word in terms of the project and standards that will be reflected in it. The problem is that between different managers those standards will vary. Another approach has the project move through departments with the department head having the final

---

[6]Ibid., p.21.
[7]Ibid., p.42.

say. However coordination is often difficult and the conflicts can arise in the direction given by different departments.

Having projects move through departments and then be reviewed for quality by a panel helps with that problem. To make that process the best it can be it is important that the members of the panel work well together and understand the difference between "constructive review" and "critique", the reviews take place at some midpoint of the project, and a set time be mandated for the review to take place.

There are firms who perform what is requested of them by the client with quality and efficiency, and there are firms that lead the client to quality decisions that the client may not have thought possible. Whichever place you want to position yourself, it is important to do so consistently. Particularly when it comes to leading the client, it may be helpful to write down what it means to consistently be a leading firm in defining how you communicate in the firm, with clients and the public, and with others in the industry.

It is important to know who has the last word on differing issues to relieve confusion caused by overlapping decisions. Consistency in decision making will increase consistency in firm standards. One way to deal with this is to create a "Last Word By" list which lists each task and which member of the group has the last word related to that task.[8]

2.2.5. Human Resources Management

The role that Human Resources Management(HRM) plays in the organization should not be underestimated. Areas in which management can affect the organization in terms of HRM are role definition, performance review and development, compensation, and training and development.

More important than a title is an understanding of what functions the person will perform in the job. The position often evolves and it is important to be aware and keep track of that. It may be more helpful to look at the desired result and ask the employee what they can do

---

[8]Ibid., p.51.

to help achieve it rather than strictly define actions to be taken. In this system expectations and performance are closely linked.

Performance review is a delicate subject. More design professionals are task oriented and do not like spending large amounts of time developing an employees potential. However, the goal of performance review should be developmental. It must be agreed to that the only measure of the work performance in this context should be output; personal opinions should not be involved. Compensation is not the purpose of a development process, it is a by-product of one. Performance review as a developmental task can open the door to communication of all kinds. With the employee helping to define the standards against which he or she will be measured, more is likely to be achieved.[9]

Basic compensation should be kept competitive with that offered in the marketplace. Incentive compensation is different and can be used to reward individual or group performance. Because the work of design firms is team intensive, it is difficult to separate results obtained due to individual performance and reward it. Many firms use a bonus system which is effective if fairly distributed and if little comparison takes place between employees. Another system is one of rewarding the team that made profit and prorating the bonus for the different contributions of team members.

Little is normally done in the way of formal staff training and development. However, there are many actions to take that can be easily implemented into the firm's existing program. Some include sending staff to seminars; hiring bright, young talent; sending all new employees through orientation; or rotating job assignments of new staff.

2.3. Organization Structure

"The structure of a design firm determines how it will serve its clients, and what kinds of roles by principals and staff will be needed to provide that service." Choosing that structure,

---

[9]Ibid., p81.

therefore, is very important to implementing the firm's goals.[10] A number of factors influence the structure of the organization, however, three of the most important are how the firm interacts with the client, the process chosen for design and how the organization is controlled.

2.3.1. Client Interaction Considerations

The project management format is usually used when client interaction is important. In this form, the principal works with the client for the lifetime of the project or if there are too many projects for the principal, a project manager is assigned. Another variation of this is the "assembly line" structure where a project enters the firm and moves through different section leaders until it is completed. In this form there is no one person in charge of the project. Generally the client does not like the assembly line format because there is not enough individual attention. The amount of attention a client wants from the principal is generally proportional to the amount of personal attention the client gives to that project.

2.3.2. Design Process Considerations

The design process results in two main organizational structures: the departmental structure in which there are different sections through which the project flows and the team approach where different members from each section work as a team on specific project assignments. Using the team approach it is often harder to change the project size assigned to the groups than it is using the other format. However, the departmentalized structure makes coordination between different groups more difficult. The structure to use depends more on the people within your organization and how they would interact in either situation. This may lead to hybrids of the two forms where certain sections stay together in a department and members of the rest of the departments form teams. For example, there may be a design team and a Construction Administration Department or a Design Department and a production team.[11]

2.3.3. Organizational Control Considerations

---

[10]Ibid., p.28.
[11]Ibid., p.33.

Two possible organization structures are due to organizational control issues: the directive approach and the facilitative approach. Leadership sets the goals and management carries them out. In a firm there can be direct management where the leadership also manages or facilitative management where the leadership delegates the management responsibility. The typically thought of business organizational structure is hierarchical in nature but is concerned with internal management. In design professions, the client is an integral part of the group and provisions must be made to manage the client . However, in many design firms the only formal management that takes place is that of managing the client relationship or project. Little attention is paid to managing the organization. The directive approach which works better in smaller organizations has one person or set of people in charge of making decisions and feeding them down to the rest of the organization. The limitations are the physical inability of the person to be the only source of direction. In the facilitative approach the management acts as a coordinator and support point for a group of unit leaders. This structure is supportive of the multifunction, multidiscipline nature of today's practice and fosters growth. However it is more difficult to consistently perform with this structure. Also, there are few design professionals interested in fulfilling the role of coordinator.[12]

2.4. Organizational Types

The two biggest differences shaping most firms are the firms design technology and their organizational values. "Design technology shapes what the firm does best; organization values determine how its professionals will govern themselves and the rewards they will receive." "More than any other factor, where the firm elects to place the last word is the deciding element in shaping the rest of its design technology."[13] For example whether the last word rests with a project manager or a department head and the style of that individual will affect other decisions

---

[12]Ibid., p.37.
[13]Coxe, Weld; Hartung, Nina; Hochberg, Hugh; Lewis, Brian; Maister, David; Mattox, Robert; Piven, Peter; Success Strategies for Design Professionals: SuperPositioning for Architecture and Engineering Firms, The Coxe Group, 1987, p.20.

related to design technology. There are three types of design technologies: strong delivery, strong idea and strong service.

2.4.1. Design Technology Driven

Strong delivery design technologies provide efficient service on similar projects. The projects will be handled by repeating the best solutions over and over again with reliable cost, quality, schedule compliance and technical knowledge. Strong service design technologies provide experience at handling complex situations that may change from one project to another. The way the project is handled depends on the management process which is used to "coordinate comprehensive, multidiscipline talents and service until the problem is solved or the project is built." Strong idea design technologies are used for unique projects where innovation is required. The way the project is handled depends mostly on the group leader or guru. Different design technologies require different project technologies to maximize efficiency and profitability.

"Seven major areas of the firm are driven by the firm's choice of design technology. They are the project operating process; where project decisions are made; staffing at the middle levels and below; what the firm sells; best markets; what the firm can change and best profit strategies."

Strong delivery firms often have a highly departmentalized structure. Projects move down a type of assembly line where at each step a specialist works on it in supposedly the most efficient and appropriate manner. Sometimes project teams work together in strong delivery firms, and this works best when the team members work together consistently on similar type projects. The most important aspect to the client is making sure consistent quality is guaranteed not who will run each project, however, the manager of the clients has an important position as the firm's key link to the client.[14]

In a strong service firm, the client expects hands-on involvement from the person who has final say over the decisions. The organization that supports the project leader depends

[14] Ibid., p.13.

mostly on what type of structure he or she works with best. Strong idea technologies "derive their strength from the expertise of one or a very few recognized professional authorities or talents." In engineering firms it is often an individual known for being able to solve a specific kind of problem, while in architecture firms it is usually a lead designer or project type specialist. The client may interact directly with this individual or he or she may have final approval over the work that has been performed before it goes to the client. In these situations, the way the project is handled depends on the "star" of the organization and what works best for them.

Certain types of projects and certain clients seem to work best with certain design and product technologies. Strong delivery firms are preferred by commercial developers because of their efficiency and speed. Institutions, federal government agencies and corporate clients seem to prefer strong service firms, and a mix of clients looking for one of a kind work, deal with strong idea firms.

Pricing schemes vary among the design technologies. Due to its efficient and cost competitive nature, strong delivery groups bid much of their work. Strong service work is better off being charged on an hourly basis. Strong idea work, due to its unique nature should be negotiated into a lump sum figure if possible or a high multiple if not.[15]

The design technology used by the firm also affects the type of staff that will work in the firm. In a strong delivery firm, the emphasis is on efficiency, and the firm will seek to hire workers who can perform the required repetitive steps for as low a cost as possible. If the firm is a strong service firm, however, it will hire and try to keep professionals in order to maintain the skill set. In strong idea firms the staff is composed of the brightest and most innovative minds, often both young and old. Despite low pay this situation is appealing to the younger set because they are working with the guru's of the business.

There is a link between the evolution of a new market and the firm type used at different stages. At the outset of the development a new market, strong idea firms are needed to apply innovative solutions to never before seen problems. After standards have been established, most

---

[15]Ibid., p.15.

of the work is turned over to strong service firms who deal with the specifics of coordinating and adapting the solution to specific situations. If a portion of the work becomes routine, it is then bid out to strong delivery firms.

Internally, strong idea firms may evolve to strong service firms when the market for their innovation begins to shrink. Although the evolution is not always easy, it is possible. A more difficult situation occurs when a strong delivery firm notices their market beginning to shrink. Because of the different personnel required, it is very difficult for this type of firm to change to a strong delivery firm while maintaining the same workforce. In this case, it is sometimes better for the firm to find a new market in need of strong service.[16]

2.4.2. Organizational Values

The debate over whether architecture and engineering firms are subjected to the same rules of management as non-professional organizations, or, in other words, if architecture and engineering firms are "businesses" in the traditional sense of the word, has resulted in a theory of professional design firms that lie along a continuum in terms of their organizational values. There is an orientation toward valuing the business and one toward valuing the practice. The business orientation uses its skills as a means of livelihood while the practice orientation carries out work as a way of life. In a design firm there are elements of both orientations, but one side is usually more dominant than the other. On one side of the spectrum is a Business-centered practice focusing on the material reward from what they do, and on the other is the Practice-centered business, which looks at how the work they do will benefit the client. Neither choice is more noble than the other. The firm's orientation is a result of what that firm deems a better goal, and therefore is selfishly motivated. This theory makes it easier to understand the great variety among design firms. Business-centered practices appeal more to professionals whose work is more quantitative and the rules of which are more defined. Practice-centered businesses are seen more in professions where the endeavors are more creative and the rewards benefit the ego.[17]

---

[16] Ibid., p.18.
[17] Ibid., p.25.

The approach to management of either a Business-centered practice or a Practice-centered business, is very different. Figure 1 is a partial view of the continuum and where certain types of firms might fall along it.

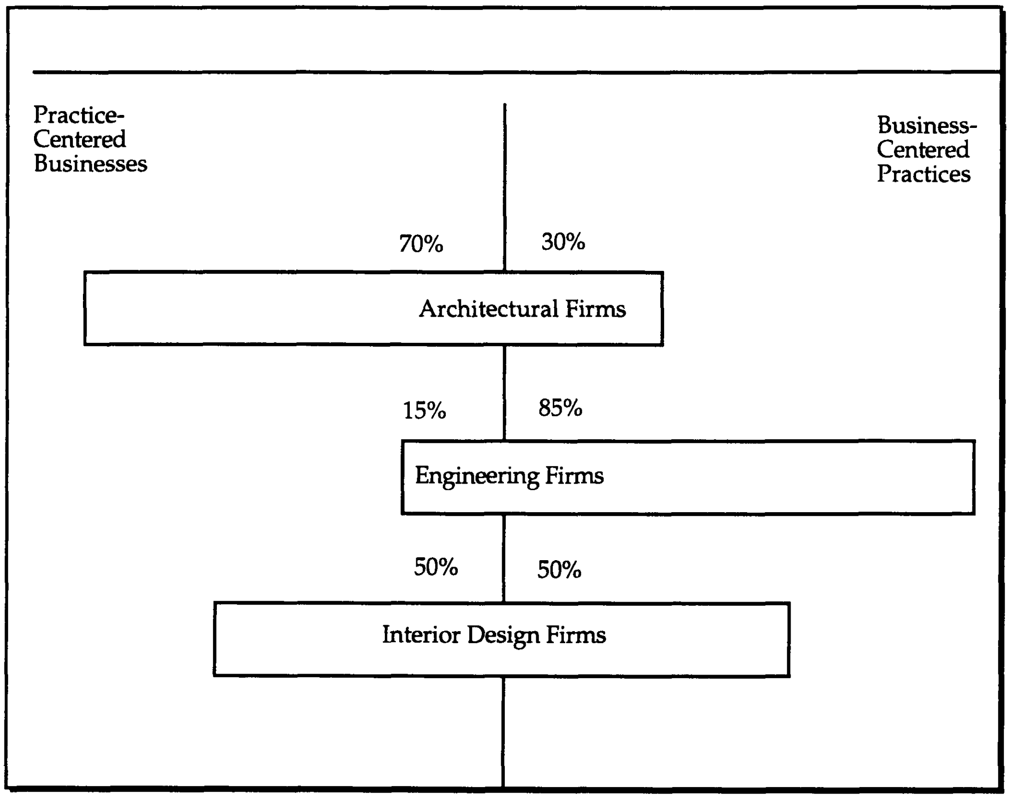

Figure 1[18]

The Business to Practice continuum has three pitfalls to be avoided which are the two extremes and the middle. At the two extremes lie the Practice Centered Practice and the Business Centered Business. The former has values linked to the lives of the professionals running the organization and basically ignores financial or client responsibility, while the latter is so focused on the business aspect it has trouble attracting and retaining professionals. In the middle lies the Organization Centered Organization. An organization is defined as "a group of people that has more or less constant membership..."[19] This group is so concerned with maintaining their status

[18] Taken from: Success Strategies for Design Professionals: Superpositioning for Architecture and Engineering Firms, New York, McGraw Hill, 1987.

[19]Coxe, Weld; Hartung, Nina; Hochberg, Hugh; Lewis, Brian; Maister, David; Mattox, Robert; Piven, Peter; Success Strategies for Design Professionals: SuperPositioning for Architecture and Engineering Firms, The Coxe Group, 1987, p.30.

quo, they do not make the necessary changes to keep themselves viable. Since the firms orientation will mandate different management techniques, it is important to know at what end of the spectrum the firm lies. When forming companies, the partners or principals should discuss their ideas about the market, firm structure, and control and come to a consensus on the issue, and in established firms, periods of transition should be examined carefully to ensure that those joining the group share the same orientation as those within the group.

