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THE UNIVERSITY OF OKLAHOMA
GRADUATE COLLEGE

OUTSOURCING IN PUBLIC HIGHER EDUCATION IN OKLAHOMA

A DISSERTATION
SUBMITTED TO THE GRADUATE FACULTY
in partial fulfillment of the requirements for the
degree of
DOCTOR OF PHILOSOPHY

By
CHRIS L. JEFFERIES
Norman, Oklahoma
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OUTSOURCING IN PUBLIC HIGHER EDUCATION IN OKLAHOMA

A DISSERTATION APPROVED FOR THE
DEPARTMENT OF EDUCATIONAL LEADERSHIP AND POLICY STUDIES

BY

Wesley B. Long
Jerry B. Farley
Gary K. Michael
David L. Tap
Jerome [Signature]

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ABSTRACT

The use of outsourcing in higher education has grown over the past decade as colleges and universities have sought management mechanisms to reduce operating costs and increase revenues. Current higher education management practice and related literature stress the financial benefits possible from outsourcing, provide case studies suggesting how financial benefits can be realized, and offer analytical matrices to assist decision makers arrive at an outsource decision. In addition, several published surveys list the numbers and types of enterprises outsourced by higher education institutions. Curiously absent in higher education management literature is discussion of non-financial considerations that may affect a decision to outsource. The presence of non-financial considerations may suggest that the economic, financially-oriented model is an incomplete explanation of outsource decisions and a more complete explanation is useful and appropriate for theoretical and practical purposes. This study identifies non-financial considerations affecting outsource decisions in higher education by focusing on how and why higher education institutions outsource and proposes a more complete decision model.

Five outsourcing case studies were conducted at four public institutions of higher education in Oklahoma. The cases yielded data on nine outsource decisions. Drawing on three theory-based models that can explain outsourcing -- economic-based, management-based, and decision-process dynamics-based -- analysis suggests that the

institutions outsource (the “why”) for two reasons. First, economic-financial benefits are derived as an in-house enterprise is exposed to the market’s competitive forces, and contracts are awarded that reduce costs and increase revenues. Second, management benefits are derived from a contractor’s ability to increase productivity, increase efficiencies, and provide economies of scale, and from divesting non-core activities. Analysis also suggests that the institutions decide to outsource (the “how”) as a result of the institution’s decision process dynamics: the bureaucratic, the collegial, the political process dynamics. A more complete decision model thus accommodates an institution’s desire to gain both economic-financial and management-related benefits, and includes all three decision process dynamics, sequentially or simultaneously, in the decision process. Finally, the study concludes that analysis of reengineering or restructuring is and should be an integral part of outsource decisions.

OUTSOURCING IN PUBLIC HIGHER EDUCATION IN OKLAHOMA

CHAPTER I

INTRODUCTION

The Problem

Outsourcing, a business technique used by private enterprise and the public sector to reduce costs, increase productivity, and increase revenues, appears to be increasingly popular among public institutions of higher education (Green, 1992; Abramson, 1993, 1994, 1995; Wertz, 1996). Known as “privatizing” in the public sector, outsourcing stems from the theoretical concept that as an institution’s internal enterprises are exposed to competition, their products or services can be obtained at the lowest possible cost. As these internal enterprise are competitively bid and outsourced, the institution can thereby shed unprofitable or too-costly functions, divest non-core functions that detract from its primary purpose, and reduce overhead costs while increasing productivity and revenues (Thompson & Strickland, 1995). Current higher education management practice and related literature stress the financial benefits possible from outsourcing (Morrell, 1994), provide “case studies” suggesting how financial benefits can be realized (The Association, 1994; Green, 1992), and offer analytical matrices to assist decision makers arrive at a financially sound decision (Goldstein, 1993). In addition, several surveys

have been published listing the numbers and types of functions and enterprises higher education institutions outsource and conclude it is a useful mechanism to reduce costs (Abramson, 1993,1994, 1995; Wertz, 1996). In sum, outsourcing is advocated and practiced among institutions of higher education with the assumption that decisions to outsource are and should be economic-based and financially-driven.

Outsourcing as an economic, financial outcome therefore appears to provide sound justification for achieving cost savings and increased revenues. Curiously absent in higher education literature, however, is discussion of non-financial considerations and influences that may affect a decision to outsource. Although a highly-regarded higher education outsourcing “guide” tantalizes by suggesting institutional culture and ethical considerations must be accommodated, its model is still a financially-based cost-benefit analysis (Goldstein, 1993). More to the point, the presence of non-financial influences and considerations in a decision to outsource may suggest that the economic, financially-based model is an incomplete explanation of outsource decisions, and a broader, more complete explanation is necessary and appropriate. Indeed, the decision process dynamics at work on a typical college or university campus themselves suggest the need to consider an alternative model.

Purpose

Postulating that an economic-based, financially-driven decision model may be an incomplete explanation of outsource decisions, this study identifies non-financial influences and considerations that affect the decision by focusing on how and why higher

education institutions outsource, and proposes a more complete decision model.

Conducting a series of case studies, two major questions are addressed: (1) what non-financial, non-economic considerations play a significant role in outsourcing decisions, and (2) how does their presence affect the decision?

Significance

This study has theoretical and practical dimensions. It contributes, first, to conceptual and theoretical understandings of outsourcing as a process or as an outcome. Management literature reveals little, if anything, in the way of outsourcing theory. At best it allows one to draw a few conceptual distinctions that may contribute to an emerging “grounded theory” if they can be generalized (Bogdan & Biklen, 1992). The study helps clarify these distinctions and contribute to this limited body of knowledge. Specifically, it identifies as yet unclear variables in the outsourcing process upon which subsequent studies, qualitative or quantitative, might be based. Second, the study contributes to a practical understanding of outsourcing as both a process and an outcome. The literature (Ginsburg, 1989) and practical experience suggest that outsourcing a traditional higher education function can cause campus-wide disruptions in service, morale, and personnel dislocations. Moreover, it may result in a degree of the outsourced function’s control loss that may ultimately be unacceptable to the institution. For these reasons, a more complete understanding of these practical dimensions of outsource decisions contributes to their avoidance and, ultimately, to outsourcing’s more successful use.

CHAPTER II

LITERATURE REVIEW

The strands of three theories converge to influence outsourcing decisions in higher education: economic theory, management theory, and decision making theory. Economic theory addresses the role of competition and its financial benefits. Management theory addresses operational effectiveness and the benefits of divestiture. Decision making theory provides an explanation of how decisions are made. Taken together, these theories can provide a more complete explanation of the outsource phenomenon.

Economic Literature

Economic theory explains that in a free market, where prices are free to change, the profit motive and competition result in the best good or service at the lowest cost (Boyes & Melvin, 1991). Where a good or service is needed to benefit all members of society (a public good) but the full cost to produce it is too high for all direct consumers

to pay, like education, then government steps in with taxes and subsidies to provide it at below-market prices. Taken out of the free market, however, public goods are no longer subject to the regulating influences of profit and competition to ensure the best service at the lowest price. Thus, overhead costs increase, productivity decreases, and efficient service declines. Only by exposing public goods and services once more to the forces of competition will public enterprises reduce overhead costs, increase productivity, and provide efficient services.

Introducing competition into the public sector is a central theme of Osborne and Gaebler (1992). Citing continuing and intractable problems in public education, health care, the justice system, and prison overcrowding, among many public issues, the authors state that the public's confidence in government has fallen to a record low. The tax revolt that began in 1978 continues, with the public growing impatient with elected officials unable to deliver on promises to do more with less, and dismayed at the bottom-line choice of fewer services or higher taxes. Their thesis: the highly centralized, rule and regulation-driven, hierarchically-structured bureaucracies created during the growth of the industrialized era are no longer responsive to society's needs.

In this context, the authors see the emergence of a new form of governance they identify as "entrepreneurial" government. Taking cues from the revolutionary changes in American business and society that decentralize authority, flatten hierarchies, emphasize quality, and respond to customers' demands, entrepreneurial governments are becoming creative in efforts to make government more responsive. They are promoting competition between service providers, empowering citizens in community-based

programs, focusing on outcomes, being driven by missions rather than rules, redefining clients as customers, working to prevent problems instead of relying only on cures, developing alternate revenue sources, decentralizing authority, relying on market incentives and mechanisms, and trying to stimulate not only the public sector, but also the private and voluntary sectors, into solving community problems. The authors' purposes are twofold: to identify the common threads in this new movement, and to provide a roadmap to governments at the federal, state, and local levels who want to change.

At the heart of the movement is recognition that governments must "steer," not "row." They must move more toward governance, or "steering," and except where governments have already freed their service organizations from centralized, rule-bound control, away from "rowing," or trying to provide the services themselves. Constrained by restrictive rules and procedures, protected by civil service regulations, and managed by cumbersome bureaucracies built over the past 100 years, public employees seldom have the incentive or the means to be creative and responsive. When freed from those constraints, and when pushed by competition, of particular importance to this study, public employees respond to the challenge of increased efficiency, lower costs, and better service. Governments' new challenge: be creative in finding ways to provide public services that are lower cost, more effective, responsive, and efficient by reintroducing competition.

Addressing the "rowing" process, the authors outline several approaches typical of this movement, two of which are relevant to this study: restructuring

("reengineering") traditional public service organizations to allow flexibility, creativity and responsiveness; and contracting out, or outsourcing, traditional service functions to the private sector. Both work, the authors state, and can be used together. They conclude that restructuring "in-house," or traditional governmental-run service functions, although essential and often effective, is frequently the most difficult because of strong public employee constituencies and long-held perceptions that governments should perform public services. Nevertheless, when accomplishing the mission is substituted for following rules and procedures, and public employees are allowed flexibility in determining how to provide services, they have proven remarkably responsive, particularly when prodded by competition from other potential service providers. Osborne and Gaebler conclude that contracting out public functions to private enterprise through competitive bidding is probably the easiest, most effective and most often used mechanism to get out of "rowing." When structured well and monitored carefully, they argue, contracting out can be a highly effective way to provide almost all public services, from police and fire protection to community services.

In their "steering" functions, the authors maintain, government can be more "entrepreneurial" by reengineering itself. The movement has found a number of approaches particularly effective. First, governments should fund outcomes, not inputs. That is, they should do away with funding carefully controlled line-item budgets, the inputs, and move instead to funding levels of service, the outputs. Essential to this process is developing performance measurements by which the success or failure of activities can be evaluated. Thus, training vendors can be paid by the number people

they place in jobs -- the outputs -- rather than the number of trainees they enroll -- the inputs. By extension, any process can be measured and benchmarks developed to establish performance standards that can subsequently be used in funding. Second, they argue, customer-driven governments are more successful than bureaucracy-driven forms. Changing the focus is a challenge because public agencies don't get their funding directly from the customer; governments thus have few incentives to focus on service. Total Quality Management, with customer surveys and emphasis on quality service, however, is becoming increasingly popular in governmental circles to change the focus to the customer. Introducing competition into service provision, for example giving customers vouchers they can use with several providers, is another way to sharpen an organization's interest in customer service. Third, the authors suggest, governments can be "enterprising," just like businesses. They note that in the face of the tax revolt, state and local governments have moved increasingly toward developing alternate revenue sources, to include implementing user fees, leasing government-owned facilities and space to vendors (a form of outsourcing), and designing activities to create profits.

From the perspective of higher education administration, many of the concepts explored by the authors apply; public higher education is experiencing reduced revenues, and it suffers from many of the rule- and procedure-driven perceptions and processes that limit governments. Likewise, many of the authors' remedies can apply to providing administrative services in higher education: decentralization, customer orientation, managing by results, entrepreneurialship, and competition through outsourcing. The last, competition through outsourcing, is most directly related to this inquiry.

The authors conclude that outsourcing, or privatizing, is useful, but with limitations. For example, if a public activity like garbage collection is contracted out, the contract could merely privatize a former governmental monopoly rather than reduce costs or increase efficiencies. If privatizing is achieved by competitive bidding, however, then the result is more likely to be lower costs and increased efficiencies. The authors also caution that privatizing merely shifts the function from the public to the private sector; it does not shift the responsibility. The responsibility must remain with the public. Another limitation stems from the natures of public and private enterprises; where both can operate in the same arena with equal costs and service, like health care or utilities, public services can be less costly without the need for a profit margin. In these cases, the issue is not public vs. private enterprise, but more efficient management. As a general rule, however, the authors maintain that outsourcing or privatizing will result in lower costs and better services.