2.5. Design Firm Organizational Models

2.5.1. The Superpositioning Principle

The Superpositioning Principles attempt to make sense of the differences between engineering and architecture and other professional firms by looking at the design technology of the organization and the organizational values. "The SuperPositioning principles recognize that really successful firms limit their activities to what they do best and have a clear and consistent project process for doing it."[20]

The Superpositioning concept says firms can focus on one of three design technologies: strong service, strong delivery or strong idea, and at the same time be either more business or practice centered. The choice of design technology affects, the project operating process, where project decisions are made, staffing at middle and lower levels, what the firm sells, the best markets for the firm to enter, what the firm charges, and the most effective profit strategies. The organization values affect the structure of the organization, how the group makes decisions, how the group plans and markets, who the best clients are, the top level staffing strategy and "leadership-management style potential rewards."[21] Consistency of both organization values and design technology is the foundation to a successful group. If values are compromised, other choices based on those values will be weakened.

There are different management strategies depending under which group you fall in the Superpositioning matrix. A comparison of the strategies for "Organization Structure and

---

[20]Ibid., p.35.
[21]Ibid., p.34.

Decision Making", "Marketing Approach and Marketing Organization" and "Project Process and Decision Making" give a good example of the potential differences between types of groups."[22] (See figures 2-4 at the end of the chapter.)

2.5.2. The Kaderlan Model

Another model of professional firm organization looks at eleven roles which the head of the organization must play. They fall into four categories. In the interpersonal category, the principal acts as a figurehead, leader, and liaison. In the informational category the principal is a spokesperson and also monitors and disseminates information. In the decisional position, the principal is an entrepreneur, disturbance handler, resource allocator and negotiator. Finally, the head often acts as a technical expert on issues with which the organization deals.

Kaderlan looks at three meanings of management: "management as a set of roles that relate to people, information, and decisions in the practice; management as a set of functions that governs the practice and coordinates the various aspects of it into an integrated whole; and management as a process by which you work through others to accomplish the goals of practice.

The activities that management consists of can be grouped into four areas: producer, administrator, entrepreneur and integrator. As a producer, the principal is concerned with doing the actual work of the firm. This role is a task oriented one in which the designer performs office duties like designing, supervising and planning. As an administrator, management sees to it that the work is completed as planned. This is accomplished by scheduling office work to implement the goals of the practice. In its entrepreneurial function the management seeks to find and utilize new opportunities for work. The entrepreneur identifies and develops ways to exploit new opportunities and sets the agenda. Finally, as an integrator, the principal tries to bring together the human resources of the organization in an effort to gain consensus for the goals of the firm. The integrator deals with people oriented issues such as human resources management, settling disputes and making sure employees are being challenged and assisted.

---

[22]Ibid., p.38, 39.

The different roles require different personality types which may be complimentary or contradictory. The producer is often a problem-solver, and the administrator is usually conservative. The entrepreneur thrives on change, and the integrator has good interpersonal skills.[23] Kaderlan feels that all the functions must be performed properly in order to realize the benefits of the organization. Because of the personality of the firm's principal, different management functions will be emphasized thereby making the organization unbalanced. In order to circumvent this, principals with different focus' may work together, one principal can train himself to perform all roles or the difficult functions can be delegated to some other administrator. It is important for the principals to know their respective strengths and limitations and find ways to make sure all roles are being fulfilled. This can be done by finding help internally, hiring a consultant or going into a partnership with someone with complementary skills.

In this organizational model, the firms are organized for efficiency, service and innovation which relate to the strong delivery, strong service and strong idea concepts. [24] The organizational structures fall into four categories: entrepreneurial, bureaucratic, innovative (adhocracy), or professional.

In the entrepreneurial firm, the structure is so simple and unelaborated that it is considered a "non-structure." The principal makes all the decisions, and the organization is organized around him or her. This type of firm is responsive to a dynamic environment. However its single focus limits its ability to deal with complexity, there is little or no standardization and it is overly dependent on the principal.

In the bureaucratic organization, the structure is formal and machine-like in nature. The decision making is highly formal and centralized and activities are highly standardized. The functions are separate. They have a functional departmental structure. With design, production and construction administration separated, for example. Firm operation and management are

---

[23]Kaderlan, Norman, Designing Your Practice: A Principal's Guide to Creating and Managing A Design Practice, McGraw Hill, 1991, p.37.
[24]Ibid. p.55.

also separate, and power is based on the position in the organization. This works best in a stable environment and is often seen in strong delivery firms Some of the problems with this structure are that it is inflexible, difficult to change and stifles creativity.

In contrast, the innovative organization (adhocracy) has a highly flexible structure in which teams are often organized for the length of the project. The decisions are based on expertise. There is little or no standardization. It is organized around the experts and the power goes to them. It is responsive to change but can be inefficient and demanding on its internal environment.

In the professional organization there is a formal structure with autonomous principals. The decisions are made collectively or through internal politics. There is some standardization, and the power goes to the partners. This structure can be very responsive if there are no problems between the partners, but there are almost always problems coordinating among the autonomous groups.[25]

2.6. Marketing Issues

2.6.1. Definition, Goals and Objectives

Marketing has had a negative image associated with its use in professional organizations. However, this may have partially been due to the idea of marketing as selling. Marketing and selling are not the same function. Selling is the part of marketing that deals with finding clients who need the services, obtaining the commission, and maintaining contact with them once the project is complete. Marketing "encompasses analysis of existing and potential markets; preparation of business development programs; staffing, training and management of marketing and sales personnel; study and critique of the sales operation; and formation of budgets to support the entire marketing effort."[26]

---

[25]Ibid., p.59.
[26]Marketing and Public Relations, AIA Practice Manual, 1988, AIA, Washington, DC., p.3.

The objective of a good marketing program is to provide opportunities for company growth and development. Purposes of a marketing program include enabling the firm to make decisions about where and what type of services to provide, building contacts with the type of clients the firm would like to serve and providing opportunities for the firm to obtain projects it would like to lead. The goals of marketing include: determining the needs of the client, evaluating the competition, evaluating the company, developing a mission statement, preparing a marketing plan, developing positive client relations and developing a positive public image.

A successful marketing program identifies the markets it wants to approach and makes sure they are not at odds with the firm's goals; analyzes the ability of the firm to perform in the given market; has a system for selling to the market; uses marketing communication and public relations for support; has the financial resources to carry out the marketing plan; links goals and activities; and projects the outcome of the activities.[27] It includes public relations, and positive public relations are a very important part of the marketing process. Part of public relations are client relations. Understanding the services being provided and being able to communicate them to the client and among the project team members, is essential to a good marketing program.[28]

The benefits of a strong marketing program go beyond increased potential for business. Through marketing the company learns more about itself and its own strengths and weaknesses. It learns more about its competition and the threats and opportunities presented by them, and hence increase its competitive position. The company image will become stronger and public relations will improve.[29] Marketing by any firm benefits the architecture profession by making the public aware of the many and different services provided by them.

Currently, clients expect the firm to market their services and do it well. The client must perceive that the firm has the capability to meet its requirements. Marketing is one way of achieving this.

---

[27]Ibid. p.3.
[28]Snyder, Jonathan, Marketing Strategies for Engineers, 1993, American Society of Civil Engineers, p.5.
[29]Ibid., p.11.

2.6.2. Steps for Formulating a Marketing Program

There are four basic questions the firm needs to ask when beginning to formulate a marketing program. The first one is, "What services does the firm want to provide?" The second question is "What services does the chosen client or market need?" The answers to these two questions should overlap to some extent, and once that overlap is identified, the firm should ask the next two questions. First, "Can the firm provide the services the market wants?" and second, "How is the firm different from others who can provide similar service?"[30]

Steps in implementing a marketing plan are determining need, surveying the market , evaluating the industry, evaluating the company, preparing a mission statement, preparing the marketing plan, developing client relations, developing a positive public image, recording and reporting information and managing the marketing plan. The needs of potential clients should be established early, particularly those needs that are not currently being satisfied. Then a marketing survey should be conducted. This looks at the past, present and possible future clients of the firm in comparison to the firms competition. This is done by surveying the pool of clients about choices they make when selecting a firm with which to do work.

The industry should be evaluated to determine the competition in various areas of service and the power of the suppliers and buyers. Then the company should do intensive self evaluation of its abilities to provide the services in which they are interested. This will help formulate the mission statement which describes the overall goals the company hopes to achieve and gives the members of the organization something on which to focus their efforts. Once the goals are understood, the marketing plan can be developed by targeting the market or markets of interest and setting long and short term goals and ways of determining the affects of those goals.

When selecting a market, do not be too broad in the scope. For example, rather than looking at schools, look at public schools, colleges or universities. Geography must also be a consideration because market conditions can vary from region to region. When the markets and regions of interest have been identified, the following questions need to be answered: "What

---

[30]Marketing and Public Relations, AIA Practice Manual, 1988, AIA, Washington, DC., p.4.

volume of business is expected in this market for the next one to three years?; What scope of service do the clients usually require?; What is the range of compensation and in what form does it usually come?; What is the standard selection process?; Are specialists needed or can inexperienced firms be used?; How would you identify clients in this market?"[31]

Client relations must be consistently maintained through communication and quality service. By developing a positive public image more job opportunities will surface through name recognition, and by doing quality work, more clients will refer the firm to other potential clients. The entire marketing effort should be monitored for effectiveness and should be under the control of the Marketing Coordinator.

Finally, the marketing process should be monitored and evaluated at different points, for its effectiveness. Also it helps to determine if changes need to be made, for example, if a new area has opened in which the firm can offer competent service.

2.6.3. Strategies

There are two main types of marketing strategy: client driven and firm driven. In client driven marketing the client uses the firm for repeat business or refers other potential clients to the firm. Firm driven marketing can be direct or indirect. Indirect marketing is used to present information to potential clients about the firm in order to increase firm recognition. Direct marketing is used in order to obtain project contracts.[32]

The prospect of finding capable professionals is no more enjoyable to clients than finding clients is to the architect. As such, the designer can make the client's search easier by familiarizing the client with the firm before the services are needed. "Developing new business involves five steps: prospecting, strategy research, paperwork, presentation/interview, and closing."[33]

---

[31]Ibid., p.5.
[32]Snyder, Jonathan, Marketing Strategies for Engineers, 1993, American Society of Civil Engineers, p.28, 34.
[33]Marketing and Public Relations, AIA Practice Manual, 1988, AIA, Washington, DC., p.7.

Prospecting involves market research, list building and bird-dogging. Market research is the act of determining what kind of work the firm should do and where it can be found. List-building refers to the process of identifying clients with whom the firm would like to keep in touch. When bird-dogging, the marketing effort is focused on finding potential projects in the short term from the list of contacts.

Strategy research involves learning enough about each potential client to know what selling tactics to use on them. Once the clients with projects of interest have been identified, the firm must formally contact them and express interest in projects they would like to undertake. This happens during the paperwork phase. During the interview stage, the company is able to personally project its image to the clients, and in closing make the sale.[34]

Marketing should be a continuous process; it should not only operate when the firm is looking for work. Some firms stop marketing when they have a sizable backlog. Not only is this inconsistency evident in the flow of work, it will be recognized and looked upon unfavorably by potential clients. [35]

2.6.4. Managing Marketing

Managing marketing is different from actually performing marketing. Managing marketing involves the "marketing plan; marketing staffing and organization; and monitoring marketing performance." Success in marketing of professional services depends on where you sell it - 5 to 10%; how you sell it - 15 to 30%; and what you sell - 60 to 80%. The marketing plan must define the market to be pursued, the services to be provided, how the firm will distinguish itself from its competition, how the firm will sell its service, what sales tools it will use, what roles will be required to fulfill the plan and how much resource will be devoted to them, what the desired results are and how they will be measured.[36]

---

[34]Coxe, Weld, Marketing Architecture and Engineering Services, 1983, Van Nostrand Reinhold, 1983, p.44.
[35]Snyder, Jonathan, Marketing Strategies for Engineers, 1993, American Society of Civil Engineers, p.10.
[36]Coxe, Weld, Managing Architectural and Engineering Practice, 1980, John Wiley and Sons, New York, p55.

The basic staff and organization marketing functions are the closer, courter, lead finder, coordinator and marketing manager and director. The closer delivers the proposal to the client and wins the contract. The courter is responsible for winning the client's confidence in the get-acquainted stage. The lead finder finds clients to be courted, and the coordinator keeps all selling materials up to date and accessible. The marketing manager/director is ultimately responsible for overseeing the marketing effort.[37]

"Those who get the work, run the firm" so closing is usually done by the principal. Sometimes clients express interest in having the closer be a doer throughout the project which limits the amount of time the principal can spend on marketing.[38] Courting is time consuming but with great payoffs. In a lead oriented firm the courting may be done by the lead finder while in a client oriented one courting may best be done by the closer. Lead finding is a difficult and often unrewarding task for the individual doing it. It is important to have the right person acting as lead finder. In terms of personality traits they should have a high tolerance for rejection and no need to "win". Every effort should be made to make the other aspects of their work more tolerable. Depending on the type of client being served, lead finding may or may not be delegated to a subordinate. Coordinating is an easily delegated position that seems best performed by one person. It involves working with proposals, communicating marketing information between principals, selling tools, public relations and research.[39] One key person must be responsible for the process. The person can either manage the process as a facilitator or direct it by telling everyone what to do. In the directed marketing approach, the marketing group delivers the client to the design professional. In the managed approach, the marketing group acts as a support system for the design professionals.

Enough money must be spent on marketing to allow consistency in the process. One researcher suggests that "...for every twenty people in a design firm, the equivalent of one full-time person must be devoted to marketing."[40] Measuring the performance of the marketing

---

[37]Ibid., p.58
[38]Ibid., p59.
[39]Ibid., p61.
[40]Ibid., p65.

effort is a difficult task in design firms. The person who finds the client is often not the person responsible for closing the deal. Instead of trying to measure performance it is better to manage the process and let the end result take care of itself. However some practical units of measurement include measuring the frequency with which contacts are made, the number and size of leads found from a list and the number of short lists made through list contacts.

2.7. Conclusion

Consistency is the key to running a successful design firm. A strategy must be developed based upon the goals and resources of the firm. This strategy needs to be consistently applied to all aspects of the firm at all levels. It should be reflected in the firm's organization and applied to the marketing effort. also be applied to any new endeavors entered into by the firm. The purpose of being consistent is to keep the firm focused on its goals which can be difficult because of both internal and external distractions. Working with another group toward some goal can be particularly distracting because of their own possibly conflicting strategies. The way this collaboration process works is the subject of the next chapter.

Master Strategies for Organization Structure and Decision Making		
Strong Delivery	This firm practices best as a proprietorship or corporation closely held by one or a few design professionals who manage a vertical organization. Decision making tends to be autocratic, and the firm thrives as long as the principals stay closely involved.	This firm is frequently "investor" owned by insiders or outsiders who delegate much of the operations and management. Decisions are largely based on standardized processes or procedures that work as long as the firm's process or product does not become obsolete.
Strong Service	This firm is broadly owned by professionals functioning as a partnership, whether legally structured as a partnership or as a corporation. Organization decision making is by consensus. It functions best when owners share similar professional capability and goals.	This firm could be a proprietorship, a closely held partnership or a corporation with owners making decisions by majority rule. Decisions are clearly oriented toward meeting the goals of major owners.
Strong Idea	This firm is usually owned by a sole proprietor or a few equal owners who function as partners. Their ideas and creativity in projects drive the firm, and few organization decisions are made.	This firm is usually a proprietorship or small partnership (or closely held corporation functioning as a partnership). Organization decisions are tailored to maximize the application of one or a few original ideas.
	Practice-Centered Business	**Business-Centered Practice**

Figure 2[41]

[41]Taken from: Success Strategies for Design Professionals: Superpositioning for Architecture and Engineering Firms, New York, McGraw Hill, 1987.

Master Strategies for Marketing Approach and Marketing Organization		
Strong Delivery	Principals sell one-on-one; they may actively take opportunities to past clients. Effective advertising and public relations campaigns keep the principal's and firm's names in front of the market. Marketing staff supports those efforts.	Marketing is carefully planned and managed. Sales representatives find and sometimes close leads. Bidding opportunities are welcomed. Advertising promotes a standard product or service. This kind of firm often relies on heavy entertainment of prospects and blanket coverage of conventions.
Strong Service	Marketing depends on closer-doer principals who are strong at finding and courting clients. A facilitative marketing manager (who may be a principal) encourages broad staff participation in marketing. This firm produces a high-quality brochure, a client newsletter, and articles in both professional and user-oriented publications. It seeks to have a good record of awards and recognition by professional or user groups.	Marketing and sales are centralized under a strong marketing director who is responsible for preparing the marketing plan. The firm will employ bird dogs or prospectors to find leads and will use targeted direct mail, client seminars, and some advertising. Sales are closed by one or a few principals who hand off work to project managers.
Strong Idea	Marketing is generally unplanned. This firm relies almost entirely on a reputation developed via books, articles, professional society awards, entry in premier design competitions (often invited), frequent speeches, and often a faculty appointment. Marketing staff, if any, maintains photographic and written project information for responding to inquiries.	Marketing is actively planned, particularly in efforts to get to know specific clients, to seek publicity and publication of articles in leading magazines, to produce effective brochures, and so on. A marketing coordinator keeps the program moving.
	Practice-Centered Business	**Business-Centered Practice**

Figure 3[42]

[42] Taken from: Success Strategies for Design Professionals: Superpositioning for Architecture and Engineering Firms, New York, McGraw Hill, 1987.

Master Strategies for Project Process and Decision Making		
Strong Delivery	Projects are processed through departments or teams in accordance with standard details and specifications developed through experience. Partners-in-charge make any necessary decisions. Success is achieved by delivering a good product efficiently.	Projects follow an assembly line process through a departmentalized system in which established standards are critically important. Since the product is standard, the client may deal with several job captains over the course of the project. Quality control is the key to client satisfaction.
Strong Service	Projects are delivered through project teams or studios whose principals-in-charge (the closer-doers) have a high degree of involvement in project decision making. Experienced, technically oriented people provide quality-control input, but project success relies on the authority and experience of the closer-doers.	Projects are headed by project managers and delivered by departments whose department heads usually have authority over project decision making and responsibility for quality control.
Strong Idea	Creative direction originates from the idea (design) principal. Projects are delivered via highly flexible teams established and organized around jobs.	Projects are delivered via stable teams or studios that often are organized around particular client or project types. Idea principal(s) maintain project authority.
	Practice-Centered Business	**Business-Centered Practice**

Figure 4[43]

[43] Taken from: Success Strategies for Design Professionals: Superpositioning for Architecture and Engineering Firms, New York, McGraw Hill, 1987.

3. Collaborative Options

3.1. Introduction

The players in the construction industry are not new to the use of collaborative options. Traditionally, their greatest use has been seen in organizations combining their resources on a single project in the single project joint venture. One very common use of the joint venture in construction has been to combine financial resources for the purpose of obtaining a bond which neither company could individually obtain. In other cases monetary resources are not enough, and managerial and physical resources must be supplied by all the companies involved. The environment in which firms are operating has become increasingly competitive. Firms are realizing that they cannot be all things to all clients or everywhere at the same time and are choosing to work with other firms in order to expand the capabilities of their business.[1] Many types of collaborations can be seen as organizations try to secure business in this increasingly competitive environment.

This chapter will look at definitions of collaboration and reasons groups decide to collaborate. Types of options available will then be discussed followed by important issues to consider when forming an alliance.

3.2. Definition of Collaborative Options

Collaboration is seen in many forms. Whenever two or more independent firms are working together to some goal, collaboration is occurring. There are many different ways in which firms can collaborate, and many names and definitions have been given to these processes. However, two main schools of thought can be seen with regard to defining collaborative efforts. One school focuses on the product as the most important aspect of the effort, and the other sees the interaction between the firms as holding more importance.

---

[1]Doorley III, Thomas L., Teaming Up for Success, Business Quarterly, Summer 1993, p.99.

Collaboration can result in the creation of a product. Said product may be a completed project, some definitive product research or the creation of a new firm or entity. Often the product is the impetus for the collaborative effort. The effort is achieved because all groups involved see an opportunity to personally benefit from the product. One definition of a collaborative effort focuses on two firms coming together to yield some output (project, new firm, research). In this relationship each participating firm or "parent" has a level of responsibility, not necessarily equivalent, for the product or "child".[2] Another definition emphasizes both the product and the contractual obligation of the parties involved. It looks at joint ventures, a type of collaboration, as a "contractual union between two or more firms for one or more specific projects." That obligation is considered important in the light of litigation because partners are individually and jointly liable for the products and services they provide.[3]

Sometimes the goal of collaborating is not what is produced but what each participant gains from the others involved. Strategic alliances can be thought of as coallignments between two or more firms hoping to learn and acquire from each other technologies, products, skills and knowledge not available to other competitors.[4] In a more general sense, collaboration can be seen as a hybrid organization using resources and/or structure from more than one existing organization.[5] The focus in this definition is the cooperative use of resources, and the following definition builds on that concept. According to this perspective, joint ventures are a cooperative form of organization between independent parties who could otherwise engage in competition or have a competitive potential.[6]

By focusing solely on the product it is possible to lose sight of the process which initially lead to it. Similarly by only looking at the internal benefits of working with another group,

---

[2]Lorange, Peter, Roos, Johan, and Simic Brown, Peggy; Building Successful Strategic Alliances, Long Range Planning, Vol. 25, No. 6, p.10.
[3]Joint Ventures, AIA Practice Manual.
[4]Lei, David, Offensive and Defensive Uses of Alliances, Long Range Planning, Vol. 26, No. 4, 1993.
[5]Jemison, David B. and Borys, Bryan, Hybrid Arrangements as Strategic Alliances : Theoretical Issues in Organizational Combinations, Academy of Management Review, 1989, Vol. 14, No. 2, p. 235.
[6]Lyons, Michael Paul, Joint-Ventures a Strategic Choice - A Literature Review, Long Range Planning, Vol. 24, No. 4, 1991

opportunities to benefit others with output from the group will not be realized. A more inclusive view of collaboration that incorporates the two sides will be presented here.

3.3. The concept behind collaboration

3.3.1. Reasons for collaborating

Organizations collaborate for a variety of reasons. A common reason for participating in an alliance is to strengthen similar skills. Both groups perform similar work, but neither alone can provide the resources needed for the project. Another need for collaboration is seen when one group can find work and another can perform the tasks needed to bring about its completion. Sometimes a single firm does not have all the necessary skills to complete a project alone. In this case an alliance is formed between them and a group with complementary skills. For example, one group can design the work and another can produce it. When one firm would like to perform a project outside of its geographical region, it may team up with a firm from the region of interest who may better understand how the local forces operate. Firms also work together when one or both firms is interested in learning from the other firm. An alliance can be used to discover information about another group regarding the way the group manages itself, projects, marketing, new technology or a number of other areas. Most of these alliances are instigated by one of the groups interested in participating. However, an owner can also initiate an alliance, directly or indirectly. An owner may request that two firms combine their talents as an assurance of the project being completed to his or her satisfaction.[7] The owner may also propose a certain mixture of organizations to spread the work being done to a larger number of groups or to include groups that have been previously underrepresented in the process.

One theory has defined four generic motives for wanting to enter into this type of arrangement. Understanding some of the generic reasons for entering an alliance, will help clarify some of the specific reasons firms use collaboration. Firms can use collaboration as a defensive move. In order to maintain competitive advantage, they will collaborate and gain

[7]Joint Ventures, AIA Practice Manual p.13.

access to new competencies, markets and technologies. A group may also use collaboration to catch up within the industry by strengthening the competitive position of the firm or to move from a position of following or maintaining to one of leading. Alliances may help firms to effectively remain in their current position. In a corporate setting, this can be especially helpful if the particular business segment is not getting much attention. Finally, an alliance can help an organization learn how to run properly or to restructure, which might lead to exiting the business altogether.[8]

3.3.2. Difficulties encountered in collaborating

Although the concept behind collaboration is to create value for those involved, the need to collaborate is not always seen in a positive light. Because firms sometimes consider collaboration a reaction to an inability to develop independently, participating in a joint venture is not always considered a successful enterprise.[9] In addition, strategic alliances can be more difficult to operate than an independently owned business. One reason for this is that they often require new management capabilities. There may be a need to manage in different ways because of new organizational structure. It is also difficult to reach consensus on decisions because more than one organization must agree on the decisions being made. The strategic intent of the parent firms may be conflicting, and they may have different corporate cultures which must now work together effectively.[10]

3.4. Types of collaborative options

No two alliances are alike. In fact, if two companies work together on two different projects at two distinct times, it is very unlikely that the experiences of those participating will be

---

[8]Lorange, Peter, Roos, Johan, and Simic Brown, Peggy; Building Successful Strategic Alliances, Long Range Planning, Vol. 25, No. 6, p.10.
[9]Lyons, Michael Paul, Joint-Ventures a Strategic Choice - A Literature Review, Long Range Planning, Vol. 24, No. 4, 1991
[10]Lorange, Peter and Roos, Johan, Why Some Strategic Alliances Succeed and Others Fail, The Journal of Business Strategy, January/February 1991.

the same. In part this is due to the one-of-a-kind nature of the projects themselves, but it is also because of the unique nature of alliances. This uniqueness suggests the existence of a universe of hybrid types that is not easily quantified. No effort will be made here to categorize all possible types of alliances. However, a theory on hybrid types will be discussed, and then time will be examined as a useful trait to distinguish alliance types.

One theory has identified four basic types of strategic alliances. It defines the ad hoc alliance, the consortium alliance, the joint operations strategic alliance and the full-blown joint venture. The type of alliance a group chooses depends on the input from and output to the parents. The input to the venture may be minimal in tune with short term operation, or it may be abundant in accordance with long term operation. The output , whatever that may be, can go into the alliance or to each parent. An ad hoc alliance is one in which the inputs are short term and the outputs go only to the parents and not back into the alliance. An example of this would be an alliance in which the groups entered to learn structural design in a specified market. In the consortium alliance, resources are input for a longer duration, but the output is still retained solely by the parents. This often occurs when research and development is the purpose for the alliance. Both groups input extensive time and manpower to research, but the benefits are used separately by each group. In the joint operations alliance or project based joint venture, the input of resources is short termed, but some of the output is retained by the alliance. In a joint venture of two groups to construct two buildings, the groups are inputting resources for a fixed amount of time. Although profits are retained separately, the recognition goes to both groups involved. Finally in the full-blown joint venture, inputs are supplied with long term involvement in mind, and outputs are retained by the alliance. This occurs when companies are working together to develop a new technology that will be used jointly in a new capacity.[11] Table 1 depicts these four basic types of alliances.

---

[11]Lorange, Peter, Roos, Johan, and Simic Brown, Peggy; Building Successful Strategic Alliances, Long Range Planning, Vol. 25, No. 6, p.10.