Competition is the fundamental principle that best reinvents government. Whether between public entities, between public and private, or between private entities, competition best leads to reduced cost, increased efficiencies, and better services. Although outsourcing a function provides an organization the opportunity to shed high overhead costs and inefficient operations, for example, it is the process of competitive bidding that is more likely to bring about the desired efficiencies and savings. But, they caution, if the contract does not have clear standards by which performance can be measured and evaluated, and if contract performance is not followed carefully, then outsourcing may add to rather than solve an organization's problems. In sum, the

literature supports the concept that the benefits of outsourcing stem from the economic principle of competition. When public functions are exposed to the market's competitive forces, the financial benefits of lower costs, increased efficiencies, better service, and increased revenues, will result. Outsourcing in higher education is therefore economic-based and financially-driven.

Management Literature

Management theory argues that if a good or service required by an enterprise cannot be produced internally at lower cost and better quality than an external provider, then it should be purchased from an external provider (Thompson & Strickland, 1995). If the good or service produced by the external provider is its primary product, then economies of scale, worker productivity, and management experience are likely to result in higher quality and lower price. Hence, outsourcing the good or service is a logical and traditional tenet by which private enterprise operates. A related corollary argues that if a business operation is not essential to an enterprise's primary mission or product, then it should be divested so the enterprise can focus its resources on its core mission, a process enterprises are likely to accelerate in a recession when resources are scarce (McHugh, Merle & Wheeler, 1995; Thompson & Strickland, 1995).

Outsourcing as a management theme is the focus of the Reason Foundation, a non-profit, non-partisan, public policy research and educational organization advocating free-market, private-sector alternatives to traditional public-sector programs. It seeks to act as an informational clearinghouse for governmental, media, and business enterprises

interested in governmental streamlining. The foundation claims to be a major information source for Vice President Gore's National Performance Review, "Reinventing Government." The results of the foundation's research are a series of monographs presenting case studies of privatization, and "how-to" guides for public enterprises seeking to privatize all or parts of their functions. It also publishes a monthly newsletter reporting current privatization developments and "alternative service delivery" efforts across the public sector and an annual report summarizing world-wide privatization efforts, successes, and failures.

In the Reason Foundation's 1994 annual report (O'Leary, 1994), its eighth, the editor states in his preface, "The intellectual debate on privatization is over. The model of government as monopolistic service provider has yielded to the productive power of competitive markets" (p.1). To support this thesis, the report's authors cite national and international trends toward privatization of public services, joint and private development of national infrastructure, and divestiture of governmental assets and enterprises. "Reshaping" societies and economies of both western and eastern Europe, the former Soviet Union, Latin America, Australia and New Zealand, and Asia, privatization in 1993 saw over \$60 billion in state-owned and operated enterprises shift to the private sector. This brings the worldwide total to more than \$388 billion over the past eight years (p. 4).

In a summary article, the editor identifies three forces that are accelerating this world-wide trend: a world-wide recession that depleted national treasuries and put severe restrictions on the ability of governments to fulfill their promises, including state

governments in the United States who are cutting higher education funding; the fall of communism in the former Soviet Union and Eastern Europe, and its worldwide discredit; and sharply-increasing global competition forcing greater attention to efficiency, productivity, and quality. As these forces tend to be regionalized, he explains, so are the responses. Joint and private development of infrastructure and divestiture of government-owned enterprises has grown most rapidly in former communist and developing countries. Divestiture in the developed countries of Western Europe, Latin America, and industrialized Asia continues in banking, telecommunications, energy and power utilities. Divestiture trends are low in the United States, however, since government-owned enterprises are relatively few. Private development of highways/tollways is emerging as a leading worldwide trend, followed by private development of airports, air traffic control systems, ports, rail systems, power utilities, and waste management.

The report's authors' data indicate the move toward privatizing traditional government services, though global, is strongest in the United States where orientation toward competition and free enterprise are more traditional. Eroding tax bases in municipalities, decreased state and federal revenues, undiminished demands for services, and a wave of managerial reform have all focused attention on the private sector as a lower-cost, more effective and efficient alternative. That is, the private sector is proving to be able to provide many traditional "public" functions at lower cost and with better services, a key management theory tenet. Contracting out is the leading form of privatization in the US, accounting for almost 80% of the total. Grants, vouchers,

volunteerism, public/private partnerships, private donations, franchises, service-shedding, asset sales, and deregulation are the other major forms of privatization used by federal, state and local governments in the US. The most popular services for privatization are, in rank order, mental health, administrative services, social services, health, transportation, corrections, and, relevant to this study, education. Privatization in higher education merits only brief mention in the study, however, as the author limits consideration to universities contracting for food service and bookstore ownership and/or operation. It is unclear whether the author's short treatment of privatization in higher education results from scarce research or from less frequent use of the process.

Outsourcing as a management principle in public higher education remains implicit; higher education continues to emphasize the economic, financial benefits (Wertz, 1996; Mercer, 1995). Nevertheless, just as there are public services that municipal governments can provide at less cost and with equal or better quality by outsourcing to private vendors -- like golf courses, swimming pools, trash removal, street repair, and other services -- the same principle can apply to public colleges and universities. Is it necessary for colleges and universities to provide dormitory housing, food services, bookstores, publishing services, computer servicing, and physical plant maintenance when these services can be purchased from private vendors, often just off campus? The central questions thus become, can these kinds of services be provided more efficiently and at lower cost by contract? Are they essential to the core mission

and responsibility of higher education, or are they peripheral and therefore candidates to be divested by outsourcing?

Serious discussion about contracting-out university support functions from a management perspective has been tentative, and appears to have begun in the late 1970s and early 1980s when colleges and universities began experiencing discontinuities in earnest between higher education programs and resources. Writing in the early 1980s, for example, Keller (1983) predicted that higher education would find itself faced with declining enrollments, overly-ambitious academic programs, excess faculty, surplus and over-age facilities, and increasing costs. To meet these challenges, Keller concluded, colleges and universities should adopt an "entrepreneurial," or business approach to administration and management. Although he advocates more use of business-like planning and asset management, his broad management emphasis on efficient use of existing resources and more creative approaches to their acquisition reinforces the idea of divestiture. Two additional sources from the early 1980s indicate a growing interest in contracting-out during the period. In a short article, Heger (1982) identifies the practice of outsourcing as a "revolution," and suggests small and medium-sized colleges and universities will likely turn increasingly to academic franchising and contracting as cost-saving and revenue enhancing measures, and implies divestiture can be beneficial. Educational Facilities Labs, Inc. (1982) published a "how-to" manual addressing campus physical plant operations and management that includes a section on contracting-out as an option to increase efficiency and reduce costs.

Of significant interest, little more about outsourcing from a management perspective appears in higher education administration literature until the late 1980s and early 1990s as the world-wide recession began to affect colleges and universities. Ginsburg (1988) presents a summary of the pros and cons of contract services in one of the first articles to move beyond identifying the practice. Among the advantages of contracting-out, he lists greater quality and depth of management; professional staff training; savings in staffing, overtime, supplies and equipment; more modern and efficient equipment; increased ability to motivate and reward staff; and the fact that the contractor assumes the business risk. Although the author does not identify them as such, these are all management-based justifications for outsourcing. As disadvantages, he lists the potential for decreased service and increased costs stemming from the contractor's inclination to minimize costs and maximize profits; the institution's over-dependency on the contractor once it forfeits the ability to perform the contracted function; and the negative impact on the institution's employee morale.

Fuchsberg (1989a, 1989b) presents a more perceptive and persuasive pair of articles addressing the advantages and disadvantages of contracting-out. Writing about the increasing number of colleges and universities that are contracting-out bookstores, he summarizes the arguments of proponents and opponents, and profiles one individual's "crusade" to reverse the trend. Proponents argue the practice allows contractors to achieve economies of scale unavailable to a university that can result in lower prices and higher quality merchandise. In addition, contracting can provide substantial financial benefits: a large one-time payment from the sale of the institution's existing inventory, a

steady stream of income, avoiding investment costs to update equipment, and greatly reduced administrative costs. Proponents reflect the popular view that colleges and universities should devote energies and resources to academic and other educational functions and leave non-educational support functions, even if traditionally provided on campus, to professionals, the classic management-based divestiture argument. Critics argue that a well-managed in-house operation will always provide services at a lower cost since contractors must make a profit. More important, the institution may lose control of the function, a major problem if the contractor does not perform to contract standards. The author identifies a growing movement to provide consultant services to in-house managers preparing counterproposals when faced with the prospect of outsourcing.

One of a very few scholarly presentation of outsourcing in higher education as a management practice is provided by Ferris (1991). In an analysis that addresses contracting in its broadest context, he identifies three forms found in higher education: performance contracts between state agencies and higher education institutions, inter-institutional contracting, and contracting with private entities to provide services. He discusses each in turn, and lists the sources of potential efficiencies and cost savings. Scale economies, increased managerial incentives, managerial flexibility, and competitive market conditions are advantages he observes can accrue under a well-developed contract. On the other hand, he argues, the contracting institution retains several "transaction" costs often overlooked that must be addressed when deciding to contract: oversight costs of determining the quantity and quality of the outsourced

service, and the potential to become too dependent upon a single supplier. Indeed, the costs of going back to an in-house operation once it is outsourced may be almost prohibitive, potentially making the institution captive to a contractor's pricing and service standards.

Abramson (1993, 1994, 1995) has been surveying higher education outsourcing since 1993. He reports a steady increase in its use and that less than 6% of responding institutions do not outsource. The most frequently contracted services are food services (68%), vending (64%), bookstores (33%), computer services (31%), academic building custodial services (23%), academic building security (22%), and HVAC servicing (17%). About one-third of the responding institutions indicate they plan to increase use of contracting-out, whereas about one-half say no. And, although the total number of outsourced functions remain steady, they are enterprises at least tacitly acknowledged as peripheral to higher education's primary missions.

As a footnote, Lively (1993) reports an innovative approach proposed by the Governor of Florida. The Governor asked Florida's 10-campus system how it would operate if its budget remained at the same level, but half the employees were taken off the payroll. Billed as an approach to "reinventing government," the divestiture proposal was intended to provide incentives to increase operating efficiencies by contracting for non-teaching services, and using the savings to upgrade educational programs.

Finally, Goldstein (1993) edits a "how to" publication that offers a framework to assist higher education institutions decide whether to contract-out campus support functions. Sponsored by the Council of Higher Education Management Associations, it

identifies six core decision factors that institutions must address and reconcile: (1) the financial impact, (2) human resources implications, (3) mission and culture concerns, (4) management control and efficiency considerations, (5) service quality, and (6) the legal and ethical considerations. The publication then outlines a 10-step sequence to guide the institution through the process: identify key participants; develop an analytical framework; assess the current environment; identify customer requirements; develop operating designs; identify operating alternatives; review legal, ethical, and community considerations; compare and contrast proposed alternatives; select the preferred alternative; and establish a continuous assessment and improvement process. It also asks a relevant question: "Is privatization good for higher education?" The authors observe this issue is "emotionally charged" with fervent supporters and critics, but they do not attempt to answer the question. In sum, from a management perspective the literature implicitly portrays outsourcing as a management-driven decision as institutions of higher education examine non-core functions that can be divested to provide services externally at lower cost and with equal or better quality. The primary emphasis, however, continues to be economic and financially-based.

Summary of Definitions from Economic and Management Literature

The literature addressing outsourcing from the economic and management perspectives reveals no developing theory about the practice of outsourcing itself, other than reaffirming that outsourcing can offer financial and management benefits. Several conceptual distinctions nonetheless emerge that may be useful to this study in summary.

"Privatization" is a generic term often used interchangeably with "contracting out," "outsourcing," and "restructuring," but in strict definition it is limited to transferring the operation, control, and/or ownership of public services and enterprises to private enterprise. The process appears to follow two major forms. The first is a private "monopoly" in which a private enterprise competitively substitutes for a government monopoly, with tax revenues going directly to the enterprise for its services (Examples: contract schools and educational programs, street maintenance, trash collection, utility service). The second form is a private sector, competitive service for which customer-tax payers pay the enterprise directly in competition with other service providers (Examples: vouchers for social services and schools; privately-developed and operated municipal parking garages, and ambulance services). In both forms, consistent with economic theory, competition plays the regulating role.

"Contracting out," and its synonym "outsourcing," refer to the process of externally procuring a service or product an enterprise cannot produce itself more economically or of sufficient quality. A fundamental business tenet, the terms apply to both private and public sector practices. Here again, competition is the regulating process, both implicitly and explicitly. Competition is implicit if an enterprise concludes the service can be provided more economically internally; competition is explicit when an enterprise awards a contract externally for services through competitive bidding. The same distinctions are being refined in the public sector, to include public higher education. "Competitive restructuring" is the implicit process public agencies, including public higher education institutions, are using to lower the cost and increase the

efficiencies of their services by comparing themselves ("benchmarking") to private enterprise and "reengineering" or restructuring their internal operations. At least one university has established a formal "make-buy" policy by which the institution routinely compares its in-house costs for services directly against contractor costs for the same services. If in-house is lower or can be restructured to become lower, then the service remains in-house. Conversely, if reengineering cannot reduce costs, then the service is outsourced through competitive bid (see p.156 in appendix). Reengineering or restructuring thus becomes an important, implicitly competitive process. "Competitive contracting" is the explicit process by which public entities request proposals from and award contracts to private enterprise to perform public services. In higher education, the terms "contracting out" and "outsourcing" are appropriate to both public and private institutions. In public higher education institutions, however, the terms are often used synonymously with "privatizing."