Four Basic Types of Strategic Alliances

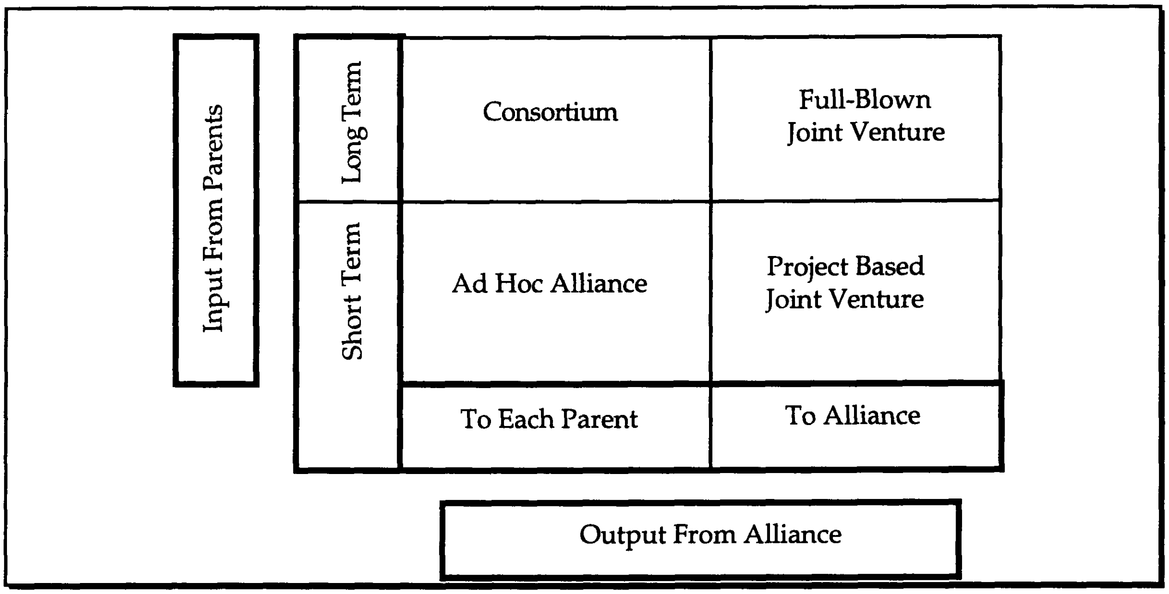

Figure 1[12]

3.4.1. The Collaborative Option Continuum

Collaborative options make up a continuum of possible alliances that can be distinguished by their duration. At one end of that spectrum is the single-project joint venture. This alliance is commonly used in the industry. Two or more firms, but traditionally two, contractually work together on one single project. They each incur financial responsibility for the project if it fails.[13] The contract between the firms details the terms of the agreement. It describes which group is responsible for what action, how the profit will be divided between the partners and what the risks and responsibilities of each group are. The joint venture allows the firms to combine resources in order to produce the project. This leaves other resources within the organization free to invest or use in another project. It reduces the financial risk associated with project performance, but it increases risks due to a need for greater coordination between the

[12] Taken from Lorange, Peter, Roos, Johan, and Simic Brown, Peggy; Building Successful Strategic Alliances, Long Range Planning, Vol. 25, No. 6, p.10.
[13] Joint Ventures, AIA Practice Manual Section 1.13, p.13.

participants. Because of the single project nature of the venture, the firms have no guarantee that they will work together again. This may discourage firms from putting in the time and effort needed to make the venture run most effectively. Whether or not the groups will work together again hinges to a great degree on the outcome of the completed project.

At the other end of the collaborative option spectrum is a full blown merger between the firms. In a merger, the firms permanently join together as one entity. Many logistical problems are incurred with a merger between groups. How should the new firm be organized? Who should be the head? Is consolidation necessary? Where should the facilities be located? With an increase in the number of workers, will there be a need to change firm strategies? The physical process of two groups becoming one takes a large amount of time. Many internal problems are seen with personnel who are confused with the changes and concerned about retaining their jobs. As the focus of this thesis is on temporary alliances, the strategies for dealing with the problems due to merging will not be discussed here.

Along the spectrum lay strategic alliances. These vary in duration from a fixed number of projects to an indeterminate number of years. Firms may decide to work together on a specific number of projects. From the beginning of the endeavor, they may have already planned or contracted together for these assignments. There is a learning curve involved when independent groups work together. The benefits of a operation such as this are that having worked on more than one project together, some basic issues of how the groups will interact will already have been resolved and they will be able to move on to other issues. In other circumstances groups will work together without having already established which projects they will produce. In situations of this type, the primary objective of the alliance is not the product but what each group can offer the others. The groups enter the alliance with the understanding that it will not be permanent, but not establishing any particular number of projects they would like to produce. This leaves the relationship open to grow and change under supervision without major time constraints. A similar relationship exists when groups decide to combine forces for an indeterminate period of time. Figure 2 depicts a diagram of the Collaborative Option Continuum.

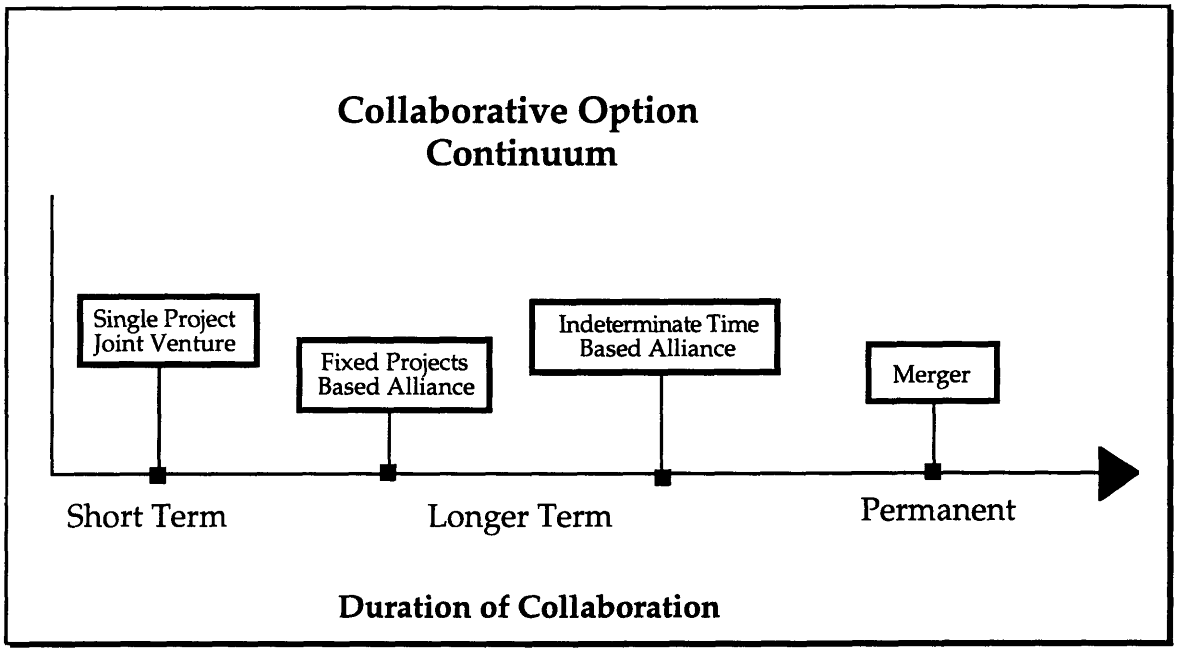

Figure 2

None of these types of collaborations must necessarily be done on an equal basis. In other words, partners need not share an equal amount of the risk. Rather than splitting the risks, and hence gains, fifty-fifty, they may be divided sixty-forty, seventy-thirty or in any other fashion. The share of risk and profit is theoretically defined according to the amount and type of work assigned. In the case of two design groups working together, the responsibility of one group for preliminary design and the other for final design may not represent equal quantities or difficulty of work, so the profits would be divided in a manner that reflected this.

3.5. Forming collaborative alliances

3.5.1. The decision to collaborate

The desire to collaborate is driven by the idea that the potential rewards from the venture outweigh the risks inherently involved. The first step to forming a collaborative alliance is understanding what those potential rewards are, or why such a venture would be worthwhile to both groups involved. This begins with understanding your firms core competence and skills. This is important because the alliance should be matched with the strategic intent of the organization. The firms involved should understand that their commitment to the hybrid purpose and their own organization purpose should not be counter to each other. Both you and your partners individually need to asses the reasons for participating in the venture. Once the firm assets are understood, the goals to be achieved through collaboration will be more clear. Once each firm has decided that the venture makes sense for them individually, the same decision must be reached by the group.[14] Everyone must be involved in the goal making process.[15]

The purpose for pursuing the hybrid acts as a legitimating factor. It is used to generate loyalty for the hybrid. Although the purpose for pursuing the venture may be different for each firm, it should be clear, and not conflicting.[16] A broad purpose may be used to unite a group into action, however, it may make it difficult to resolve inevitable conflicts that will arise. A more narrow purpose may make the solutions to some of those conflicts more clear.[17] By not losing sight of the purpose of the venture, it has a better chance of success. Determining the purpose of the venture will also help a firm decide which type of venture would best fit that need.

3.5.2. Which option should you choose

The option chosen is influenced by the goal of the venture. Understanding the goal will help to determine the requirements needed to achieve that goal, the first step in venture formation.[18] For example the goal may be to joint venture on one predetermined project. In a

---

[14] Joint Ventures, AIA Practice Manual.
[15] Lane, Henry W. and Beamish, Paul W., Cross-cultural Cooperative Behavior in Joint Ventures in LDCs, Management International Review, Vol. 30, Special Issue, 1990.
[16] Lorange. Peter, Creating win-win strategies from joint ventures, The CTC Reporter, No. 31, Spring 1991.
[17] Jemison, David B. and Borys, Bryan, Hybrid Arrangements as Strategic Alliances : Theoretical Issues in Organizational Combinations, Academy of Management Review, 1989, Vol. 14, No. 2, p. 237.
[18] Joint Ventures, AIA Practice Manual.

simplified sense, once the firms have decided who is responsible for what aspect of the project and that responsibility has been translated into percentages, the required input from each group will be known. In other words, once the project has been estimated and bid and the groups have decided how the work will be divided, each firm will have a good idea of the input required of them and for what length of time that input will be required. On the other hand, if the goal is a less tangible one like gaining skills from each other, the firms will have been made aware that there is uncertainty in the relationship because an undetermined amount of time and other resources may be required. The goal will require a certain basic level of input. It will determine whether that input will be long or short term. Also if the goal is product versus process oriented, the type of input and length will be influenced. Once the type and quantity of input are known, the best option can be chosen.

3.5.3. Support of internal and external stakeholders

3.5.3.1. Internal

In broad terms all the members of the organization will be affected by the collaboration and therefore an effort should be made to have unanimous organizational support of the alliance. However, some members will be more directly affected than others. Those who will be working directly with the projects must be committed to making them work. The greatest effort should be made to obtain commitment and consensus from managers on all levels regarding the decision to pursue the venture. There are seven indicators of this consensus.

1) The internal consensus within the organization regarding the venture.

2) The internal consensus in the other organization regarding the venture

3) The commitment to the venture by top management.

4) The commitment to the venture by the financial part of the organization.

5) The commitment to the venture by the product development part of the organization.

6) The commitment to the venture by the production part of the organization.

7) The commitment to the venture by the marketing part of the organization.[19]

3.5.3.2. External

External stakeholders are those who are affected by the overall profitability of your firm or who have had an influence on the decision to collaborate. Some of these stakeholders might include bankers, the project owner or client, stockholders, etc. It is important to manage and obtain endorsement from those stakeholders who will be affected by the arrangement. Obtaining stakeholder endorsement often requires political competence. In other words, the firm or group must be competent at managing a variety of stakeholders because this may impact not only the outcome but whether there is a project at all. The stakeholder strength/ political competence, looks at the ability to deal with broader stakeholder management issues. The way in which the problems are analyzed and dealt with will vary from project to project.[20]

3.5.4. Firm analysis

Once the type of venture has been decided upon, the firm must identify its strengths and weaknesses relative to fulfilling the purpose. The strengths and weaknesses of the partners must also be determined.[21] Whether the goal of collaboration is to produce a specific project or position oneself in a new geographical area, the process of determining the strengths and weaknesses of the firm as accurately as possible is probably the most difficult. For a venture consisting of a single project or a fixed number of projects, one method of determining strengths and weaknesses relative to each project is by looking at certain criteria and determining the firm's capability in each area. A firm should look at the skills required by the project, the background and knowledge the firm has with this type of project, the contacts needed to secure the project, the staff necessary for the project, the management/leadership needed on the project and the

---

[19]Lorange, Peter and Roos, Johan, Formation of Cooperative Ventures: Competence Mix of the Management Teams, Management International Review, Vol. 30 , Special Issue 1990.
[20]Lorange, Peter and Roos, Johan, Formation of Cooperative Ventures: Competence Mix of the Management Teams, Management International Review, Vol. 30 , Special Issue 1990.
[21]Lorange. Peter, Creating win-win strategies from joint ventures, The CTC Reporter, No. 31, Spring 1991.

administration needed to hold the firm together while working on the project. The firm must be extremely critical of its ability to perform in each of these areas as well as its ability to sustain the effort over the entire course of the project.[22] Determining ones own strengths and weaknesses helps to determine the complements needed in a venture partner.

This ability to carry out business investigations and analyses within the firm in connection with the venture is known as analytical scope. This is a type of analytic competence. The importance of analytic competence is seen in the collecting of information related to the venture. If analytic competence is poor, the decision to go ahead with the venture may be based on little or incorrect information. A strong analytic scope is thought to influence the decision to form the venture and the outcome of the venture itself. There are six indicators of analytic scope.

1) The analysis of whether the venture fits with the company strategy.

2) The analysis of whether the venture fits with the other company's strategy.

3) The analysis of markets for the product the venture will create.

4) The analysis of the competitive position of the venture.

5) The analysis of the company's relevant resources.

6) The analysis of the partner's relevant resources.[23]

After the firm is clear on their abilities and needs, the group being considered for the venture can be analyzed for their strengths and weaknesses. Group competencies may overlap, but the goal is to leave no holes in the needs of the collaboration. A venture that does not supply all the necessary skills, will not be viable. When evaluating the position of a potential partner as well as your firm, you should look at:

1) The skills the project requires.

2) The background and knowledge the firm has in dealing with this type of project.

3) The contacts you have and your ability to secure the commission.

---

[22] Joint Ventures, AIA Practice Manual.

[23] Lorange, Peter and Roos, Johan, Formation of Cooperative Ventures: Competence Mix of the Management Teams, Management International Review, Vol. 30 , Special Issue 1990.

4) The staff requirements of the project. Working on this project should not put the rest of the projects in jeopardy. The staff needs to be correctly skilled and of an adequate number to undertake the type of project under consideration.

5) The appropriateness of the managers available to lead that project and the other ongoing work.

6) The ability to handle the project financially taking the risk into consideration.

By looking at these areas, the strengths of the firm will be discovered and so will the areas in which a partner can compensate. However, it is important not to forget firm compatibility as an important determinant of whether or not to pursue the venture.

The decision to pursue the venture must be made jointly, the agreement should be drafted jointly which will give additional insight into how the other group works.[24]

It is also helpful to look at your firm's abilities as though through the eyes of your partners. This outside-in analysis will not only give you more insight into your own firm but also into possible concerns of your partners.

3.5.5. The Venture Agreement

There should be a venture agreement endorsed by and reflecting the input of representatives of each group, but drafted by any group member. This should be a written document, and its formality will probably parallel the formality of the arrangement. Its basis should be a clear business strategy with a clear written plan. The agreement also needs to be accepted by the independent organizations. One way of facilitating this may be to look at the document as not etched in stone. A time period during which the document will be reviewed and commented upon could be arranged as another method of building consensus. It must be endorsed by upper management and detail who is responsible for what activities. If the venture involves products for a specific customer, the agreement should also include information about how the venture will serve them. The customer should also endorse the venture.[25]

---

[24]Joint Ventures, AIA Practice Manual.

[25]Lorange. Peter, Creating win-win strategies from joint ventures, The CTC Reporter, No. 31, Spring 1991.

Decisions must be arrived at jointly, and after a general agreement has been reached, the lawyers can get involved .

3.5.6. Organizing the management team

The management team is composed of representatives from the partners firms who are responsible for controlling the venture. Members of both sides should interact from the beginning. They must understand that it is their job to make the venture work. The make-up of the management team is very important. Partners should strive to assign people with compatible styles and beliefs. Entrepreneurial executives with a high threshold for ambiguity and pain will work well with the constraints caused by collaborating, and the local manager should be a proven performer in this type of work. The authority and responsibility of the management team must be clear. Executives should be motivated to make the venture, not the parent company, is the focus. To aid in this action, the parents should suppress the urge to "control" the venture. Performance expectations must be clear. Organizational compatibility is another important consideration of the venture. The business cultures of the groups must be looked at to determine if they are too opposed to form a venture.

A sense of learning must be aggressively pursued, and this should be integral to the parents business culture. Learning from the venture is one part of creating a win-win strategy from forming a venture.[26] It is best to keep the alliance personnel long term because they create a base for sustained learning within the organization. Another way to look at the situation is each time your firm personnel is replaced the alliance essentially becomes re negotiated to the benefit of the partner. This is important because the greatest chance for learning often occurs on a daily basis at the employee level.[27]

3.5.7. Partner Selection

---

[26]Lorange. Peter, Creating win-win strategies from joint ventures, The CTC Reporter, No. 31, Spring 1991.

[27]Lei, David, Offensive and Defensive Uses of Alliances, Long Range Planning, Vol. 26, No. 4, 1993.

Partners should be complementary and compatible. It is best to choose partners with complementary skills and markets. They should be complementary in style, values, objectives and personalities of the key executives and compatible in business culture, objectives, purpose, driving force behind organizations and client interaction. In this way it will be possible for the organizations to develop mutual respect for one another.

The culture of the businesses is important to look at when selecting a partner. North American executives often underestimate how their culture influences them and how their partners culture influences them, but it can be difficult to work with a group with a different structure, style of managing or size. Understanding the differences can make them easier to deal with when problems arise.

Once a compatible partner is found it is important to recognize that you may have different needs. It is important to recognize both your needs and those of your partner. Any underlying agendas should be disclosed, and their differences should be addressed. This will help establish the expectations of all involved.

The partner selection process should not be done under pressure to enter an attractive market or for short term political reasons.[28] The 'feeling out' phase should not be so long and involved as to scrutinize and magnify all possible faults of a potential partner. Instead the strengths of the partners should be emphasized, and the venture should be managed so partners can contribute productively.[29]

3.5.8. Managing the alliance

How the alliance will be managed, is very important to its overall success. The more information the firm has about itself and its partners, the easier will be the job of managing the group. Communication is the key to this process. How communication will be handled should be discussed. Good communication can help alleviate mistrust and misunderstanding which

[28] Lane, Henry W. and Beamish, Paul W., Cross-cultural Cooperative Behavior in Joint Ventures in LDCs, Management International Review, Vol. 30, Special Issue, 1990.
[29] Lorange. Peter, Creating win-win strategies from joint ventures, The CTC Reporter, No. 31, Spring 1991.

create problems. It is important to discuss expectations with regard to decision-making. Who knows more about what aspects of the business, should be known, and which decisions will be arrived at jointly, should also be discussed. These working relationships must be defined and established.[30]

A factor that makes collaborative arrangements even more hard to control is their evolving nature. As the firms learn more about the ways in which they work best together, the alliance will change to suit new needs. It is important that the alliance be managed so that the firms can learn from each other and the arrangement can evolve without dissolving. This can be accomplished by instilling planning and control routines that help the venture adapt. The group should strive to anticipate changes in the internal climate. Although the ability to adapt and deal with instability is important, the firm should not lose sight of its goals. Crises represent a special situation, and must be dealt with in cooperation with the partner.[31] Understand risks of cooperation - losing skills to the other firms. Although the ability to adapt is good, it is important not to lose sight of firm goals.

It is also important to define boundaries for the relationship. Some outside obligations held by hybrid members may hinder the hybrid itself. Therefore it is important to define the boundaries between the partners and the hybrid. This means defining what resources, authority and obligations should cross the boundary. All involved parties should understand which resources belong to the hybrid and which do not. In examining this boundary, the groups should not forget to look at the boundary between the collaboration and its environment which is just as important as that between the partners and the hybrid.[32]

---

[30] Lane, Henry W. and Beamish, Paul W., Cross-cultural Cooperative Behavior in Joint Ventures in LDCs, Management International Review, Vol. 30, Special Issue, 1990.
[31] Lorange. Peter, Creating win-win strategies from joint ventures, The CTC Reporter, No. 31, Spring 1991.
[32] Jemison, David B. and Borys, Bryan, Hybrid Arrangements as Strategic Alliances : Theoretical Issues in Organizational Combinations, Academy of Management Review, 1989, Vol. 14, No. 2, p. 237.

All of this input requires a disproportionate amount of time for management compared to the time spent managing an independent entity.[33] If the firms are stable enough individually, they may not need the hybrid to survive.[34] This may cause them to become discouraged and want to end the alliance when problems arise. This is another reason why it is important to have a clearly defined goal. By having a clear understanding of the goal, it will be clear to those involved why the arrangement has benefits to offer that could not be achieved by each group individually. Finally, the end of the venture must be discussed and addressed.[35] Some concept of how and when the venture will end or some decision to discuss it in the future is necessary.

3.6. Conclusion

Working with another group is a challenging process. In a single project joint venture, the key challenge lies in efficiently and effectively organizing in order to maximize profit for the partners. In less structured collaborations, such as those where skill exchange is the goal, the greatest challenge lies in the interaction of the groups involved. How to communicate the information so that it is useful, is the key concern. A merger situation misleadingly seems to represent the greatest organizational challenge. Because the groups involved in a merger are not concerned with working together while simultaneously maintaining their individual identity, less conflict is expected.

A disproportionate amount of time is spent managing a collaboration, and as such, it is not advisable to enter into one lightly. However, collaborating can supply benefits that working alone does not. As in organizing and managing the firm, consistency is the key to successfully participating in a collaboration. If the firm enters into a collaboration that is inconsistent with the firms overall strategies and goals, it will probably find itself diverging from the original plan.

---

[33]Lyons, Michael Paul, Joint-Ventures a Strategic Choice - A Literature Review, Long Range Planning, Vol. 24, No. 4, 1991

[34]Jemison, David B. and Borys, Bryan, Hybrid Arrangements as Strategic Alliances : Theoretical Issues in Organizational Combinations, Academy of Management Review, 1989, Vol. 14, No. 2, p. 237.

[35]Lorange. Peter, Creating win-win strategies from joint ventures, The CTC Reporter, No. 31, Spring 1991.

Collaboration can not be considered separately from the environment in which it exists. Collaboration between minority and majority groups in different forms has been the subject of much attention. It is important to consider collaboration within the context of these issues because of their effect, direct and indirect, on the collaborative process. That is the subject of the following chapter

4. Affirmative Action Background and Efforts

4.1. Introduction

Industries are becoming increasingly aware of the changes in demographics that will be occurring over the next 50 years. This has motivated some of them to actively diversify their labor. This too is occurring to some degree in the construction industry. However, owing to many qualities of the industry, particularly its short term outlook, that knowledge alone is often not enough to encourage change.

There are at least three major reasons why companies participate in minority hiring programs or actively recruit minorities. First, the programs are often mandatory in order to secure the desired project. This is usually the case in projects contracted or administered by public agencies. Second, participation can fulfill voluntary goals that have been set by the project owners who may be public or private groups or individuals. Third, firms use the programs as a marketing strategy to increase positive association with the firm's name as an activist in the community. The majority of the participation is seen by companies trying to secure public works projects with goals that have been mandated by local and federal governments. However, increased participation is being seen in the voluntary and private arenas. In addition proactive measures are being taken by those monitoring and administering the programs to ensure that there exists an available pool of prospective firms.

The purpose of this chapter is to look at these three strategies for dealing with affirmative action in the industry. Both theory and implementation of the different programs will be addressed. The construction industry is used as an example of a related field and one from which we can learn. After introducing the concept and evolution of affirmative action as a foundation for why these issues are so important and controversial, the challenges facing the minority construction community will be discussed. These problems can be used when comparing the programs to see how they attempt to deal with the different issues. Then ways in which firms use recruiting as a marketing strategy will be discussed. This trend seems to be on the rise. Next, voluntary goal oriented programs will be examined and their effectiveness when compared to mandatory programs will be discussed . Finally, the traditionally thought of mandatory set-aside program will be discussed.

4.2. Background

4.2.1. The Affirmative Action Concept

Minority set-asides are related to the body of Affirmative Action Policy, formulated as a reaction to past discriminatory policies. Affirmative actions are " 'public or private actions or programs which provide, or seek to provide, opportunities or other benefits to persons on the basis of, among other things, their membership in a specified group or groups.' "[1] The "nation's judicial, legislative and political history is replete with examples of [preferential] treatment of African Americans as a legal remedy and response to racial discrimination and the vestiges of slavery."[2] A number of Presidential orders, Congressional statues and Supreme Court decisions set precedents related to the treatment of African-Americans in the society.

4.2.2. The Evolution of Affirmative Action

The first executive order (Executive Order 8802) to prohibit discrimination in employment on the basis of race and to mandate using affirmative action was issued by President Franklin Delano Roosevelt in 1941. Although it did not use the words affirmative action, its purpose was to call for an end to discrimination and an effort on the part of management and labor to provide opportunities for minorities.[3] In 1961, President John F. Kennedy issued Executive Order 10925 which apparently used the words affirmative action for the first time regarding employment discrimination based on race. That order not only established the President's Committee on Equal Employment Opportunity, it also "provided that government

---

[1]Turner, Ronald, The Past and Future of Affirmative Action, Quorum Books, Westport, CT, 1990, p. 1.
[2]Ibid., p. 4.
[3]Ibid., p. 5.

contractors had to 'take affirmative action to ensure that applicants ... and employees... are treated... without regard to race, creed, color, or national origin.' "[4]

Through the Civil Rights Act of 1964, Congress played a role in moving the concept of affirmative action forward. Title VII of that Act prohibits discrimination in employment based on race, color, sex, creed, religion or national origin. Title VII's provisions related to cases where the treatment of individuals from certain groups was discriminatory. The provisions also included employment practices, which on the surface appeared non-discriminatory, but had a discriminatory result. Actions of both kinds were in violation of Title VII. Title VII also authorized the Supreme Court to promote affirmative action. The Act provides that the "courts may order such affirmative actions as may be appropriate."[5]

Subsequent Supreme Court litigation has impacted how companies in different states interpret and implement affirmative action. For example, in Griggs v. Duke Power Company, 1971, the Court determined that an employer could violate Title VII even without the intent to discriminate. The plaintiff bore the burden of establishing a case of obvious discrimination, but demonstrating that the composition of the employer's relevant workforce deviated from that of the relevant geographical area, would essentially suffice. A more recent case, Watson v. Fort Worth Bank and Trust, 1988, increased the burden of the plaintiff to include specifically identifying the employment practices that caused the disparity and suggesting a practice that fulfills the goal of the practice without the disparate impact. Watson in Wards Cove Packing Company, Inc. v. Antonio, 1989, reaffirmed the burden of proof to be on the plaintiff. However, it invalidated comparing the relevant workforce of the employer with the relevant geographic area as an acceptable means of determining discriminatory practice. "The 'proper comparison [is] between the racial composition of the [at issue jobs] and the racial composition of the qualified...population in the relevant labor market.' "[6] These few examples illustrate the

---

[4]Ibid., p. 6.
[5]Ibid., p. 6.
[6]Ibid., p. 11.

controversy that surrounds affirmative action policies. The examples of its application in the construction industry are no less conflicting.

4.3. Problems Faced by the Minority Design and Construction Communities

A number of problems are facing the minority construction community. Some of these are similar in form to most firms in the construction industry, some are similar to small firms or firms just starting up, while others are specific to minority businesses within the industry. Discrimination is still a problem within the minority construction community and one that set-asides are more likely to exacerbate than to resolve. One example is seen in the existence of stereotypical attitudes about the lack of quality among minority groups. "The biggest problem is to get MBEs who will show up when they say they're going to be there and will do the work they say they're going to do."[7] In the construction industry a company's reputation is built one project at a time. Repeat business is an important part of many companies' portfolios. Unfortunately to obtain repeat business you must have business in the first place, and as one minority contractor put it: "'People like to work with whom they know. They don't know minority contractors.'"[8] Problems exist in trying to obtain bonding. The "word of mouth" nature of many aspects of the industry make it difficult even with training to get work. Within the past five years, an independent study was performed by a Washington based firm to study the percentage of contracts won by black-owned contractors in Dade County, Florida. The study found that among other problems black-owned businesses faced difficulties with bonding, financing, suppliers and exclusion from social and business networks. This in turn affects their ability to grow and be bonded on their own.[9] Another study was conducted by the American Subcontractor's Association's government relations director, E. Colette Nelson who looked at minority participation in the construction industry. After conducting the study she wrote that the

---

[7]Mervin, Donald P., How Two Camps Divide Over Program's Fairness, Highway and Heavy Construction, March, 1990. p. 36.
[8]Ibid., p. 38.
[9]Dade County Slipping, ENR, November 4, 1991, p.23.

obstacles minorities face to full participation are 1) inaccessibility to surety bonds, 2) inadequate capital, 3) lack of contracting information and opportunities and 4) inadequate management training and education.[10]

4.4. Diversification as a Marketing Strategy

Public Relations are an important part of the marketing process. Increasing name recognition can enable firms to be considered for projects. This is particularly important for design firms who are not usually selected by the lowest bidder process. One way of increasing name recognition is by doing pro bono work or work for a reduced fee. Another method of increasing name recognition is being used by private and publicly held owners needing design and construction services.