A word is in order about the term "reengineering." Coined and popularized by Hammer and Champy in their popular book, *Reengineering the Corporation* (1993), the term describes the process by which American corporations must reinvent themselves in order to remain competitive in the global economy. It is no longer sufficient, they explain, to employ the organizing and operating principles advocated by Adam Smith over 200 years ago that work should be broken down into its simplest and most basic tasks. Although his concepts facilitated the world's industrialization, they result in specialization, compartmentalization, and fragmentation, principles that work contrary to the requirements of the post-industrial era. To succeed in the post-industrial, highly

competitive global environment, enterprises must reunify those tasks into coherent business processes and procedures through “business reengineering,” eliminating any that do not lead directly to high quality products and services at fair and reasonable prices. That is, reengineering should eliminate all tasks that do not lead directly to customer satisfaction.

With the restructuring and downsizing typical of American business in the late 1980s and early 1990s, however, reengineering came to be associated with job losses, unemployment, and under-employment among white collar workers, consequences that have overshadowed reengineering’s salutary intent. Nevertheless, the term is now widely accepted in management, to include higher education administration, to describe any process by which an organization restructures its organization and operations to increase efficiencies, reduce costs, and increase revenues. It is in this context that the term “reengineering” is used in this study.

Decision Making Literature

Decision making theory is a relatively new branch of organizational theory which is, itself, a branch of sociology (Selznick, 1948). Based on theories of how organizations function, it focuses on how decisions are made within the organization. A seminal work is Allison's *Essence of Decision* (1971), an analysis of presidential and executive-level national security decision making during the 1962 Cuban Missile Crisis. Allison identifies and isolates three decision making models at work in the process: the rational actor at the top and center of a rational decision process; organizational processes, or the routines,

scenarios, and standard operating procedures that limit rationality and lead to decisions; and bureaucratic politics, the interaction of key participants in decision making as they build coalitions, bargain, and compromise. This last model, bureaucratic politics, is Allison's distinctive contribution to decision making theory as he identifies and analyzes power relationships among individuals and political processes within complex organizations (George, 1972). It is the power relationships and processes, Allison explains, that best describe how decisions are made within organizations. Jefferies (1977, 1989) argues further that it is all three decision models, acting together, that best explain the decision process.

Birnbaum (1988) does for higher education what Allison and others do for the national security establishment; he describes several models of higher education organization, governance, and decision making. Each can serve as a “conceptual lens” to help one understand and “make sense” of higher education’s organizational functioning (p. 83). He outlines five models: the collegial, the bureaucratic, the political, the anarchical, and the cybernetic.

The collegial model is the traditional view of higher education governance and decision making. It is based on consensus, shared power, common commitments and aspirations, consultative leadership, and collective responsibilities. The author refers to a 1986 study by Bowen and Schuster that identifies three additional characteristics: the right to participate in institutional affairs; membership in congenial and sympathetic company; and equal value of all disciplines (p. 87). Processes are egalitarian and democratic, and decisions are made by consensus. By “consensus” Birnbaum doesn’t

mean “unanimity.” Consensus occurs when participants believe they have had a chance to influence the outcome, have had a fair hearing, and can be comfortable with supporting the decision. Particularly important to the collegial model is the frequent, continuing, face-to-face interaction of the decision makers, a requirement implying a comparatively small group.

Birnbaum acknowledges the collegial model alone does not completely describe an institution’s governance and decision making. It ignores differences in legal authority between participants, it overlooks standard or legal procedural requirements, and it assumes general agreement on values when they may in fact be disputed. Moreover, it provides limited accountability; if things do not go well, governance begins to fall apart. Finally, maintenance of interpersonal rewards and group self-protection, often a consequence of strong, cohesive groups, may not adequately describe how decision making in the best interest of the institution may nonetheless result.

His bureaucratic model emphasizes a rational organizational structure and decision process with characteristics able to accommodate the collegial model’s weaknesses. Birnbaum defines bureaucracy as the type of organization designed to accomplish administrative tasks by systematically coordinating the work of many individuals within structures designed to relate organizational programs to the institution’s goals. At the heart of the bureaucratic system, he explains, is the organizational chart, the formal depiction of positions and responsibilities, lines of authority, and lines of communication. Also inherent in a bureaucracy are codified rules, regulations, and procedures that provide the scenarios and repertoires by which organizations operate.

Division of labor, rights, regularized routines and procedures, and responsibilities allow the system to work and leads to development of and dependence on high levels of expertise in defined areas. Technical competence and performance are accepted as the basis for promotions and position, and the higher one is in the hierarchy, the greater is assumed his or her competence and expertise. Effectiveness and efficiency, he continues, equate to complying with established and accepted rules, procedures, and routines as articulated in standard operating procedures, repertories, and programs. Decision making is approached as a rational process linking means to ends and resources to objectives, and the hierarchical structure suggests this process will occur at the senior levels. As a bureaucracy, Birnbaum concludes, the institution functions predictably, impartially, reliably, and effectively to achieve its mission.

The collegial and bureaucratic models alone, he cautions, still do not account for all the influences and factors that determine how the institution works. For example, status differences created by hierarchy may limit the exchange and flow of information. In addition, while responsibility may be delegated, sometimes full authority is withheld. Moreover, although power may be embodied in the legitimacy of a position, not all orders are obeyed; a subordinate's expertise and relationships may allow him or her to accept or reject an order. To provide a more complete explanation of organizational functioning and decision making, Birnbaum turns to his Political model.

In its simplest terms, the Political model of organizational functioning is based on individuals and groups interacting by forming coalitions, bargaining, compromising, and exerting influence to reach agreements they believe will further their individual and

collective interests. Thus, power comes not from norms, rules, procedures, or positions, but by negotiation or other means individuals and groups use to impose their aims.

Institutions are more accurately described, he explains, as a collection of groups vying for and exerting influence rather than a hierarchical structure of individuals. Decision making is thus diffused and decentralized. In order to obtain a desired outcome, groups must join with other groups to bargain and compromise. Organizational politics thereby becomes the process of groups and individuals acquiring, developing, and using power to obtain desired outcomes.

Constant instability and turmoil are avoided, he continues, first, because groups tend to develop quasi-stable coalitions; second, because individuals most often belong to more than one group, providing an element of checks and balances; and third, because of indifference. That is, most groups are not concerned about most issues most of the time. Established rules and procedures, and informal understandings, however, provide stability, regularity and some degree of predictability. Collegiality, bureaucracy and politics can thereby co-exist.

Birnbaum's two remaining models sometimes integrate elements of the other three models, and sometimes provide alternative explanations of organizational phenomena. His Anarchical model assumes an institution is not driven by comprehensive rationality, "but by the autonomous actions of many individuals and organizational subgroups responding to their own perceived interests...." (p. 166). Each participant, individual or group, can perceive and pay attention to only a limited set of elements or circumstances of the organization's environment, and thus respond only to those in which they perceive an

interest at stake. This process of individuals and groups pursuing their interests is “organized anarchy,” “organized” because the process occurs in an accepted structure, and “anarchy” because individuals and groups pursue only their interests. Characteristic of the anarchical system are vague and subjective goals, unclear processes by which individuals and groups convert inputs to outputs (i.e., decision making), and fluid participation. Thus, problems arise that are looking for solutions, solutions exist that are looking for problems, and decision makers are looking for decision opportunities. The organization nonetheless functions adequately, Birnbaum explains, because of “garbage-can decision making” (p. 162). As streams of problems, solutions, and participants flow through the environment, large receptacles, or “garbage-cans” exist in which specific problems, participants and solutions coalesce, and decisions are thus made.

Birnbaum asserts that all four models are helpful to “make sense” of organizational processes, but each is incomplete. Much of what happens is a consequence of standard operating procedures, programs, and repertoires (the bureaucratic model). Groups of people meet regularly with colleagues as members of departments, committees, or colleges and come to consensus (the collegial model). Politics can explain why and how individuals and groups make conscious choices (the political model). Goals are often vague and subjective with fluid group participation in organizational processes and decision making (the anarchical model). More likely, he explains, a fifth model is at work that integrates the other models: the cybernetic nature of academic institutions. Governance and decision making occur through “cybernetic controls,” or “self-correcting mechanisms that monitor organizational functions and provide attention cues, or negative

feedback, to participants when things are not going well” (179). Activities are regulated by explicit and implicit control systems operating within the institution’s culture. The explicit systems are the institution’s organizational rules, regulations, procedures, and structures; the implicit systems are controls developed through the interaction of individuals in groups that leads to shared values and concern for cohesion. The explicit and implicit control systems are “organizational feedback loops” that accomplish two ends: they make minor adjustments in organizational processes to keep them functioning within acceptable limits, and they initiate action to alter the organizational processes themselves. These “negative feedback loops” provide information that something is wrong or when an important variable is outside its acceptable limit and attempts to correct it. Adaptive behavior thus creates a reasonably stable environment.

Birnbaum’s collegial, bureaucratic, and political models closely parallel Allison’s, George’s and others’ explanations of organizational functioning and decision making. His anarchical and cybernetic models, however, are complex, arcane explanations difficult to understand and follow. While they may be useful to provide additional explanations of how higher education institutions function, they are much less useful as discrete models to assist analytical study. This study will draw on Birnbaum’s collegial, bureaucratic, and political models, and Allison’s and other’s explanations. Together they provide theoretical frameworks within which outsourcing decisions might be explained and understood, that is, by explaining and understanding an organization's decision processes. Decision models appear to provide a more complete explanation of how outsource decisions are made at institutions of higher education.

Summary of the Literature and Relevant Hypotheses

A review of the literature related to outsourcing suggests there are two well-established hypotheses or propositions that can explain why decisions are made in public higher education to outsource traditional campus functions. First, decisions to outsource are based on outsourcing's use as an economic, financial mechanism that introduces competition into the public sector and thereby reduces the cost of services. Employed in public higher education, savings are thereby generated that can be reallocated to other functions. Second, decisions to outsource are based on its use as a management mechanism to achieve efficiencies and to divest an institution of non-core functions. Unburdened by non-educational functions, the institution can thereby concentrate its resources on direct education.

If the economic-based and the management-based decision models providing explanations of *why* higher education institutions outsource are incomplete, what else does the literature suggest? A third proposition is suggested by analyses of *how* institutions make decisions. Decisions are determined by the decision processes and organizational dynamics typical of public higher education institutions. Analyzing outsourcing in these contexts may thus lead to a more complete understanding by addressing how higher education institutions decide to outsource. Together with explanations of why institutions outsource, explanations of how will contribute to the development of a greater body of knowledge explaining outsourcing's use in higher education, and to a practical understanding of outsourcing as a decision outcome.

CHAPTER III

METHODOLOGY

Conceptual Framework

This study poses two questions designed to elicit an understanding of how and why an institution of higher education concludes it will or will not outsource a traditional higher education function. What non-financial considerations play a significant role in outsourcing decisions? How does their presence affect the decision? The study is exploratory in nature and suggests a qualitative, phenomenological approach using case studies (Ary, D., Jacobs, L, & Razavieh, A., 1990). While not excluding a quantitative, survey-based study, the questions are designed to identify as yet unclear variables affecting outsource decisions. A qualitative study is thus easier to design and conduct given the current tentative state of outsourcing hypotheses. More important, identifying possible variables through a qualitative study may simplify the design of follow-on survey-based studies.

As the study focuses on decision makers and the decision processes, or how and why decision makers choose to outsource, a phenomenological approach is appropriate. Decision making is largely a subjective process reflecting a person's "socially-constructed" reality (Bogdan & Biklen, 1992. p. 34), even when a decision maker relies heavily on "objective" data or analysis. Interpreting the data, analyzing it rationally or intuitively, and making a decision, require judgments by the decision maker that will reflect his/her perceptions. Phenomenology seeks to understand the individual's perceptions and maintains that a person's perceptions cannot be separated from the environment (Langenbach, Vaughn & Aagaard, 1994). Studying an individual's perceptions and the environment from which they grow, therefore, will offer some understanding of the phenomenon. The phenomenon in this study is outsourcing.