Recently private companies have become interested in having prime contractors work with minority firms. These private efforts serve to introduce the minority firms to the private arena where they have been sorely underrepresented. On an AT&T project completed in Chicago, goals were set for minority and women participation. The developer of the building designated twenty percent of the work for minorities and five percent for women.[11] One of the reasons for this action was an effort to look good in the public eye. Publicly held companies such as AT&T are correctly concerned with public relations, and the positive press generated by an action such as this is extremely valuable. It may also have the goal of encouraging other private groups to behave similarly.

4.5. Voluntary Goals Programs

Recommendations from city government are another impetus for private majority firms to define goals for minority participation. The public officials may be driven by the knowledge

---

[10]Mervin, Donald P., How Two Camps Divide Over Programs' Fairness, Highway and Heavy Construction, March 1990, p.37.
[11]Wright, Gordon, Building opportunities for minorities, Building Design and Construction, August, 1992, p. 38.

that "a strong base of minority firms can't exist on public sector contracts alone."[12] In general, the percentage of contracts set aside for minorities, even if achieved, will not provide the level of opportunity that participation in the private industry would.

Increasing minority participation in the private industry has been attempted in a number of ways. The methods range from subtle suggestion to rewards to set goals for participation. In Prince George's County, County Executive, Parris Glendening talks to builders coming through the office. He tells them that the county provides set asides for minority business and would like them to do the same. The goal is not to pressure groups into participating, so groups who are not interested are not further pursued. Neither is it a substitute for their public sector set aside program.[13] In another example of suggestion, bidders were requested to develop an affirmative action plan for a project, though there were no minority goals specified in the project's request for proposal.[14] Two examples of programs that emphasize reward are seen in Atlanta and Chicago. Hoping to address the low numbers of minority firms getting contracts in the private sector, the set-aside plan suggested by Atlanta Mayor Maynard Jackson would reward white contractors who did work with minority companies.[15] In Chicago, the Department of Public Works has set up a program that mandates 25% of the work on jobs over $10,000.00 to be awarded to minorities and 5% to women. "The ordinance allows non-minority prime contractors to earn credit for subcontracts awarded to minority and women-owned firms on private projects. Under the law, the city will credit a contractor one dollar of goal subcontracting for every three dollars of private-sector subcontracting, up to a maximum of 5% of the city's contract."[16]

4.6. Public Sector Set-Asides

4.6.1. The Evolution of Set-Asides

[12]Pyatt Jr., Rudolph a., A Public-Private Effort to Aid Minority Firms in Prince George's. The Washington Post. Thursday, February 16, 1989. p. C14.
[13]Ibid., p. C14.
[14]Wright, Gordon, Building opportunities for minorities, Building Design and Construction, August, 1992, p. 38.
[15]Smith, Verne E., A Second Look at Set-Asides. Newsweek. July 1, 1991. p.44.
[16]Korman, Richard, Chicago Adopts new set-aside plan. ENR, August 23, 1990. p. 14.

As mentioned previously, set-asides have a history rooted in affirmative action. They were established to encourage the development of businesses owned by minorities, women and the disadvantaged. By fostering the economic prosperity of the minority construction community, set-asides are hoped to help that community achieve self-sufficiency. Set-asides relate to Minority Business Enterprises. A Minority Business Enterprise (MBE) is a business that is both owned and controlled by a minority, a woman or a person found to be economically and socially disadvantaged under the Small Business Act. The remainder of this section presents a chronological view of the primary developments affecting MBE set-aside policy.

The Public Works Employment Act (PWEA) of 1977 included a 10 percent minority set-aside program.[17] "The PWEA, which authorized the distribution of 4 billion dollars in federal funds to state and local governments for public work projects, provided that 10 percent of those funds were to be expended for MBEs owned by United States citizens who were 'Negroes, Spanish-speaking, Orientals, Indians, Eskimos and Aleuts.'"[18] Following the passing of the Act, challenges were made by majority contractors as to its constitutionality. In 1980, the Supreme Court in Fullilove v. Klutznick held, 6-3, that the establishment by Congress of a set-aside to redress historic discrimination was constitutionally permissible.[19] Chief Justice Burger's opinion addressed several important issues with regard to the set-aside provision. First, he rejected the idea that Congress needed to behave in a color-blind manner when acting to remedy past wrongdoing. Second, he concluded that the adverse affect the set-aside might have on non minorities, did not make the set-aside unconstitutional. He felt this "burden" would be light when comparing the set-aside portion to all construction contracting opportunities. Finally, he felt it was important to note that the PWEA MBE plan had provisions for waiver and exemption. These provisions would act as a safeguard from "front" minority firms, MBEs charging

---

[17]Ownes, Major R., Federal Contracting: Minority Progress Halted by Majority Greed, Business and Society Review, Winter 1987, p. 41.
[18]Turner, Ronald, The Past and Future of Affirmative Action, Quorum Books, Westport, CT, 1990, p. 115.
[19]Ownes, Major R., Federal Contracting: Minority Progress Halted by Majority Greed, Business and Society Review, Winter 1987, p. 41.

unreasonable prices and for non minority firms who had legitimately tried but could not meet the requirement.

After Fullilove, for about six years, state set-aside programs were generally upheld as constitutional when reviewed by the courts. In Ohio Contractors Association v. Keip, for example, the Sixth Circuit concluded that the state was taking steps to correct past racial discrimination in its contracting and procurement procedures. Since this was in compliance with the Equal Protection Clause, they were acting in a similar capacity as Congress. In the opinion of the court, the burden being placed on the majority groups was relatively light, there was no requirement that the state choose a less restrictive method to fulfill their goals, and no specified end date of the program was required. Their action, like that of Congress, was found to be constitutional. In another case, the Eleventh Circuit upheld a set-aside in Dade County, Florida as constitutional and noted that the set-aside did not have an unfair impact on third parties. In noting that they compared the percentage of the work being set aside to the percentage of the population in Dade that was African-American.[20]

In Wygant v. Jackson Board of Education, the Supreme Court declared unconstitutional the school board policy of protecting certain teachers against layoffs because of their race. The school board cited remedying societal discrimination and the need for role models for minority students as their motivation for the provision. This provision would result in the retention of minority teachers while non minority teachers with more seniority were laid off. The Supreme Court found this provision to be in violation of the Fourteenth Amendment. The plurality stated that the Court had never found societal discrimination alone a sufficient cause to justify using a racial classification. In trying to develop a case for racial discrimination, the Court suggested looking at the disparity between the percentage of minority school teachers hired by the school board and the percentage of qualified minority teachers in the labor pool. It also noted that there

---

[20]Turner, Ronald, The Past and Future of Affirmative Action, Quorum Books, Westport, CT, 1990, p.122.

was no logical stopping point to the role model theory and that the scheme was not narrowly tailored enough to fit the goal.[21]

The Wygant decision impacted MBE set-aside cases. The plurality in the case had rejected societal discrimination as too general an argument to require governmental remedial action and had applied strict scrutiny to any program which adversely affected non minorities. The Court could not declare constitutional a plan that did not cite specific evidence of past discrimination, did not use proper labor pool comparisons and affected the "concrete expectations" of other parties. Because set-aside programs generally involved a governmental body attempting to remedy past discrimination and because non minorities claimed it adversely affected them, the implications for set-aside programs was great.

The impact of Wygant cases can be seen in lower court set-aside cases following the decision. In J. Edinger and Son, Inc. v. City of Louisville, Kentucky, the Sixth Circuit and district court concurred that the City of Louisville, Kentucky had an unconstitutional minority vendors ordinance. One of the biggest problems with the plan, was its comparison of percentage of minorities in the general population to percentage of minorities receiving business from the city. Instead, the courts felt, the city should look at the percentage of qualified minority vendors in the city and compare that to the percentage of minority vendors utilized. In Michigan Road Builders Association, Inc. v. Milliken, the Michigan set-aside program was invalidated although the state admitted to engaging in discrimination in awarding contracts. In this case the Court determined that the evidence presented by the state proved no more than societal discrimination which was not grounds enough to support the set-aside program. These post-Wygant cases demonstrated the courts' concern with the sufficiency of findings of discrimination, the pool of available contractors, and the legality of the means employed to remedy unlawful discrimination."[22] The Supreme Court's Croson decision would reflect similar logic.

In 1989, in a 6-3 decision in the Richmond vs. Croson case, the Supreme Court ruled that programs that deny contracts to white owned firms would only be constitutional if they showed

[21]Ibid., p.123.
[22]Ibid., p.127.

detailed evidence of past discrimination, and employed a "narrowly defined" remedy for the situation.[23] In the opinion authored by Justice O'Connor, she observed that such a narrowly defined solution should have goals based on the relevant qualified labor force and the available job opportunities for them in the city, not the percentage of minorities in the general population. In speaking to permissible remedial efforts by the city, she noted that the city had not used race-neutral remedies such as lowering bonding requirements or providing training and/ or financial aid for disadvantaged groups before applying their set-aside program.[24] Information inadequate to prove past discrimination to the courts included general descriptive statistics or unsubstantiated accounts. Courts have also struck down programs that did not first consider race neutral alternatives such as reduced surety bonding requirements or direct state and local government offers of financial assistance to small or disadvantaged firms. Finally other set-aside programs have been invalidated on technical grounds such as the lack of an expiration date , lack of geographic boundaries, no provisions for periodic review or inclusion of groups without prior evidence that they experienced past discrimination.[25]

Within two years following the Croson, lower courts have used the ruling to declare 9 such programs unconstitutional, and several jurisdictions (20) have voluntarily abandoned their programs.[26] Although some states and cities suspended or dismissed their set aside programs after the Croson decision, some began the process of studying discrimination to use as proof of the need for their program. Some cities have let contracts for a disparity study to be conducted. A disparity study is research undertaken with the goal of demonstrating past discrimination against a particular group of people. At the time of this research, a disparity study was being compiled for the Greater Boston area.

---

[23]Smith, Verne E., A Second Look at Set-Asides. Newsweek. July 1, 1991. p.44
[24]Turner, Ronald, The Past and Future of Affirmative Action, Quorum Books, Westport, CT, 1990, p.133.
[25]Joshi, Pamela, FOCUS, October, 1990, p. 3.
[26]Joshi, Pamela, After Croson: New Directions for Minority Business Set-Asides, FOCUS, October, 1990, p. 3.

A limited number of programs that have been challenged, were upheld. Two such programs are in Maryland and Washington state.[27] In Coral Construction v. King County, what is believed to be the first case to uphold a set-aside since the Croson decision, U.S. District Judge William L. Dwyer handed down a decision that upheld the constitutionality of the minority and women business set-aside program in King County, Washington.[28] The judge in the case cited the Croson decision, and upheld the plan because it met the strict scrutiny called for in it.

Recently, a Supreme Court decision made it easier for business to challenge government programs that set aside a certain amount of public contracts for minorities. In Northeastern Florida Chapter of the Associated General Contractors of America v. Jacksonville, Fla., the AGC group challenged the constitutionality of the city's set-aside program. The city, questioned the right of the group to challenge the provision since it had not shown that any of its members were denied work because of the provision. The court said a builder's association who brought the suit did not have to prove that its members lost specific bids in order to challenge Jacksonville, Florida's policy of setting aside 10% of the public construction contracts for minority businesses.[29] Writing the majority opinion for the court, Justice Thomas stated that "in the context of a challenge to a set-aside program, the 'injury in fact' is the inability to compete on an equal footing in the bidding process, not the loss of a contract."[30] The contractors association only needed to show that they were "able and ready to bid on contracts", but were not able to do so because of the law in question.[31] In this case the Supreme Court "didn't address the merits of the Jacksonville minority-preference rule itself."[32]

One can only speculate in the effect this ruling will have on set-aside programs nation wide. However, the Court has specified that the necessity of such programs must be

---

[27]Ibid.
[28]Joshi, Pamela, Court Ruling Favors Minority Set-Asides, FOCUS, February, 1990. p. 5.
[29]Davidson, John. Top Court Eases Way for Firms to Fight Public Contracts Set Aside for Minorities. The Wall Street Journal. Tuesday, June 15, 1993. p. B5.
[30]Northeastern Florida Chapter of the Associated General Contractors of America v. Jacksonville, Fla., 61 LW 4626, 6/15/93, The United States Law Week, August 3, 1993.
[31]Ibid.
[32]Davidson, John. Top Court Eases Way for Firms to Fight Public Contracts Set Aside for Minorities. The Wall Street Journal. Tuesday, June 15, 1993. p. B5.

demonstrated under strict scrutiny while giving others the right to challenge them without demonstrating any adverse affect because of them.

4.6.2. Implementation

Set-asides are almost entirely a public sector phenomenon. Cities typically set aside 10 percent of spending related to construction for minorities.[33] Projects are funded through federal, state and local government agencies as well as through quasi-public agencies. These agencies are charged with carrying out the MBE programs for each project. The programs are known as Minority Business Enterprise (MBE), Women's Business Enterprise (WBE) which is now a part of MBE and Small Disadvantaged Business (SDB), a term used by the Defense Department.[34]

4.6.3. Benefits of the Program

The specific benefits of the program relate to the program's individual provisions within the region in question. Whether the program's focus is one of purely providing a portion of the region's work for the disadvantaged group(s) or providing financial and management training to them is a great determinant in the question of the benefits gained from them. However, the program does seem to be accomplishing the goal of providing work for minorities that would be absent without the rules. Commitment of private firms and even public firms (if the set asides are ruled unconstitutional) to help disadvantaged firms, seems vague and unenforceable. At the North Carolina Department of Transportation, the awarding of contracts to minority owned business fell sharply after the state agency suspended its program. In the first three months of the program's suspension, MBEs share of DOT contracts dropped to 2.9%. This is less than half of the number of contracts won while the set aside program was still in effect.[35] In a largely white, male dominated industry, minority groups see set-asides as an answer to discrimination.[36]

---

[33]Smith, Verne E., A Second Look at Set-Asides. Newsweek. July 1, 1991. p.44.
[34]Mervin, Donald P., Behind the Struggle That Divides the Industry. Highway and Heavy Construction, February, 1990. p.21.
[35]Contract awards slump after state eases goals, ENR, January 13, 1992, p. 25.
[36]Mervin, Donald P., Behind the Struggle That Divides the Industry. Highway and Heavy Construction, February, 1990. p.20.