Building on these concepts, Yin (1994) affirms the utility of a qualitative approach to investigate contemporary phenomena when the phenomena and context may not be clear, and when there are many possible variables of interest deriving from multiple sources of evidence. He asserts that questions asking "who," "what," "where," "how many," and "how much," are likely to favor predictively-designed quantitative surveys. Indeed, the limited research into higher education outsourcing thus far is survey-based and is just now beginning to answer these types of questions (Abramson, 1993, 1994, 1995; Wertz, 1996). Questions asking "how" and "why," however, are more likely to favor exploratory or explanatory methods such as qualitatively-designed case studies (Yin, 1994, pp. 5-6). As this study's questions are designed to elicit information

about how and why higher education institutions outsource, Yin's case study approach is appropriate.

Yin explains a case study should follow a logical sequence connecting empirical data to the research questions and, finally, to its conclusions. Such a design will have five components: the study's questions; its propositions ("theory"), if any; the units of analysis; the logic linking data to the propositions; and the criteria for interpreting the findings (pp. 20-26). He suggests the case study investigator should not resist the development of propositions, but should make the effort at least to develop a conceptual framework. This effort will not only pay off in constructing an appropriate research design, but will also provide a vehicle to generalize the study's results.

He explains further that case study design should meet four tests: construct validity, or establishing operational measures; internal validity, or establishing causal relationships; external validity, or establishing the domain to which a study's findings can be generalized; and reliability, or demonstrating that the data collection procedures can be repeated with the same results (p. 33). To ensure construct validity, use multiple sources of evidence to triangulate. To ensure internal validity, use pattern-matching, that is, compare an empirically-based pattern with a predicted pattern. External validity can be enhanced by replication logic using multiple cases in which similar results are obtained in several cases. Reliability will be increased by developing a study protocol that establishes and outlines the steps the researcher will follow. If planning a multiple-case study, Yin suggests using a pilot case study to test the questions and gather data that might provide conceptual clarification. Finally, he lists six sources of data that will help

triangulation: documents, archival records, interviews, direct observations, participant observation, and physical artifacts. While observing no single source has an advantage over the others, Yin suggests all can be highly complementary and as many as possible should be used.

Using Yin's case study research methodology, five case studies were conducted. Each case examined the decision processes in which outsourcing an in-house enterprise at a public four-year higher education institution in the state of Oklahoma was at issue. Studies were conducted at four separate campuses and yielded information on nine outsource decisions. To strengthen construct validity, three sources of evidence were used to triangulate: contemporary correspondence, archival records, and interviews. Participant observation was relied upon in one case. To strengthen internal validity, patterns were matched within and between cases. To strengthen external validity, multiple cases were studied and yielded similar data. To strengthen reliability, a protocol of steps and procedures was followed.

The study's two questions are designed to elicit an understanding of how and why decisions are made to outsource at public four-year institutions of higher education. What non-financial considerations play a significant role in outsourcing decisions? How does their presence affect the decision? From the questions and from possible theoretical constructs (economic theory, management theory, decision theory), several testable propositions suggest themselves. First, outsource decisions are driven by the financial objectives to lower the costs of providing academic support services or to increase revenues by introducing competition into selecting a service provider. Second, outsource

decisions are driven by the management objectives to increase productivity, reduce costs through economies of scale, and to divest the institution of non-core functions that do not lead directly to education outcomes. The institution is thus able to focus its resources on direct education. Third, outsource decisions are driven by the decision process dynamics that affect decision making in organizations in general and higher educational institutions in particular.

As the study focused on decision processes, using Yin's methodology, the units of analysis are individual decision makers and decision-making groups such as committees and boards. The logic linking data to the propositions is the degree to which the data support each proposition. Finally, the principle criterion used to interpret the findings is the relative influence each proposition has on the decision. Analyzing the relative influence of each proposition thus yields the information to begin answering the questions.

Assumptions

The study assumes, first, that economic-based, financially-driven explanations of outsource decisions at public four-year institutions of higher education in Oklahoma are incomplete, and that additional explanations are required to understand the phenomenon. It assumes, second, that additional explanations can be determined by case study analysis following a qualitative, phenomenological, case study methodology as described by Yin. It assumes, third, that reviewing archival data, contemporary correspondence, and interviewing the primary decision makers in outsource decisions will yield sufficient

information to build a more complete explanation. The study assumes, finally, that some degree of generalization to other cases will be valid and useful.

Limitations

This is not a quantitative study. Cases were not selected randomly, nor are they necessarily representative samples of a larger population. An effort was nevertheless made to select cases from different campuses. The study is limited to four year public institutions of higher education in Oklahoma. This limitation acknowledges there may be differences in outsourcing between public and private institutions. The limitation also recognizes the possible distinctive character of public institutions of higher education in Oklahoma. For example, of the 26 public colleges and universities in Oklahoma, at least a quarter are led by former Oklahoma public officials. It also acknowledges a distinction between four and two-year institutions, particularly in procurement policies and procedures. Generalizations must therefore be made cautiously.

As a phenomenological study, the conclusions are limited by the perceptions of the participants. Although determining environmental perceptions is an aim of the study and essential to explanation building, perceptual differences may further limit generalizations. Nevertheless, the number of decisions studied, nine, yielded useful and broadly consistent perceptual patterns. Moreover, triangulation, data from correspondence, archival records, and financial statements, was used to offset some of the bias inherent in individual perceptions as revealed in interviews.

Research Questions and Propositions

Document research and loosely-structured interviews were conducted to elicit information that would help answer the two research questions: (1) what non-financial, non-economic considerations play a significant role in outsourcing decisions, and (2) how does their presence affect the decision? Two corollary questions are implied: (a) are costs the major criterion upon which the decision to outsource was made; if not, then (b) what decision model is more appropriate or complete? A review of the literature suggests three hypotheses or propositions and their associated models. First, outsource decisions are economic-based and financially-driven. Second, outsource decisions are management-based, driven by possible efficiencies and the benefits of divestiture. Third, outsource decisions are driven by the decision process dynamics inherent in higher education: bureaucratic decision dynamics, collegial decision dynamics, or political decision dynamics.

Population and Sample

The decision was made to limit research to four-year public institutions in Oklahoma, acknowledging there may be significant differences between four and two-year schools, between public and private institutions, and between Oklahoma and non-Oklahoma schools. In addition, an effort was made to select outsource cases from different four-year campuses in Oklahoma. In the end, five cases were selected from four campuses. Although two cases were from the same campus, they were separated by a significant time lapse and different sets of decision makers. The five cases, in turn,

yielded information on nine outsource decisions. While the validity of qualitative studies is not dependent upon random selection or sample size, selecting cases was influenced by a desire to achieve some degree of cross-sectional representation. Thus, one campus is a professionally-oriented health sciences university, one is a major state flagship university, one is a rural university, and the other is a small liberal arts university. The nine outsource decisions equate to a series of nine multiple cases as defined by Yin (1994) and fall within the six-to-ten he suggest will provide compelling support for initial propositions (p. 46).

Data Collection Procedures

The first case study, the decision to outsource printing services, is a pilot study conducted to test the study protocol and conceptual propositions. It was largely an archival search to determine the events leading up to the outsource decision and to provide context. In addition, contemporary correspondence related to the decision was reviewed, together with pre- and post-decision financial data. Finally, interviews were conducted with key remaining participants to elicit their perceptions and descriptions of the decision processes. The case confirmed the protocol utility and the presence of all three study propositions. In addition, the study identified a number of additional outsource characteristics or variables that add to understanding the phenomenon. These were looked for in subsequent studies.

Data collection for the second case, the decision not to outsource the campus motor pool, relied upon a review of contemporary correspondence, meeting minutes,

personal observations of participants and procedures, and interviews with key participants. The case reconfirmed the study protocol and the influence of the three study propositions. It also confirmed the additional outsourcing variables identified in the pilot study.

The third case, the decision to outsource a campus lighting retrofit, grew out of the unique opportunity to participate directly in the decision process. Data collection therefore comes largely from personal observation. The data was triangulated with subsequent participant interviews, archival research, and reviews of contemporary correspondence. The data confirmed again the influence of the three study propositions.

Data collection procedures for the fourth and fifth cases, the rural university, and the small liberal arts university, followed the protocol established and used in the first three cases. In the rural university case archival research was relied upon heavily since the initial decisions were made almost twenty years ago. Records included meeting minutes, financial statements, and transcripts of interviews conducted soon after the events. Interviews conducted with three key participants still accessible were particularly valuable. Outsourcing at the small liberal arts university is recent, so data collection relied heavily upon participant interviews, triangulated with financial statements and contract reviews.

Research was terminated after five cases. The last two cases confirmed again the study's three propositions established in the previous three cases. Moreover, patterns and characteristics consistent with previous cases were found to be present in the last two cases. Finally, no additional variables affecting outsourcing appeared in the final cases.

CHAPTER IV

PRESENTATION OF FINDINGS

Current higher education management practice and related literature stress the financial benefits possible from outsourcing (Morrell, 1994), provide “case studies” suggesting how financial benefits can be realized (The Association, 1994; Green, 1992), and offer analytical matrices to assist decision makers arrive at a financially sound decision (Goldstein, 1993). In addition, several surveys have been published listing the numbers and types of functions and enterprises higher education institutions outsource and conclude it is a useful mechanism to reduce costs (Abramson, 1993, 1994, 1995; Wertz, 1996). In sum, outsourcing is advocated and practiced among institutions of higher education with the assumptions that decisions to outsource are and should be economic-based and financially-driven.

Outsourcing as an economic, financial outcome therefore appears to provide sound justification for achieving cost savings and increased revenues. Curiously absent in higher education literature, however, is discussion of non-financial considerations and

influences that may affect a decision to outsource. The presence of non-financial influences and considerations in a decision to outsource may thus suggest that the economic, financial model is an incomplete explanation of outsource decisions, and a broader, more complete explanation is necessary and appropriate.

Postulating that an economic-based, financially-driven decision model may be an incomplete explanation of outsource decisions, this study was conducted to identify non-financial influences and considerations that affect the decision by focusing on how and why higher education institutions outsource. A series of case studies was conducted asking two major questions: (1) what non-financial, non-economic considerations play a significant role in outsourcing decisions, and (2) how does their presence affect the decision? From the questions and from possible theoretical constructs (economic theory, management theory, decision theory), several testable propositions suggested themselves. First, outsource decisions are driven by the financial objectives to lower the costs of providing academic support services or to increase revenues by introducing competition into selecting a service provider. Second, outsource decisions are driven by the management objectives to increase productivity and efficiency, and to divest the institution of non-core functions that do not lead directly to education outcomes. Divestiture enables the institution to focus its resources on direct education. Third, outsource decisions are driven by the decision process dynamics that affect decision making in organizations in general and higher educational institutions in particular.

Case One

The Decision to Outsource Printing Services

At a Major Medical School

Case synopsis. Printing Services had operated for over 20 years at the medical school, providing offset printing and, when it became technically feasible, high-speed copying to support its printing and copying needs. With low employee turnover, yearly wage and salary increases gradually increased the shop's overhead costs. By 1990, office copiers and off-campus copying services had cut into printing services' business, and revenues were running less than 70% of several years earlier. Old equipment and technology and employee attitudes limited the ability to increase productivity, and a series of not-well-thought-out organizational changes and realignments greatly reduced morale. By 1991, what appeared to be intractable personnel problems, low productivity, high costs, and reduced business combined to contribute to large operating losses. In an effort to correct the problem, the administration commissioned a series of studies to determine how to fix printing services. Among the alternatives, two stood out: (1) restructure the operation, modernize the equipment, hire new management and keep the function in-house, or (2) outsource the operation to an off-campus contractor to provide on-campus printing and copying. After protracted analysis, the vice president for administrative affairs' staff of directors decided to outsource printing services.

Question One: What non-financial, non-economic considerations play a significant role in outsourcing decisions?

The case identified two primary non-economic, non-financial considerations in the decision to outsource printing services. Of great importance was the directors' desire to rid themselves of what they perceived to be an intractable personnel problem stemming from deep dissatisfaction with printing services performance and weariness over trying to work with recalcitrant employees. As the director of purchasing stated, "we were just tired of the continuing problems in printing services dating back at least three years. Contracting out the entire operation seemed the easiest, cleanest way to get rid of the problem." Of somewhat less importance in the decision was the university's board of regents' stated policy of encouraging the university's administration to outsource non-essential enterprises and activities. The policy provided easy justification to proceed with outsourcing.

Question Two: How does their presence affect the decision?

By concluding that they could rid themselves of an intractable management and personnel problem by outsourcing printing services, the directors' moved the decision away from the economic-based, financial-driven model commonly accepted as justification for outsourcing, to the management-based model that includes divestiture. Although cost and service were marginal criteria, this does not suggest that cost and service were unimportant. If either of the two alternatives offered significant cost savings over the other, restructuring and keeping printing services in-house or outsourcing the operation, then it would have been difficult for the directors to justify not

pursuing the clearly lower cost option. As it was, restructuring and outsourcing both offered options that satisfied the economic and financial criteria.