Among their benefits are providing access to the industry where their firms will work and become competitive and be able to contribute to the community, an opportunity to bid on projects on which they might otherwise be shut out, help in obtaining investment capital and surety bonding in order to be able to finance the projects, and construction work that has produced billions of dollars in revenue.

4.6.4. Criticisms of the program.

Criticisms of the program come from both major sides of the debate. A serious complaint is the fact that majority companies have invented ways of circumventing the programs. Two methods of this have been using a front for a majority owned company and using a "sham" company that serves as a broker. A sham organization is one that sets up a minority to bid the job, but then subcontracts it out to another firm, MBE or not. A front company sets up a non-minority firm with a minority as top officer.[37] The affirmative action programs have been called discriminatory against majority owned companies, and this complaint has been the source of much of the set-aside litigation. Because of this, an environment of adversity between majority and minority companies has been created and is used by some to question whether minority groups will ever be able to make it on their own.[38] Other complaints are that participation in the program does not prevent the firms from failing and that there is not a high enough retention rate in the program.[39] Another problem with the programs seems to be the underlying assumption that all minority firms are unable to perform a majority or all of the work in question. "Black Chicago Architect, Wendell Campbell, who founded Wendell Campbell Associates in 1966, said affirmative action programs are primarily designed to help firms that are just getting started, and can be a liability for established firms like his. 'They still want to treat me like they did 30 years

---

[37]Mervin, Donald P., How Two Camps Divide Over Programs' Fairness, Highway and Heavy Construction, March 1990, p.37.
[38]Mervin, Donald P., Behind the Struggle That Divides the Industry. Highway and Heavy Construction, February, 1990. p.20.
[39]Ibid.

ago' by giving a minority firm a small share a project rather than all of it, he added."[40] Some firms feel that the "opportunity to bid" on a project is not always an "opportunity to win" a project. There seems to be no provisions within the program guidelines to help the firms become more independently competitive.

Despite set asides, minority firms still seem to have trouble prospering in the business. Majority firms do not want to feel forced into working with minority firms, however, it seems as though fewer minority firms would get work without legislative pressure. After the Croson decision some minority owned firms experienced drastic reductions in or loss of work. This led them to feel that they were only being used by the majority firm to win the contract.[41] Within this confusing, ever changing system minority firms need to be careful about how and when and under what context their projects are conducted. Particularly within the context of set-asides, firms need to clearly define their working relationships. When utilized properly collaborative options are one way to address some of these problems.

4.6.5. Example: Development of the Boston Jobs Policy[42]

On September 11, 1979, Mayor Kevin H. White passed an Executive Order that went into effect on October 15, 1979. Its purpose was to counter the high rates of unemployment for minority and non-minority city youth because such unemployment had a negative effect on all the neighborhoods in Boston. The order said that on all construction projects wholly or partially funded by the city, or on projects for which the city expended or administered funds or was a signatory to the construction contract, the worker hours on a craft by craft basis would be performed at least 50% by bona fide Boston residents, 25% by minorities and 10% by women. The worker hours would include those worked by apprentices and those in on-the-job training positions. Provisions were included for 1) every department in the City of Boston that contracted

---

[40]Wright, Gordon, Building opportunities for minorities, Building Design and Construction, August, 1992, p. 41.
[41]Smith, Verne E., A Second Look at Set-Asides. Newsweek. July 1, 1991. p.44
[42]Interview with George Winston of the Boston Redevelopment Authority, March 1994, and the Boston Jobs Policy documentation.

out work to comply with this order, 2) the Equal Employment Opportunity Contract Compliance Office of the City of Boston, through the awarding authority, to monitor and enforce the order, 3) a group to assess the legality of incorporating the order into general law, 4) the Boston Redevelopment Authority (BRA) and the Economic Development and Industrial Corporation (EDIC) to be urged to incorporate the provisions into the contracts they funded or administered and 5) the mayor to file for an ordinance to punish those who misrepresented themselves in order to benefit from the program.

In the fall of 1979, the Executive order was challenged and the 50% resident requirement was struck down by the Supreme Judicial Court of the State. In October 1981, the city appealed the case to the Supreme Court who overturned the Judicial Court decision in February of 1983.

In 1983, the Boston Jobs Policy was passed. The U.S. Supreme Court had found the jobs policy to be a "legitimate and legally valid policy". The policy as passed had the same percentage provisions for residents, minorities and women as the Executive Order of 1979. "Minority persons" were defined as Blacks, Hispanics, Asians and Native Americans. The agency responsible for carrying out the order would review spending plans for projects to be undertaken; identify the number of job positions that the project would create; detail the training needed for entry level and semi-skilled positions by job title; recruit employees and arrange for training through established union apprenticeship programs; and establish a job screening and referral agency to bring together city residents, minorities and women with contractors and subcontractors to help them comply with the ordinance. They would also have the power to sanction any contractor or subcontractor for noncompliance with the ordinance. The sanctions could include suspended payments, a terminated contract, recovery by the city of .1 percent of the contract award price as liquidated damages, and denial of a right to participate in future projects for up to three years.

The Contract Compliance Office for the City of Boston was responsible for enforcing and monitoring compliance with the provisions. They were required to 1) have all contractors and subcontractors submit weekly workforce charts listing worker information relevant to compliance, 2) negotiate with contractors with the goal of classifying construction jobs by job titles, hiring dates and training and 3) register all community based organizations and notify them of pre-award conferences relating to hiring requirements and goals. Provisions were also included for the establishment of a liaison committee to meet monthly in an open forum to review reports and register compliance. The members of the committee would be chosen by the Mayor and would serve two year terms. The City of Boston was to be responsible for establishing job training programs for minorities, Boston residents and women for skilled or semi-skilled construction jobs. All construction contracting activities of an agency operating or acting on behalf of the City of Boston were required to comply with these provisions. A penalty of up to $300 was also included for any person who falsified information about their residence.

In 1985 the Policy was extended under Mayor Flynn. It was amended to include measures that would make the provisions of the original plan applicable to new "major private development which encompasses office, hotel, retail, institutional or unsubsidized residential development" and which requires a Development Impact Project Plan. In these projects the developer was required to submit a Boston Residence Construction Employment Plan that detailed the developer's plans to ensure that the requirements were being met. The Commissioner of Inspection Services was not authorized to issue a building or use permit for projects that had not met the standards. The extension also applied to substantial renovation projects.

In 1986 the Boston Residents Jobs Policy Agreement was drafted between the Boston Redevelopment Authority and the City of Boston. The agreement outlined the Authority's responsibility and that of the Office of Jobs and Community Services in making sure that the Jobs Policy was being upheld and properly reviewed. Also in 1986 the Boston Employment Commission was established. They would be responsible for monitoring compliance for covered projects and making recommendations for sanctions where necessary. They would also be responsible for helping to form and monitor Voluntary Employment Plans. A "Voluntary

Employment Plan was any plan developed by a Major Employer or a group of Major Employers to promote hiring for jobs in Boston of Boston residents, minorities, and/or women.

The contractor had to require each subcontractor to designate an individual to serve as compliance officer for the purpose of pursuing the Boston Residents Construction Employment Standards (BRCES). The compliance officer would request employees from associations or union halls, for example, and would ask that they be provided in the proportions specified by the policy. Failure to comply was only acceptable if the compliance officer obtained in written form documentation that insufficiencies existed in the number of employees available to work and the percentage was unable to be obtained. Records would be kept of persons applying directly to the contractor and reasons they were not hired. This would help establish a pool of employees who were not working through unions. If the project was subjected to union collaborative bargaining agreement, it would be sufficient reason for denial of employment that the individual was not a union member. Weekly lists would be compiled showing the composition of the workforce for that week and hours worked. It established that the goals would be evaluated annually and modified if necessary.

This policy defined Minority or Women's Business Enterprise as "a business organization in which 51% in the aggregate of the beneficial ownership is held by one or more minority persons or women respectively." The new standard for compliance was to show statistical data that the project was either in compliance with the BRCES or for the Commission to determine that "Best Efforts" had been made to be in compliance with the standards.

In conjunction with the development of the jobs policy, efforts were being made specifically with regard to the development of minority business in Boston. In 1978 there was an executive order passed by Mayor Kevin H. White encouraging Minority Business Enterprise (MBE). It mandated a Minority Business Enterprise as one in which 51% of the beneficial ownership was held by a minority. It required that 10% of all construction goods and services procured by the City each fiscal year be provided by MBE's, unless a federal program required a higher percentage. Also in impacted areas, which were areas designated by the city as having a high concentration of minorities, 30% of the work would be performed by MBE's.

In 1987 Mayor Flynn passed an executive order on Minority and Women Business Enterprise (WBE) Development. It extended the plan by increasing to 15% the goods and services as well as construction to be provided by minorities. It created a 5% requirement for goods and services and construction provided by WBE's. The 30% construction award to MBE's for work in impacted areas remained the same.

Of course the best policy if not properly implemented will not achieve its purpose. Implementation of the Boston Jobs Policy and the order on WBE and MBE development, is often difficult. They want to make sure that bona fide minority businesses get the work. Sometimes a minority business will come in, get the work and the sub it out. Measures must be taken to ensure that either that does not occur or that when it is found out the party is not able to benefit from it. At times when they've found the firms haven't been getting paid or there is back charging going on, they try to get the situation resolved.

In addition, there is a concern for the firms and a desire to see them do well. In setting these goals for inclusive participation, it is not a goal for the minority or women's business to do the job and only satisfy their company payroll. They should be able to profit from the project. There is a large number of companies and specific information on each of them is difficult to document. But, firms that are doing good work are noticed and promoted through word of mouth contact.

Programs are also implemented in an effort to constantly have minority, women and resident workers and firms available to perform. The unions set up a program last year with the help of the BRA for minorities, women and majority journeymen who wanted to run their own businesses. Out of thirty people recommended by to the program there were about 2 or 3 women and about 10 minorities. The purpose of the program was for the journeymen to find out how they could function as business men and how the BRA functioned. The subjects dealt with ethics, what does it mean to be a business person, etc. Out of the ten, three were able to become stable.

Since then they have also joint ventured an Asian American and a woman's business that had similar structure with good results

4.6.6. Project Example: The Central/Artery Tunnel[43]

One project using proactive measures to provide opportunities for MBEs is the Central Artery/Tunnel project currently underway in Boston. Four to five years ago, this mega project was assumed to cost $4 billion. Now, at 80% design completion, the estimated project cost is $7.7 billion. The Federal Highway Department approved the project and agreed to spend $8 to every $2 the state spent. Being such a large project and generating so much work not only for businesses in the Boston area but also around the country, it is closely scrutinized in most areas including compliance with DBE regulations. The lower limit of DBE participation on the project is 11% of the project cost. A plan has been developed with both outreach and development aspects to ensure maximum Disadvantaged Business Enterprise (DBE) participation. Since the project is primarily funded with Federal dollars, the laws governing DBE participation are Federal laws. However the project must still be responsive to local codes such as following the Boston Jobs Policy.

The goals are established on a contract to contract basis. There are some contracts that are called forced accounts like Boston Edison and ComGas in which the goal cannot be mandated or other contracts where the goal cannot be easily split, like a $300 million insurance contract. Since the overall project goal remains, the lack of DBE participation in these areas, means they will have to make up for that in other areas. Some thought is being given to allowing prime contractors to fulfill their DBE participation goals by using non-construction related businesses. For example, if the prime uses a minority lawyer, that will count toward the goal. Presently this is not the case.

Every 30 days project representatives traverse the state and hold informational workshops and seminars to let opportunities of jobs to be let or bid be known. Most of the

[43]The information in this section is based on an interview with John Fernandez, Manager of DBE participation at the Central Artery/Tunnel Project.

opportunities are in construction because the bulk of the money will be spent in construction. The common responses from the groups that attend are: the work is too far away, they don't know the unions, their firm is not prepared to bid, they won't win the bid, there are mobilization issues, they have trouble obtaining bonding and financing, and their firm infrastructure won't support a project of the size being let. However, if the groups are qualified and certified and interested in participating they are invited back to quarterly, contract specific seminars.

In these seminars, contract opportunities arising within the following 90 days are identified. These sessions are targeted specifically toward firms that have expressed interest in the projects. Within the workshops, the specific strengths and weaknesses of the interested firms are identified. The firms have an opportunity to participate in further workshops specifically related to the weaknesses they have identified. After the firm has attended the workshops, they see a facilitator, an assessment is done of their capabilities and a game plan is outlined. They are then positioned, with the intent of putting forth a resource package of bonding, financing and a mentor/protégé relationship. The CA/T facilitator works with the firm from the start and follows the firm throughout the process. Because of the length of the project, there is an interest in turn around use of the DBE participants. If all goes well with the project on which they are currently working, there is a greater chance that they will be prepared to work on an upcoming project.

At the time of bidding the prime contractor must supply the name(s) of the subs they will be using to satisfy the DBE requirements and the amounts of the subcontracts to them. This cannot be changed between the time of bidding and the beginning of the project. Of the DBE contractors the primes have available to work with, the majority of them don't have well developed relationships with prime contractors and have problems obtaining bonding or are start up companies with whom the prime would not feel comfortable working. If there are not enough certified, qualified DBE groups to work with, the prime can legally put in a claim to waive the requirement. The purpose of this program is to make sure that there is never a deficit available DBE firms.

The possibilities for success are great on smaller parcel projects, but problems occur in a case like section 11-A - a $400 million contract for which there needs to be $44 mill in DBE participation. Most of the area DBE firms do not have the capacity to perform that level of work. The CA/T is interested in both developing that capacity and satisfying the participation requirements at the same time by setting up joint ventures between larger minority contractors who may be out of state and local groups. They are targeting Atlanta and Washington, D.C. as two areas with DBE groups with the capacity to perform large quantities of work. The key to this working is the fact that the local firm will play the leading role in the interaction.