The regents' role provided an unexpected and interesting perspective in this study. Like outsourcing to solve a personnel problem, outsourcing because of emphasis by the regents further moved the decision from economic, financial considerations. Although the role of the regents was not decisive, it was influential, and reflects their perceptions that outsourcing enables an institution to divest non-core functions in order to focus resources on core activities, a management-related proposition. Also important, influence by the regents, a non-campus-based group, may suggest that political considerations play a role in outsource decisions.

Other significant findings:

The case helps answer the corollary question, what decision model is more appropriate or complete, by providing a more complete explanation. The predominance of non-financial considerations suggests the inadequacy of the economic-based, financially-driven model in the outsource decision. In this case, the decision was made by a group of seven directors working for the vice president for administrative affairs: the directors of financial affairs, budgeting and purchasing, educational services, grants and contracts, computing services, and operations. The group exhibited many characteristics of the collegial model: shared influence, decisions by consensus, common values and commitments, collective responsibility, mutual trust and respect, frequent face-to-face interaction, and mutual congeniality. All but one had worked together successfully for several years, and the new director of operations appeared to fit in well. Together they

shared the dismay caused by printing services' problems, having struggled together for several years for an acceptable solution. The staffs of each director used printing services, with its products being crucial to their respective operations, and they reflected the broader campus community's deep dissatisfaction with printing services status. Financial considerations appeared important only to the director of financial affairs; the others wanted an end to the problem by whatever means. All, however, shared the perception that the problem lay with the recalcitrant employees of printing services. The collegial model of decision making thus appears to be an appropriate explanation of how the decision was made to outsource printing services. Few elements of the bureaucratic or the political models appeared to be significant, although the regents' emphasis on outsourcing, a political element, did have an influence.

Restructuring printing services, or reengineering, offered a second, clear alternative to the problems the directors were experiencing. Restructuring worked; costs were coming down and revenues were increasing with improved management. Given time, restructuring the in-house operation may have proven as efficacious as outsourcing to solve the problems, an alternative higher education literature says little about. A question deserving additional research, then, is whether an existing campus enterprise can be restructured or reengineered to provide improved services at the same or better levels than available through outsourcing to a contractor. The pilot study thus suggests reengineering may be an additional line of research into decisions to outsource.

Case Two:
The Motor Pool:
Outsource or Reengineer?

Case synopsis: The university's board of regents directed the administration to make efforts to "get out of the business of business" and focus on the university's missions of education, research, and public service. Since a university is a public institution, they argued, it is unlikely to be able to provide services as efficiently or at as low a cost as private enterprise. Translated, that meant to outsource in-house services private vendors might be able to provide. With a number of university functions successfully outsourced, they thought more aggressive efforts were required and suggested the administration consider the motor pool as an outsource candidate. In response, the vice president for administrative affairs constituted a steering committee of staff and faculty to oversee the process. The committee hired a consultant to assist its analysis of the motor pool's finances and management. It soon became clear that a few internal restructuring steps would enable the motor pool to reduce its costs significantly and increase its services. As the changes were made, improvements resulted and the committee recommended that instead of outsourcing, the regents accept the reengineered motor pool. The regents insisted it be outsourced, however, so purchasing prepared a request for proposals to outsource the motor pool. Subsequent events delayed the release of the RFP, including the announced retirement of the president, the announced

retirement of the board's chairman, and a six-month tenure of an interim president. When the new president took office, he concluded the motor pool should not be outsourced.

Question One: What non-financial, non-economic considerations play a significant role in outsourcing decisions?

The presence of political dynamics was predominate in the decision process. The regents believed that outsourcing by its nature is preferable to in-house operations of non-education support functions. In contrast, the steering committee members believed that in-house operations are preferable to outsourced if the in-house enterprise can be restructured or reengineered to make its operations less costly, more efficient, and more responsive to customers. Two decision-making groups, each with a different perception of the problem and its solution, were in conflict. If the outcome were dependent only upon which of the two groups had greater influence, then the motor pool would likely have been outsourced. In the end, it was not.

Also significant in the case was the Regent's articulated view that non-core enterprises should be divested to allow the institution to focus more directly on its missions. With many of the members being successful business persons, the view reflects their perceptions of management, particularly the chairman's. Under their direction, several university functions had been outsourced successfully, and outsourcing the motor pool seemed a logical extension of the process. Political dynamics appear to be the only reason the RFP for outsourcing the motor pool was not released.

Question Two: How does their presence affect the decision?

Like the first case, this case suggests that financial considerations were not the decisive criteria in the outsource decision processes. While they appeared to drive the steering committee's evaluation and decision to reengineer rather than outsource, in the end they provided only the baseline around which other dynamics swirled. Other events and perceptions played more important roles, in particular, the regents' view that outsourcing would allow the institution to focus on its primary missions, a fundamental tenet of management theory. More important were the political dynamics. The regents have more authority than the steering committee. Despite the regents' greater authority, the motor pool was not outsourced. With the retirement of the president and the appointment of an interim president, the vice president and the committee never submitted the question formally to the regents for a decision, a highly-effective political tactic. As a member of the committee expressed, "if you can't win, wait until another day when circumstances are more favorable." Moreover, with the announced retirement of the regents' chairman soon after the president's announced retirement, other matters no doubt became more pressing to the regents. They likely became indifferent to the motor pool. Finally, the arrival of the new president six months later resulted in a shifting of policy priorities. Although he emphasized the need to continue to cut administrative costs, the new president was also highly sensitive to the need to rebuild a sense of community within the university and did not want to risk further alienation among the administrative staff that outsourcing the motor pool was likely to cause.

Other significant findings:

The first case identified reengineering as a significant consideration in the decision to outsource. While in the first case reengineering incidently provided an alternative to outsourcing, reengineering became a central issue in this case. Can business process reengineering, the term coined in current management-related literature, be a valid alternative to outsourcing, given outsourcing's potential to disrupt tradition and personnel? Little in higher education management literature suggests an answer, but this case provides interesting and useful insights into the relationship between outsourcing and reengineering. Like the first case, it confirms that reengineering can be an effective alternative to outsourcing. Reengineering worked. The motor pool reduced its costs and increased its productivity, and significant personnel disruptions were avoided. In addition, reengineering resulted in "benchmarking" cost and productivity measures that would be useful if the enterprise were outsourced. Perhaps most important, reengineering allowed the in-house enterprise to become more competitive with potential off-campus contract operations, thereby satisfying the economic-based, financially-driven criteria.

Furthermore, the case helps clarify the corollary question, what decision model is more appropriate or complete? There are indications that all three of the decision process dynamics models were at work in the decision process. The steering committee's deliberations appeared to reflect the collegial approach, and the respective bureaucratic responses by the committee, the vice president, the president, and the regents, reflect the bureaucratic model. The political decision dynamics model, however,

is most clearly illustrated. The RFP was not released as a result of the struggle for influence between the regents and the steering committee. The committee “won” as a result of the political dynamics.

Finally, the heightened visibility of outsourcing in this case, in contrast to the first case, may suggest an important dynamic. What made the motor pool case more visible than the printing services case? The major difference appears to be in the political significance of the motor pool in contrast to printing services. The motor pool contract would affect a greater number of individuals, and a much higher contract dollar amount increased the potential risk of the outsource contract. Although tentative after only two cases, the size and dollar amount of a potential outsource contract seem to be important, emerging considerations.

Case Three:

The Lighting Retrofit Project

Case synopsis: The medical school’s physical plant staff has traditionally looked for energy efficient measures to reduce the university’s cost of utilities. Over the years the staff has successfully implemented a number of measures that have resulted in significant utility cost reductions. Over the past several years, a number of technological advances in lighting have made possible significant reductions in the consumption of electricity if older-technology florescent light tubes and ballasts were replaced with the new, more energy-efficient tubes and ballasts. To evaluate potential savings, the

physical plant staff retrofitted one of the campuses' twelve buildings as a test. The test proved successful, reducing electrical consumption by an estimated 35% and saving the university about \$100,000 per year. Based on the test, the staff prepared and released a request for proposals to retrofit the remaining eleven buildings, a project that would potentially save the university a further \$265,000 per year. Only one proposal was received in response, an offer to retrofit the remaining buildings at a cost of \$1,054,000 submitted by the winner of the test-project contract the previous year. Fearing that receiving only one bid might bring into question the validity of the bid process, purchasing made a number of unilateral decisions that collectively brought into question not only the bid response, but the validity of the project itself. As a result, the project decision process escalated well beyond an easily-controllable level, to include the president's office located on the main campus, the university's regents, and the state bond oversight commission, a player outside the university. After a year of re-evaluations and political maneuvers, contract signing is still in question.

Question One: What non-financial, non-economic considerations play a significant role in outsourcing decisions?

Right from the beginning, each of the three decision process dynamics models was clearly illustrated. The bureaucratic and collegial decision dynamics process models accurately explain the decision process leading to the test project, evaluation of the test, and the decision to proceed with the campus-wide project. The participating members of this group included the director of campus operations and three of his four assistants, one of whom was an engineer. Each was acting in their organizational and bureaucratic

capacity. In addition, they enjoy a collegial relationship with the group making decisions after eliciting and accommodating the views and concerns of each member. Expanding the group to include the vice president, the final decision-level authority, was an easy evolution as he is a primary participant in physical plant decisions.

When the follow-on decision process to retrofit the remaining 11 buildings expanded beyond this group to include representatives from purchasing, architecture and engineering, legal counsel, and finance, the bureaucratic model continued to predominate. The chief buyer's response reflected the department of purchasing's routines and procedures. "An RFP should have more than one bid to maintain the integrity of the bid process and to be in the best interest of the HSC," she states. "In addition," she continues, "because the contract potentially creates a debt by the state, it should be referred to the State of Oklahoma bond oversight commission." An unusual move because the project did not involve bond financing, the bond oversight commissions' staff, in turn, reflected its own routines and procedures by reviewing and commenting upon the contract even though its jurisdiction over the university and this type of project was unclear. Finally, A&E responded that before the project could proceed an electrical engineer should review the scope of the project and prepare detailed contract specifications. Even though this step was not required in the previous retrofit, it was most typically bureaucratic. A&E's purpose as an organization is to prepare drawings and specifications for renovation and construction projects in campus buildings, and to oversee contract completion and compliance. Their response that detailed

specifications were required was therefore predictable, even though the retrofit was a maintenance-related project in which they do not become involved.

The decision process dynamics, finally, reflected the political model. Defined as a diffused process in which individuals and groups vie for influence, it describes purchasing, the campus architect, and the operations director arguing and maneuvering for their respective positions. In particular, the architect's insistence on three occasions before the contract signing that his concerns be accommodated, although they had marginal influence on the contract itself, is classic political dynamics. In addition, the bond oversight's staff was quick to claim jurisdiction, even though it is still questionable, in an effort to exercise their prerogative. "Does the project involve financing by anyone involved at any level? If so, then you damn well better bring it to us" was the response by a senior member of the staff when bond oversight's jurisdiction was questioned. The contractor also entered the political arena when he appealed to a member of the board of regents. The regent, in turn, vied to influence the process by going to the president's office on the main campus. The president's office illustrated both the bureaucratic and political models; it "won" by exerting its influence in making the decision to award the contract, but its influence stems from its organizational position and prerogatives. The vice president's eager acquiescence to the president's office, even though this was clearly a local medical school project, reaffirms the political dynamics model.

Question Two: How does their presence affect the decision?

The pervasiveness of the decision process dynamics models in this case moved the decision far from economic, financial considerations. Although marginal, financial

considerations nevertheless remained significant. At each major step the decision to outsource the project rather than complete it in-house was reaffirmed by cost-benefit analysis. The one-building test project came close to a solely economic-based, financially-driven decision, confirming that financial considerations are important and play a major role as a base-line as other variables come into play. During the ensuing decision process dynamics, however, the question of financial benefit was not at issue even though at times the viability of the project itself came into question.