4.7. Conclusion

The importance of understanding problems facing the minority construction industry relate to being able to formulate solutions to them. The problem of discrimination itself is something that must be attacked within each individual while the courts deal with mitigating its effects. Aside from that a number of other problem areas need to be addressed. Finance and training seem to be two noted areas wherein improvement can be made. Training to increase technical, financial and management knowledge would be beneficial. In addition, opportunities to obtain financing and a better chance at investment capital are needed. William H. Coquette is senior vice president and manager of the Landover, Md. office of Gilbane Building Company, a large commercial builder that has had a relationship with minority contractors for over 30 years. He says minorities need to learn of opportunities in the construction industry, training programs, joint ventures.[44] Not all programs address issues such as financial support and management training. In addition not all MBEs are at the same developmental place. This means they have different needs to be met by the programs. There is a need to be sure that the policy governing the collaborative interaction is also supportive of the collaboration itself and the overall goals of the firm.

---

[44]Mervin, Donald P., How Two Camps Divide Over Programs' Fairness, Highway and Heavy Construction, March 1990, p.37.

5. Conclusion

5.1. General Issues

Majority owned firms have expressed interest in working with minority owned firms for a number of reasons. A few of the reasons these firms may want to work with diverse groups are in order to fulfill set aside requirements, in anticipation of demographic changes that will begin taking place within the industry, because they are motivated to fulfill a voluntary goal requirement or because of good public relations potential. Minority owned firms also have a number of reasons for wanting to work with majority owned firms which might include entrance into new markets, developing different skill sets and opportunities for financial gain. The most common manner in which these groups work together is through a subcontracting relationship between the majority and minority firm. However, through collaboration, some goals that would be difficult to achieve using pure subcontracting systems may be attainable.

There are some important issues to remember when attempting to maximize the competitive advantage of collaborating. Have a clear understanding of the goal of the collaboration. Just as in the process of evaluating the firm for potential as a joint venture partner, the firm should have a strong knowledge of what they hope to obtain from the venture and work out how best to obtain that goal given the firm's structure and way of doing business. Do not blindly enter into agreements. Enter into them only after what you want and how you will obtain it has been planned. Even if the firm is interested in taking the project primarily for monetary reasons, the other aspects of the arrangement need to be considered. If, however, the firm is interested in obtaining or exchanging skills, the correct personnel need to be in place in order to take advantage of the opportunity. Remember, skill exchange often takes place at the day to day work level of the employee.

Firms should try to at best work with other firms of a similar organizational type and at least understand the organizational differences and the possible problems that can be caused by them. Differing business cultures can be a stumbling block. The collaborative relationship is built on communication and trust and as such, issues of concern to all involved should be brought forward at an early stage. The venture is not a hand-out. It is a mutually beneficial relationship. Minority firms need to understand this reality when they approach majority firms in terms of how they want to market their service to the project and the benefits to be obtained by the majority firm.

5.2. Collaboration Hypothesis

Applying firm strategies to firm choices must be done consistently. The firm structure should be considered when choosing the type of option to pursue and when determining market strategy. Also the policies that will be governing the collaborative interaction should be considered when determining the type of effort to be pursued. The framework used to demonstrate the firm's organization and marketing strategies, provides a convenient basis for looking at a firm's strategies related to pursuing a collaboration and accessing an affirmative action program that will best benefit it. A summary of these strategies is shown in Table one at the end of the chapter. A detailed explanation of the hypothesis follows.

5.2.1. Mandatory Requirement Program

The traditionally thought of set-aside program with mandated goals and little or no provisions for training and bonding assistance may be best utilized by firms who have established skills in a particular area and are interested primarily in doing work in that area. These firms would also probably be interested in the traditional prime contractor/sub-contractor relationship. Traditional set-aside programs have mandatory goals for the involvement of women and other minorities in construction and construction related work. However, few of them have provisions for training or financially supporting the MBE's, WBE's or DBE's. These programs have been effective in providing opportunities for disadvantaged groups. Many legitimate and illegitimate companies have been started in an effort to take advantage of some of these opportunities which is one benefit of the program. However, without proper support many of those same companies have failed. In addition, lack of training has caused the quality of some of those companies both processes and products to be poor which has resulted in stereotypes of MBE, WBE and DBE firms. The problem, of course, is that without help in learning how to set up and run a business and without financial opportunities for bonding, many firms desiring the opportunity will not be able to support it. Therefore, the pure set-aside option may not be desirable for firms needing additional assistance.

In this traditional system, the minority firm usually works with the majority firm in a prime contractor/subcontractor relationship. A firm involved in this type of relationship would probably be providing consistent service to a particular set or type of clients. They would have a niche and feel comfortable in it. They would be an established firm with experience that was looking for opportunities in their specific area not trying to diversify or switch interests. The strong delivery firm with a Business-centered practice orientation falls into this category. Once established in a niche, This firm will probably only be interested in committing to a single project joint venture, and not for purposes of exchanging skills. In the strong delivery firm with a Practice-centered business orientation, , the principal in charge is at the center of all the firm does. Collaborating is a resource consuming process. The time of the principal in split in so many directions, it will be hard for him or her to devote large amounts of it to making a collaboration run smoothly. For this reason, any collaboration entered into will probably be short termed. This firm's desire to efficiently produce will bias the firm toward a more structured program to govern the interaction. The flexibility of the marketing oriented approach would not be appealing.

5.2.2. Voluntary Goal Program

Voluntary Goals-Oriented programs with incentives for training may be a good alternative for firms that are just beginning to gain experience or are looking for new skills. Strong service firms that are also Business-centered practices are interested in serving the client to the best of their ability. They may be interested in continuously updating their skills. When using collaboration to achieve this purpose, they will probably input whatever resources are necessary to obtain the desired skills. A voluntary goals program has more flexibility in its administration, and therefore would be a better option for this type of firm. The strong service firm also has a limitation on the time of the principal who is heavily involved in the projects undertaken by the organization. The principal in charge of the project under consideration will determine whether or not to pursue collaboration. Due to the limited time, most collaborations will probably be limited to single project duration.

Some private and public agencies are becoming involved in voluntary goal oriented programs as a supplement to the set-aside programs that exist. These programs try to encourage the diversification of the construction industry by encouraging owners to set voluntary goals for MBE participation. Some of the programs include incentives for firms that actively recruit and support the objectives of the goals approach. Since these programs are not mandated and enforced by governmental guidelines, they can be created in any fashion beneficial to all the involved parties. A positive combination for this group might be mentor/protégé collaboration for a fixed number of years or projects. A new firm that is interested in financial and organizational support may have a better chance of finding that in this type of arrangement. A firm that is just starting out usually needs more support than a well established firm. Depending upon the background of those in charge of the organization, support may be needed in finance, marketing or organization structure and strategy areas to name a few. Collaborating is one way for these firm to obtain some guidance or help in these areas. In the mentor/protégé situation, the mentor firm puts forth many resources up front looking for both long and short term returns on their investment. A firm that feels forced into working with MBE's may not want to put forth the effort that the relationship requires.

Even when voluntarily entering into this arrangement, depending on the needs of the protégé firm, the mentor firm may be asked to supply many resources and may be disinclined to put out that much effort without some significant returns. This is why incentives by public agencies may be beneficial in getting more firms and owners to participate in the programs. These returns come in many forms, including establishing a good working relationship with a firm that can then be used in the future and will already have a good understanding of how the mentor firm works. Another beneficial aspect of this type of program is its lack of formal structure. Each collaboration is unique, and voluntary programs because of their lack of restrictions allow the participating groups to form their own best solution to the problems they face. In some cases a good combination might be a mentor/protégé relationship for a number of years. In other cases, working together on one or two projects may be all that is required. Some of the incentives that can be provided may include more leniency related to meeting MBE goals for the mentor firm when working on publicly funded projects. Incentives for owners may include preferential treatment such as speeding up the permitting process of upcoming projects.

5.2.3. Marketing Program

The marketing approach may be useful for groups established in certain areas or skills, and looking to diversify their skill set. Groups such as this are aware of the value they are bringing to the relationship. They understand the possibility for skill exchange. Their knowledge about whatever aspect of their business gives them leverage. The best situation would be one wherein all parties involved want to exchange skills. In a situation such as this, there is a greater likelihood that the firms will be able to gain from each other in a win-win relationship. There may be an interchange of skills or technology or even a better understanding of cultural differences between the groups. Because the MBE firm is already established, the majority firm will not likely feel unreasonably imposed upon or feel as if they are contributing more than the other firm. In addition, majority firms not feeling forced or forced into the situation of fulfilling goals may be more willing to share information and may be easier to work with. If the majority firm is interested in the arrangement because of its marketability, it is safe to assume that the situation is getting some publicity. This publicity can be a motivating factor for both sides.

A strong idea Business-centered practice may be more interested in this type of program because of its flexibility for the interaction of the groups. They are driven by the firm's design principles, and would be likely to collaborate on projects that support these principals and also give them exposure to the public. The strong idea firm that is also a Practice-centered business is driven by creativity. The creativity of this firm and its flexibility and lack of formal structure will make it a difficult firm with which to collaborate. A more marketing oriented approach would probably be beneficial due to its flexibility, however, the firm is just as likely to work with mandatory or voluntary programs.

5.3. Further Investigations

The conclusions herein are hypotheses based on researching the major topics and ways in which they currently interact and could possibly interact in the future. Further research, however, needs to be conducted to validate the findings of this thesis. Case studies on different alliances between majority and minority firms could be conducted to provide more insight. The focus would be upon what each firm brought into the relationship, what they hoped to obtain from it and what they ultimately received from it. Statistics on voluntary goal programs and marketing oriented programs could be compiled over a period of years to see if growth is visible. Interviews with both majority and minority firm owners could be conducted for a more subjective view of the subject.

Strategies for Choice of Collaborative Option and Affirmative Action Program		
Strong Delivery	Necessity for principals to be directly involved may limit this firms choice of options to short term involvement. Desire for efficiency will limit its desire to work with marketing oriented firms, once the firm is established.	Once in a niche, this firm is probably not interested in committing to joint venture on more than a single project at a time. And then only for bonding purposes. Many projects will be obtained under existing set-aside programs.
Strong Service	Interest in collaboration will depend heavily on the principal in charge of the individual project being considered. Will probably be limited to project based alliances due to limited time of principals.	Interest in providing the best service to the customer will keep this firm motivated to develop to the best of its ability. If new skills are desired, the firm will collaborate whatever time needed to obtain those skills. The best program option would be a voluntary goals program that meets the needs of the group.
Strong Idea	Driven by creativity, this firm's loose structure will make it a difficult collaboration partner. In addition, no one program will be the cause of the vast majority of its work.	May have interest in collaborating on one or a number of projects that are in concert with the design principles of the firm. The marketing oriented affirmative action strategy will provide both maximum flexibility and visibility for the firm.
	Practice-Centered Business	**Business-Centered Practice**

Table 1[1]

[1] Adapted from: Success Strategies for Design Professionals: Superpositioning for Architecture and Engineering Firms, New York, McGraw Hill, 1987.

6. Bibliography

Boston Jobs Policy documentation.

Contract awards slump after state eases goals, ENR, January 13, 1992.

Coxe, Weld, Managing Architectural and Engineering Practice, 1980.

Coxe, Weld, Managing Architectural and Engineering Services, 1983.

Dade County Slipping, ENR, November 4, 1991.

Davidson, John. Top Court Eases Way for Firms to Fight Public Contracts Set Aside for Minorities. The Wall Street Journal. Tuesday, June 15, 1993.

Doorley III, Thomas L., Teaming Up for Success, Business Quarterly, Summer 1993.

Gutman, Robert, Architectural Practice: A Critical View, 1988.

Hamel, Gary, Doz, Yves L., and Prahalad, C.K., Collaborate with your competitors - and Win, Harvard Business Review, Jan-Feb. 1989

Jemison, David B. and Borys, Bryan, Hybrid Arrangements as Strategic Alliances : Theoretical Issues in Organizational Combinations, Academy of Management Review, 1989, Vol. 14, No. 2.

Joint Ventures, AIA Practice Manual, 1992

Joshi, Pamela, After Croson: New Directions for Minority Business Set-Asides, FOCUS, October, 1990.

Joshi, Pamela, Court Ruling Favors Minority Set-Asides, FOCUS, February, 1990.

Kaderlan, Norman S., Designing Your Practice: A Principal's Guide to Creating and Managing a Design Practice, 1991.

Interview with George Winston of the Boston Redevelopment Authority.

Interview with John Fernandez, Manager of DBE Participation for the Central/Artery Tunnel Project.

Lane, Henry W., Beamish, Paul W., Cross-cultural Cooperative Behavior in Joint Ventures in LDCs, Management International Review, Vol. 30 , Special Issue, 1990.

Lei, David, Offensive and Defensive Uses of Alliances, Long Range Planning, Vol. 26, No. 4, 1993.

Lorange, Peter, Creating win-win strategies from joint ventures, The CTC Reporter, No. 31, Spring 1991.

Lorange, Peter and Roos, Johan, Formation of Cooperative Ventures: Competence Mix of the Management Teams, Management International Review, Vol. 30, Special Issue, 1990.

Lorange, Peter and Roos, Johan, Why Some Strategic Alliances Succeed and Others Fail, The Journal of Business Strategy, January/ February 1991.

Lorange, Peter, Roos, John, and Simic Brown, Peggy; Building Successful Strategic Alliances, Long Range Planning, Vol. 25, No. 6.

Lyons, Michael Paul, Joint Ventures as Strategic Choice - A Literature Review, Long Range Planning, Vol. 24, No. 4.

Korman, Richard, Chicago Adopts new set-aside plan. ENR, August 23, 1990.

Mervin, Donald P., Behind the Struggle That Divides the Industry. Highway and Heavy Construction, February, 1990.

Mervin, Donald P., How Two Camps Divide Over Programs' Fairness, Highway and Heavy Construction, March 1990.

Northeastern Florida Chapter of the Associated General Contractors of America v. Jacksonville, Fla., 61 LW 4626, 6/15/93, The United States Law Week, August 3, 1993.

Ownes, Major R., Federal Contracting: Minority Progress Halted by Majority Greed, Business and Society Review, Winter 1987.

Pyatt Jr., Rudolph a., A Public-Private Effort to Aid Minority Firms in Prince George's. The Washington Post. Thursday, February 16, 1989.

Smith, Verne E., A Second Look at Set-Asides. Newsweek. July 1, 1991.

Spaulding, Margaret, Advanced Marketing Techniques for Architecture and Engineering Firms, 1989.

Turner, Ronald, The Past and Future of Affirmative Action, Quorum Books, Westport, CT, 1990.

Wright, Gordon, Building opportunities for minorities, Building Design and Construction, August, 1992.