Other significant findings:

The case seems to clarify a pattern suggested by the contrast between the printing services case and the motor pool case that may be significant. A major factor in this case's decision process escalation was the project's cost. The test project's cost was \$254,000, and although significant, it appeared to entail minimal risk. It was funded from the utility budget where the savings likewise accrued. At this stage, the decision process was limited to the physical plant staff and the vice president. Cost of the campus-wide project, however, increased by four times to just over \$1 million. At that level, the project's visibility and risk seemed to become more significant. Hence, the chief buyer was uncomfortable with only one bid in response to the RFP even though receiving one response to an RFP is not unusual. When the campus architect was asked why A&E took an interest in the project when it grew to include all campus buildings, even though they had little interest in the test project, he replied that "with over \$1 million at stake in the project, we dare not overlook anything that might potentially increase the risk to the university." In addition, concern over potential risk was

illustrated by questions being raised several times over a methodology to calculate and verify energy savings. “How do we really know, the test project notwithstanding, that we really do have savings?” asked the vice president, by nature reluctant to make decisions. Even though the contract spelled out a calculation methodology all primary participants acknowledged was valid, the potential risk of no savings after such a sizeable investment seemed to sit heavily on the vice president’s mind. It thus appears that the higher the potential cost in an outsource decision, the greater the visibility and the further the decision moves from solely economic and financial considerations, and the greater the number of decision participants. This is a pattern looked for in subsequent cases.

This case also reaffirms a pattern suggested by the first two cases. Restructuring or reengineering an in-house enterprise appears to be a significant consideration in the decisions to outsource. Reengineering in this case refers to the more traditional definition of recalculating technical specifications and, with the project thus being re-defined, to completing it in-house to reduce the project’s cost. In addition, its intent parallels the concept of “process reengineering” illustrated in the first two cases; let’s restructure the organization and its processes to become more efficient and competitive and thereby keep the enterprise in-house. More explicitly, reengineering was addressed in both the test building and the campus-wide project by estimating the costs of completing the projects in-house, to include hiring additional staff if necessary. This study thus appears to reaffirm the efficacy of reengineering as an alternative to outsourcing, even though in the end outsourcing was the more cost-effective approach.

Case Four:
Outsourcing at a Rural University:
Setting the Standard

Case synopsis: With an on-campus student population of about 2500, the university is located in a rural area north of Oklahoma City. For a number of reasons during the mid-1970s, the university underwent severe financial difficulties to the point of technical bankruptcy. In a rural area with limited access to qualified and trained staff, extraordinary measures were required to regain solvency. Among the steps taken, unusual among institutions of higher education in Oklahoma at the time, was a program to outsource three important campus enterprises: food services, the bookstore, and somewhat later, physical plant operations and maintenance in two phases. Food services and the bookstore, both unable to become solvent after efforts to reorganize, were outsourced, respectively first and second, and soon began to show profits. Physical plant operations, with new leadership, were successfully restructured and soon began to provide adequate services. Five years later, it too was outsourced with good results. The three enterprises remain outsourced today, almost 20 years later.

Question One: What non-financial, non-economic considerations play a significant role in outsourcing decisions?

Outsourcing the food services and the bookstore followed closely the economic-based, financial-driven decision model. The extreme financial exigencies required quick and decisive action to bring solvency to these enterprises. Financial and cost-benefit

analysis indicated outsourcing offered a clearly better alternative to continued internal efforts to restructure. Indeed, it may have been the only viable alternative. Beyond the financial model, organizational-bureaucratic considerations played an important role. The ability of the vice president for fiscal affairs to move quickly and decisively to outsource food services and the bookstore operations stems from his role and responsibilities in the organization. The decision to outsource the physical plant, made several years after the successful outsourcing of food services and the bookstore, appears to be management based. The vice president and the president concluded outsourcing would offer economies of scale purchasing, increased productivity, and allow them both to spend less time managing physical plant operations. As the president stated, “by now it was clear that not managing and worrying about how food services and the bookstore were operating left me time to devote to more important matters. The prospect of doing the same with physical plant was persuasive.” The decision process in the physical plant decision also reflects the collegial decision dynamics model as the president deliberately expanded the decision process to include his vice presidents and key staff members.

Question Two: How does their presence affect the decision?

While the economically-based, financially-driven decision model is evident, the vice president’s ability to move quickly and largely unilaterally to outsource both functions, albeit with the president’s approval, stems from his role and responsibilities as the university’s chief financial officer. That is, his actions are more satisfactorily explained when considered in the context of the bureaucratic decision dynamics model. Financial considerations were important, and impelled action, but the response was

largely a result of the vice president's organizational position and prerogatives. Thus the university's first two outsource decisions also are illustrations of the bureaucratic decision process dynamics model.

The decisions to outsource the physical plant, however, went beyond both the economic-based, financially-driven and the bureaucratic process dynamics decision and provide useful contrasts. Financial considerations continued to remain important. More important, however, the vice president was concerned that despite its improvements and satisfactory current operations, the plant needed improvements current capabilities were unlikely to allow, and outsourcing, with its economies of scale, higher productivity, and increased efficiencies, provided a means to achieve them. Concurrently with the vice president's initiative, the president realized that outsourcing provided him relief from managing non-educational activities. Together these two concerns moved the decision into a management model: outsource for greater efficiency; outsource non-core activities to allow greater focus on core activities.

Going beyond outsourcing food services and the bookstore, both decision makers realized that the decision to outsource the plant represented an important evolution in outsourcing's use at the university. Financial imperatives were not as significant, and outsourcing appeared more discretionary. Moreover, the value and magnitude of a contract to operate the physical plant meant that more members of the campus community would be affected, directly and indirectly. In particular, a larger number of more highly-paid, highly-skilled, and likely more vocal employees would be affected in contrast to the employees affected by the food services and the bookstore

contracts. Consequently, the president adopted a collegial approach to decision making by ensuring that representatives from all campus communities were involved in the decision process. Interviews with the vice presidents for fiscal affairs, academic affairs, student affairs, members of the faculty, and managers of the physical plant determined they all believed they had significant input into the decision to outsource the physical plant and agreed with the assessment that the process was collegial.

Although the decisions primarily followed the collegial model, political dynamics played an important, though lesser role. The decision to outsource the plant in two phases based on trade skills was an effort to minimize potential opposition from a likely vocal group while the concept was tried, proven and accepted. So likewise was a decision to include in the contract the requirement to hire in-house plant employees for at least six months at comparable wage and benefit rates. Unusual for the time, these contract provisions successfully limited opposition from the affected employees, satisfied the regents' concerns, and provided satisfactory answers to two state legislators who inquired on behalf of their constituents.

Other significant findings:

The case provides additional insights into outsourcing in higher education. First, the physical plant decision appears to confirm that the higher the value and magnitude of a potential contract, the greater its visibility becomes, and the more significant non-economic and non-financial considerations become. This phenomenon was identified in the two previous cases, and implicit in the first case. Food services and the bookstore

were failing enterprises, but their operating costs were individually about one-third the operating costs of the physical plant. Fewer resources were thus at risk.

Second, restructuring or reengineering, though not a major, continuing effort, nonetheless occurred at some level. The vice president tried restructuring food services and the bookstore before concluding outsourcing in each case offered a better alternative. At about the same time, he reorganized the physical plant and hired a professional director. Significant improvements resulted over several years in physical plant operations and maintenance. The vice president's subsequent conclusions that the university was unlikely to be able to make the improvements he viewed elsewhere, within the plant's current capabilities and resources, was implicit reengineering; he made a judgement that additional restructuring would not bring additional improvements

Finally, the case confirmed many outsourcing benefits often cited in higher education management literature. Outsourcing brings up-front capital funding at no or little cost to the institution. Outsourcing brings increased productivity and lower costs through economies of scale buying and more responsive, quicker purchasing. Outsourcing brings increased productivity by reducing employee absenteeism and providing access to a larger pool of qualified employees on which to draw when non-routine problems arise. Outsourcing can increase revenues from auxiliary enterprises. Outsourcing, through its efficiencies, can reduce the cost of providing services and provide savings that either can be reallocated to other activities, or retained in the outsourced activity to improve services further.

Case Five:

A Small Liberal Arts University:

A Work in Progress

Case synopsis: The university is a small liberal arts state-supported university of about 1700 campus students located southwest of Oklahoma City. It enjoys a strong reputation for academic distinction. Outsourcing is a recent phenomenon at the university, with its first contract awarded in 1994. The president became interested in the concept when he grew weary of working with the bookstore that had long struggled with profitability. Discussions with colleagues who had successfully outsourced one or more enterprises on their campuses convinced him that outsourcing might be of benefit to his bookstore operations. Soon after awarding a contract for its operation, the bookstore began generating surpluses rather than losses. Encouraged by the bookstore's success, he next outsourced food services when its long-term manager retired. Early success was mixed with food services, but he had confidence in the concept. A year later, recognizing that outsourcing might also benefit the physical plant, the president and his staff awarded a contract for physical plant operations and maintenance. The food services and physical plant contracts have not been as successful as hoped for a number of reasons, but with contractors willing to work things out the president and his staff are yet hopeful the contracts will be as successful as the bookstore contract. Nevertheless, returning physical plant operations and maintenance as in-house operations remains an option.

Question One: What non-financial, non-economic considerations play a significant role in outsourcing decisions?

The management model is reflected in all three decisions; outsourcing provided efficiencies and economies unlikely to be achieved in-house. Operation of the decision process dynamics models also was significant and contributes to a more satisfactory explanation of outsourcing at the university.

Question Two: How does their presence affect the decision?

Economic-based, financially-driven considerations were significant only in the decision to outsource the bookstore; the initial concern was to help it become consistently profitable. Financial considerations were of marginal concern in the decisions to outsource food services and physical plant operations. That is, the contracts had to be financially sound, but financial considerations did not drive the decisions. Food services had been a highly successful enterprise, and the decision to outsource was influenced by the bookstore's successful contract. The president's concern that he would be unable to find a qualified manager to replace food services' retiring manager was a management-based issue. He chose instead to rely upon the contractor's access to a broad management pool to provide a qualified manager. The physical plant was operating adequately. The decision to outsource reflected the desire to improve operations and the expectations that outsourcing would offer management-based benefits deriving from economies of scale purchasing and greater productivity not available in-house.

The decision processes dynamics were also important. Participation in the decisions to outsource the bookstore and food services was limited to the president and the vice president for fiscal affairs. It appears that the president's determination to outsource, and both enterprises' limited impact on the campus community, explain the narrow decision processes. The actions and decisions of the president and vice president fall within their organizational and bureaucratic roles and reflect the bureaucratic decision dynamics model.

When the decision was made to proceed with outsourcing the physical plant, the decision processes were expanded to include a broader decision group, reflecting recognition of the wider impact outsourcing physical plant operations would have on the campus community. The greater cost of the physical plant contract and the greater number of higher skilled and higher paid long-term physical plant employees ensured it would be. Consequently, the decision process dynamics expanded to the collegial decision model. Political dynamics did not appear to play a significant role in the decision process but were nonetheless important. Concern for the welfare of physical plant employees and the need for their support led directly to a decision to allow employees to choose to go with the contractor or remain with the University. The consequences of that decision, however, are now causing contract and operating difficulties.

Other significant findings:

The university's experience appears to confirm the pattern identified in the earlier cases: the higher the value and magnitude of a potential outsource contract, the more

significant non-economic and non-financial considerations become. The bookstore's gross sales are now about \$500,000 per year and food services' sales are about \$350,000 per year. The physical plant budget, however, is about \$1.2 million, and represents about 20% of the university's total annual budget. Accordingly, the decision process to outsource physical plant operations and maintenance expanded from the narrow bureaucratic decision process dynamics to broader collegial decision dynamics, with political dynamics an important concern.

In addition, together with the rural university's experience, the university's experience seems to suggest another pattern; on small campuses, bureaucratic and collegial decision models are more likely, and political dynamics are less important than on larger campuses. Finally, although the university is experiencing difficulties with two of its three contracts, it nonetheless reaffirms many benefits associated with outsourcing. In particular, outsourcing can increase revenues and decrease costs. It can bring up-front resources either unavailable to, or difficult to obtain by, in-house operations. Also, it can increase productivity and reduce costs through economies of scale and with access to a larger labor pool.

Somewhat surprising, the university's experience with outsourcing did not appear to include explicit or implicit reengineering efforts. With the bookstore, reengineering did not appear to be considered at all. With food services, the enterprise was already successful and reengineering seemed unnecessary. With the physical plant, reengineering was considered unlikely to result in any improvements given the limited skill pool and long-tenures of in-house employees. Likewise a surprise, management-

based divestiture was little in evidence. The president and vice president for fiscal affairs continue to be actively engaged in managing food services and the physical plant.

Summary of Findings

During the course of the research and analysis, and beyond the research questions themselves, a useful organizing concept emerged from the broad purpose of the study: to determine how and why higher education institutions in Oklahoma outsource. Each of the variables, economic-financial considerations, management based considerations, and decision dynamics-based considerations, fit into either “why” or “how” categories. Economic-financial and management-based considerations explain why institutions outsource. Decision process dynamics explain how. Categorizing the variables in terms of “how” and “why” institutions outsource thus allows the construction of a summary matrix.

The matrix lists the variables across the top: economic-financial (Finance), management-economies and efficiencies (Mgt/E), management-divestiture (Mgt/D), bureaucratic decision dynamics (Bureau), collegial decision dynamics (College), and political decision dynamics (Political). In the “other” category are reengineering or restructuring (Reengin), and revenue or budget expenditures listed in thousands of dollars (add 000 to the listed values). On the left axis are the cases: printing services (Print), the motor pool (Motor), lighting retrofit (Light), rural food services (R/Food), rural bookstore (R/Book), rural physical plant (R/Plant), small university bookstore (S/Book),

small university food services (S/Food), and small university physical plant (S/Plant).

Analysis follows the matrix.

| | (Why) Finance | (Why) Mgt/E | (Why) Mgt/D | (How) Bureau | (How) College | (How) Political | (Other) Reeng | (Other) Size |
|---------|------------------|----------------|----------------|-----------------|------------------|--------------------|------------------|-----------------|
| Print | M | M | P | M | P | S | Yes | 750 |
| Motor | M | M | P | M | M | P | Yes | 1,700 |
| Light | M | M | S | P | P | P | Yes | 1,100 |
| R/Food | P | M | S | P | M | M | Yes | 375 |
| R/Book | P | M | S | P | M | M | Yes | 550 |
| R/Plant | M | P | P | S | P | S | Yes | 1,700 |
| S/Book | S | M | P | P | M | M | No | 500 |
| S/Food | M | S | M | P | M | M | No | 350 |
| S/Plant | M | P | S | M | P | S | Yes | 1,200 |

P: primary importance. *S*: secondary importance. *M*: marginal importance

Matrix analysis. The case studies suggest that economic-based, financial-driven considerations explaining why the institutions outsourced were of marginal importance in six of the nine cases. They were of primary importance only in the rural's food services and bookstore decisions, and secondary in the small's bookstore decision. Likewise, management based economies of scale and productivity efficiencies were of marginal importance in six of the nine cases. They were of primary importance only in the rural's and the small's decisions to outsource their physical plant operations and maintenance, and of secondary importance in the small's food services decision. Management based

divestitures, however, were of either primary or secondary importance in seven of the cases, and in only two, the small's bookstore and food services, they were of marginal importance.

In terms of how the institutions outsourced, bureaucratic decision process dynamics were either of primary or secondary importance in six of the cases, and of marginal importance in only the printing services, the motor pool, and the small's physical plant decisions. The collegial decision dynamics were of marginal importance in five of the cases, but in the other four, they were of primary importance. Political decision dynamics were of primary or secondary importance in five of the cases, but of marginal importance in the other four. Finally, reengineering or restructuring was significant in seven of the nine cases, with only the small's bookstore and food services indicating marginal importance.

It appears a relationship between the size of the outsource contract and its relation to non-financial considerations may be significant. Initial indications suggested that the higher the value of the contract, the more visible the process and the more likely the decision would move from economic-financial concerns. In three out of the four lowest-value contracts, financial considerations were of primary or secondary importance whereas in the five highest-value contracts, the political process dynamics model was of primary or secondary concern. A relationship may also be implied between the bureaucratic decision dynamics model and the four lowest-value contracts. In all four, bureaucratic process dynamics were of primary concern. Conversely, in the four lowest-value contracts political decision dynamics was uniformly of marginal importance.

CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

The broad purpose of this study was to determine how and why public institutions of higher education in Oklahoma outsource in-house enterprises. Postulating that an economic-based, financially-driven decision model may be an incomplete explanation of outsource decisions, the study was designed to identify non-financial influences and considerations that affect a decision and to propose a more complete decision model. The study examines two major questions: (1) what non-financial, non-economic considerations play a significant role in outsourcing decisions, and (2) how does their presence affect the decision?

Current higher education management practice and related literature stress the financial benefits possible from outsourcing (Morrell, 1994), provide “case studies” suggesting how financial benefits can be realized (The Association, 1994; Green, 1992), and offer analytical matrices to assist decision makers arrive at a financially sound decision (Goldstein, 1993). In addition, several surveys have been published listing the

numbers and types of functions and enterprises higher education institutions outsource and conclude it is a useful mechanism to reduce costs (Abramson, 1993,1994; Wertz, 1996). In sum, outsourcing is advocated and practiced among institutions of higher education with the assumptions that decisions to outsource are and should be economically-based and financially-driven.

Outsourcing as an economic, financial outcome, therefore, appears to provide sound justification for achieving cost savings, increased efficiencies, and increased revenues. Curiously absent in higher education literature, however, is discussion of non-financial considerations and influences that may affect a decision to outsource. More to the point, the presence of non-financial influences and considerations in a decision to outsource may suggest that the economic, financially-based model is an incomplete explanation of outsource decisions, and a broader, more complete explanation is necessary and appropriate.

Although higher education management literature emphasizes the economic-financial benefits, a review of the broader literature related to outsourcing suggests there are two well-established hypotheses or propositions that may be used to explain why decisions are made in public higher education to outsource traditional campus functions. First, decisions to outsource are based on outsourcing's use as an economic, financial mechanism that introduces competition into the public sector and thereby reduces the cost of services or increases its revenues. Employed in public higher education, savings or revenues are thereby generated that can be reallocated to other functions. Second, decisions to outsource are based on its use as a management mechanism to achieve

efficiencies and/or divest an institution of non-core functions. Unburdened by non-educational functions, the institution can thereby concentrate its resources on direct education.

The economic-based, financially-driven decision model and the management-based decision model provide explanations of why higher education institutions outsource, but does the literature also provide explanations of how? A third proposition suggests that decisions are determined by the decision process dynamics typical of public higher education institutions. Analyzing outsourcing in this contexts thus adds to a more complete understanding of how higher education institutions decide to outsource. Together with explanations of why institutions outsource, explanations of how they make the decisions contribute, in turn, to the emerging body of knowledge explaining outsourcing's use in higher education, and to a practical understanding of outsourcing as a decision outcome.

Conclusions

This study was conducted in an effort to provide a more complete and satisfactory explanation of how and why public institutions of higher education in Oklahoma outsource traditional in-house enterprises. It is concluded from the case studies that the institutions outsource (the "why") for two primary reasons: economic-financial benefits and management-related benefits. Economic-financial benefits are realized as an in-house enterprise is exposed to the market's competitive forces and contracts are awarded

that reduce costs and increase revenues. Second, management benefits are realized through a contractor's ability to increase productivity, increase efficiencies, and provide economies of scale, and when a contract allows the institution to divest non-core enterprises to allow more attention to mission-related activities.

The data also leads to the conclusion that the outsource decision process (the "how") follows three decision process dynamics models. First, decisions result from organizational, bureaucratic processes and procedures as officials act in their respective organizational roles. Second, decisions result from a collegial dynamics process in which responsibility is shared by key decision makers as they reach consensus. Third, decisions are a result of the political dynamics process in which individuals and groups bargain, compromise, build coalitions, and seek to influence the decision in their favor.

In each of the outsource decisions examined, elements of all variables were found to be present in varying degrees of importance, suggesting that a more complete explanation of why and how public institutions of higher education in Oklahoma outsource must include consideration of each. The findings suggest an institution may desire both economic-financial benefits and the management benefits associated with outsourcing. They also suggest that on a campus all three decision process dynamics may be at work, sequentially or simultaneously, and that each may have an influence on the decision. A complete outsource decision model thus states that public higher education institutions in Oklahoma outsource for economic-financial and management related benefits as the outsource decision evolves through bureaucratic, collegial and political decision process dynamics.

The findings also suggests that restructuring or reengineering is implicitly and explicitly related to outsource decisions, particularly as institutions seek the economic-financial benefits competition can make possible through outsourcing. In all five cases, and in seven of the nine outsource decisions, reengineering was either an implicit or explicit process. It was implicit as decision makers subjectively judged in-house restructuring would not bring the same benefits as outsourcing, and explicit as decision makers made cost-benefit analyses of the relative benefits of restructuring and outsourcing. Competitive restructuring appears efficacious in higher education.

Although not as immediately apparent as others, an additional conclusion related to reengineering might be drawn. In the motor pool case, the threat of outsourcing motivated a majority of the steering committee members and motor pool employees to undertake reengineering vigorously. The possibility that many jobs might be lost appeared to stimulate employee cooperation in reducing the motor pool's operating costs, and extended to eliminating four employee positions. This experience is in direct contrast to the printing services case; nevertheless, it is also suggested in the lighting retrofit and the initial rural university decisions. It deserves additional study.

Further, the data suggest there may be a relationship between the size or dollar amount of a potential outsource contract and the likelihood that non-financial concerns drive the decision. The decision process dynamics in large dollar-amount contracts will more likely reflect either the collegial or political decision process dynamics. Smaller contract dollar amounts are more likely to follow the routine organizational-bureaucratic decision process dynamics model. This issue has significant practical application.

Finally, the study confirms a number of benefits frequently associated with outsourcing in higher education. Broadly, six of the eight outsource contracts resulted in significant benefits to the respective institutions, with the outcome of the two yet in question. The problems with the two seem to derive from incomplete or inadequate contract provisions not present in the other seven. These problems suggest that a carefully structured contract explicit enough to cover institutional requirements and to include easily measured performance standards can provide significant benefits to the outsourcing institution. More specifically, a number of contractors made significant required capital improvements in equipment and facilities at either no or low cost to the institution. The institutions were thus able to use their capital funds for other purposes. In addition, economies of scale purchasing and personnel resources, reduced operating costs, increased auxiliary enterprise revenues, fewer management diversions from core activities, fewer personnel problems, and increased productivity, were all demonstrated in the contracts studied. The study, in sum, demonstrates that outsourcing is a useful mechanism for public higher education in Oklahoma.

Implications

From a theoretical perspective, the study confirms outsourcing can be understood adequately and explained in terms of existing economic, management, and decision making theory. The cases do not identify any variables that appear to be acting outside these theoretical boundaries. The study does nevertheless contribute to conceptual and theoretical understanding of the phenomenon of outsourcing in public higher education

and adds to its body of knowledge. It also clarifies variables upon which subsequent studies, either quantitatively, survey-oriented or qualitatively, phenomenologically-oriented, can be based. Perhaps more important to higher education administration and management, the study has practical significance and implications.

First, reengineering or restructuring is an integral part of the outsource decision process, either implicitly or explicitly. Many of the benefits ascribed to outsourcing can also accrue to the institution through reengineering in-house enterprises. Perhaps more important to the institution, these benefits can accrue without the personnel dislocations, loss of continuity, and reduced morale often associated with outsourcing. If outsourcing is the better alternative, then better contracts and greater contract benefits are more likely if a reengineering analysis is included as an explicit part of the decision process.

Second, the study demonstrates that outsourcing can be a complex, difficult, and time-consuming process requiring a significant commitment of resources. Better understanding the process can reduce the time and resources necessary to arrive at a decision beneficial to the institution. For example, if a large contract with a high dollar amount is under consideration, as in the lighting retrofit case, anticipating the decision process dynamics might simplify and shorten the process. Conversely, smaller outsource contracts are more likely to be approved and awarded more quickly.

Recommendations

As a qualitative, phenomenological study of nine outsource decisions at four public institutions of higher education in Oklahoma, generalizing the study's results to a

larger population must be done cautiously. The study has identified a number of variables affecting outsourcing at four institutions, and a follow-on survey-based quantitative study may be useful to understanding outsourcing in general higher education. Survey questions addressing the relative importance of economic-financial considerations, management-related considerations of economies and divestiture, and decision process dynamics, would elicit data that could be analyzed using statistical processes. With appropriate sampling, the data would be useful to understanding the process in the broader population.

The study suggests a number of possible correlations and relationships that a quantitative study may clarify. Is there a significant correlation between the size and dollar amount of a potential contract and a decision process dynamics model; between the size of the university and a particular outsource decision process dynamics model; between the size of a university and outsourcing frequency; between the size of a university and the enterprises it outsources? Does the location of a campus, urban, suburban, or rural, correlate to outsourcing frequency? When outsourcing is under consideration, what is the ratio of successful reengineering to successful outsourcing? Is there a relationship between the threat of outsourcing and cooperation in reengineering? Is there a correlation between a type of outsourced enterprise and a level of savings? What percentage of outsourced enterprises have been brought back in-house? While further analysis of this study may elicit additional questions, as will follow-on studies, the limited body of knowledge addressing outsourcing in higher education suggests that further quantitative or qualitative studies will contribute significantly.

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STUDY ONE

THE DECISION TO OUTSOURCE PRINTING SERVICES AT A MAJOR UNIVERSITY HEALTH SCIENCES CENTER

THE CASE

With publishing being a natural outcome of higher education's mission, university presses and printing services have long been an integral part of any campus. While some have grown to rival the major publishing houses, most provide convenient, quick, and low-cost services to assist the faculty, research staff, and students. In the case of the health sciences center, printing services included the additional, unique capability to create medical illustrations, indispensable to its teaching and publishing. Before inexpensive office copiers and desk-top publishing systems became common, and before

high-speed copiers allowed the development of low-cost off-campus copying enterprises, the center's faculty and staff had few options other than printing services.

For over 20 years, operating as the department of graphics and media, the shop was a \$1 million per year enterprise supporting the center's needs using offset presses and, when it became technically and financially feasible, a high-speed copier. It established a walk-in, over-the-counter quick-copy service, and offered pick-up and delivery of larger jobs for which offset presses were more appropriate and less expensive. Employee turn-over was low; advances in printing technology had reduced the demand for experienced, skilled printers, and the university provided a wage scale and benefit package that surpassed those prevailing in the community. Though office copiers and off-campus copying services began to cut into printing services business, the shop nonetheless sustained a large, loyal clientele built over many years. In addition, it continued to offer hand-drawn medical illustrations not readily found elsewhere.

By 1990, increased competition from off-campus quick-copy services and office copiers began to have a significant impact. Gross revenues fell to the \$750,000 per year range. The shop's ability to cut costs was limited by fixed overhead operating costs tied to the university's rigid personnel and service unit accounting policies and procedures, and was thus unable to reduce overhead. In an effort to shed some of its personnel costs, the shop in 1990 was restructured and assigned to the office of public affairs, under the provost, responsible for the center's publications. Medical illustrations, typesetting, and reception were separated and relocated from printing services to the public affairs office,

together with their overhead costs. Two print shop employees were laid off with the hope that combining administrative support of two offices would result in economies.

Though well intentioned, the move appeared not to have been well thought out. Expected administrative economies did not materialize. Separating typesetting, illustrations, and reception from production slowed down the printing process. Printing priorities, now established by public affairs, tended to favor the slower, less profitable publishing projects like books rather than quicker and more profitable printing and copying jobs. Slower and less responsive service eroded the shop's clientele even further. Moreover, print shop employee morale, seldom a problem when the shop operated as an independent enterprise, plummeted under public affairs. Animosity grew between print shop and public affairs employees. Indeed, print shop employees viewed the downsizing and subordination to public affairs as management retaliation for going public with a long dispute over environmental working conditions in the print shop. Tardiness and absenteeism became problems. Losses, heretofore only occasional, began to be chronic, ranging as high as \$200,000 per year.

The administration, in an effort to untie what had become a Gordian knot, commissioned the first of three print shop studies by outside consultants. The study identified four practical options: close the print shop and allow the center's users to go directly to any off-campus source for printing; contract with an off-campus printing firm as the exclusive center printing source; contract with an outside firm to establish an on-campus operation; reorganize, re-equip and restaff printing services to provide quick, low-cost and convenient printing services. It recommended the fourth option:

reorganizing, re-equipping and restaffing. Acknowledging a large on-campus clientele, the study suggested modernizing printing equipment, cross-training personnel to reduce personnel needs, reducing the number of supervisory and management personnel (out of 12 employees, four were supervisors who no longer contributed to production), and computerizing and streamlining the work flow.

Before deciding which option to pursue, however, administration attempted to overcome the open hostility between printing services and the office of public affairs that brought printing practically to a standstill. In 1991, it moved printing services from public affairs to the director of operations and consolidated once again its former functions. Operations is responsible for several other campus-wide support functions, including central mail, records management, physical plant, motor pool, and public safety. More importantly, the director of operations reports to the vice president of administrative affairs, the administrative unit under which the print shop had previously been assigned. Although the move somewhat improved morale and productivity, the director of printing services retired out of exasperation and frustration. Despite the change, for which he argued forcefully, he believed too many uncertainties remained about printing services' future.

The director's resignation further complicated the issue and stimulated the second study: Should administration hire another director/manager? Are the first study's recommendations valid? If so, which option should be pursued? This time, the administration turned to the main campus and commissioned the director of student publications to conduct a study. He confirmed the first study's conclusion: strong

demand for on-campus printing services remained, and printing services should be reorganized, re-equipped and restaffed. In particular, he concluded hiring a new manager from outside the center, and investing in new equipment, would significantly improve printing operations. It could once again become a profitable enterprise.

The director of operations, however, did not implement the recommendations. Despite two studies' findings that the equipment needed to be modernized, he elected not to invest in new equipment. Though he admitted knowing nothing about printing, he nonetheless believed better management and reorganization would do the trick. But then he, too, retired. This left the print shop without management or administrative oversight, with marginally adequate presses, obsolete typesetting equipment, and antiquated collating and binding machinery. Not surprisingly, the print shop drifted. Project backlog increased, employees showed little interest in improvement, tardiness and absenteeism increased even more, and most of the shop's clients went elsewhere. Clearly, something had to be done with printing services.

The vice president of administrative affairs, growing weary of what appeared to be an intractable problem, asked his directors staff to come up with a plan. Should the shop be salvaged, or should it be outsourced? After extended deliberation, the staff formulated a plan it seemed only a committee could have come up with. A request for proposals was prepared soliciting proposals for a 90-day management contract to improve printing operations, with an option for the bidder to purchase the entire operation if administration concluded it was in center's best interest. The idea was to hire an expert management consultant to try to turn the print shop around by making improvements and, if

successful, hire a permanent manager to continue printing services as a center enterprise. Alternatively, if shop operations could not be made profitable once more, then the manager-consultant would be offered the print shop to purchase and provide the center's printing needs. To keep the contractor "honest," that is, to dissuade him/her from trying to convince the administration to sell the shop by showing only marginal improvement, the administration would assign its own interim business manager to the shop as an assistant to keep an eye on things. Four management-purchase offers were received, with the lowest management fee/highest purchase price offer being accepted. The 90-day trial period began July 1, 1992.

Coincidental with the end of the 90-day period, and after a seven month delay, administration hired a new director of operations. His first assignment was to evaluate the print shop test and recommend a course of action. Should the shop be continued as a center enterprise, or should it be contracted out? He called for reports by the consultant-contractor, as stipulated by the contract, and by the administration's interim manager.

Both reported significant improvement. Employee absenteeism and tardiness were well down. Work flow improved with a new tracking system, and a new, lower, competitive price list was established. Turn-around times were shortened. The billing system was computerized and collections were up. Gross revenues increased to an annual rate of \$800,000. Most importantly, the shop began to show revenue surpluses consistently, although small. Old equipment still remained a problem, however, and needed to be replaced. In addition, overhead costs remained high; the university's wage and benefit structure and the print shop staff seniority allowed little room to cut.

Moreover, employee attitudes, while improved, were still defensive. Customers continued to sense the attitude "you need us" rather than "we need you." Nonetheless, administration's interim business manager identified the trial a success; good management had made a difference, and transformation was underway.

It was time for a decision. Which option should the director recommend? From the reports and financial statements he concluded printing services could be profitable, and given an experienced manager, time, and investment in new equipment, could recapture its clientele. Ultimately, the print shop could provide quality, low cost printing for the center, and, without the need for a profit margin, perhaps even at lower prices than off-campus competitors. Equally important, keeping the operation in-house would ensure its availability and flexibility; administration would maintain control.

There remained, however, substantive problems with keeping the print shop in-house. Could the shop decrease its operating costs enough to become truly competitive? Since high wages and benefits limited the ability to cut overhead costs, reducing operating costs would rest on greatly-increased productivity that would, in turn, require new equipment and highly motivated employees. Estimates for new equipment approached \$410,000, a cost that would require more than five years to recapture; enthusiastic, motivated employees seemed unlikely given the events of the past several years. Selling the print plant to a contractor, on the other hand, would avoid capital costs, difficult personnel issues, and, with the terms and conditions offered by the consultant, provide responsive, reasonably-priced, on-campus printing for center users. In summary, there was no clear-cut indication that one alternative was better than the

other. Indeed, the director concluded, either alternative could provide campus users with convenient printing services. He leaned toward recommending it stay in-house.

Armed with his analysis and conclusions, the director consulted with the other committee members to formulate a recommendation. He was surprised, however, by their cool responses; they seemed to have little interest in continuing to operate the shop as a center enterprise. The problems of the past two years had taken their toll. The staff had little confidence that employee attitudes would improve, were weary with dealing with the issue, and intuitively believed that contracting out the print shop made more sense. In addition, the vice president observed that the university's board of regents were very interested in outsourcing as a means to reduce costs and were actively encouraging its use. Both campuses were under pressure to demonstrate they supported the idea. A recommendation to continue operating the print shop thus would have likely been received with little enthusiasm.

Upon further reflection, the director recommend printing services be sold to the manager-consultant. The existing space would be leased to him for continued on-campus operations, his offer to buy the equipment would be accepted, he would be allowed to use campus mail to receive orders and return completed jobs, and he would offer continued employment to all print shop employees for at least 90 days. Arguing that since administration's objective was to provide quality, timely, low-cost printing services to campus users, the director suggested outsourcing the print plant would achieve that end and avoid the time and resource-consuming process required to re-establish a quality in-house operation. The staff and vice president concurred. The director prepared a

reduction in force plan and the decision was enthusiastically approved by the board of regents. The manager-consultant took over operations in February 1993.

Printing services' first year's operations suggested the decision to outsource was sound. The vendor was providing responsive service, although he had not regained the customer base enjoyed by printing services in previous years. Important to the directors staff, complaints from campus users about printing services had stopped. The center recovered \$57,500 in the sale of the printing equipment to the vendor and in reallocating printing services cash and reserves to other projects, and avoided the \$400,000 cost required for new equipment. The center also began receiving about \$30,000 per year in lease revenues from the vendor. Perhaps most important, it appears the center's costs for printing had been reduced by about \$225,000 per year based upon the vendor's new pricing schedule. Although outsourcing did not settle the question of whether it was a better option than restructuring, re-equipping, and continuing to operate printing services in-house, it was nonetheless considered successful.

ANALYSIS AND CONCLUSIONS

This study postulates that an economically-based, financially-driven decision model, when used to outsource higher education in-house functions, may an incomplete explanation of the process. Focusing on how and why higher education institutions outsource, it seeks a more complete decision model by asking two questions: (1) what non-financial, non-economic considerations play a significant role in outsourcing decisions, and (2) how does their presence affect the decision? Two corollary questions

are implied: (a) are costs the major criterion upon which the decision to outsource was made; if not, then (b) what decision model is more appropriate or complete? A review of the literature suggests three hypotheses and associated models. First, outsource decisions are economic-based and financially-driven. Second, outsource decisions are management-based, and driven by possible efficiencies and the benefits of divestiture. Third, outsource decisions are driven by the decision process dynamics inherent in higher education: bureaucratic decision processes, collegial decision processes, or political dynamics decision processes.

This first case study is an effort to begin answering the questions by determining if economically-based, financial considerations were the major criterion in the decision to outsource the center's printing services and, from an exploratory perspective, to identify other criteria considered important in the decision. It appears cost and service, financial considerations, were not the primary criteria in the decision to outsource printing services at the center. The new director of operations clearly believed a restructured and re-equipped print plant could provide quality printing at a reasonable, competitive price to campus users, a conclusion confirmed by three separate studies. He likewise concluded outsourcing the operation by selling it to the manager-consultant would provide competitively priced, quality printing if the contract were structured as required by the request for proposals. While financial considerations, cost and service, thus provided a baseline against which to measure alternatives, a wish to get rid of what had become a difficult personnel and management problem seems to have been the driving motivation, reinforced by the regents' advocacy of the practice.

Cost and service were important, however. If either alternative offered significant savings over the other, then it would have been difficult to justify not pursuing the clearly lower cost option. As it was, restructuring the print shop offered an option that also satisfied the cost and service criteria. Perhaps of greater significance to the study is that in-house restructuring may have proven as efficacious as outsourcing to reduce costs and increase quality, an alternative higher education literature says little about. A question deserving additional research, then, is whether an existing campus enterprise can be restructured, or reengineered, to provide a product or service at the same or better levels than available by contract from private vendors on- or off-campus.

The predominance of non-financial considerations suggests the inadequacy of the economic-based, financially-driven model in the outsource decision. In this case, the decision was made by a group of seven directors working for the vice president for administrative affairs: the directors of financial affairs, budgeting and purchasing, educational services, grants and contracts, computing services, and operations. The group exhibited many characteristics of the collegial model: shared influence, decisions by consensus, common values and commitments, collective responsibility, mutual trust and respect, frequent face-to-face interaction, and mutual congeniality. All but one had worked together successfully for several years, and the new director of operations appeared to fit in well. Together they shared the dismay over printing services' problems, having struggled together for several years for an acceptable solution. The staffs of each director used printing services, with its products being crucial to their respective operations, and they reflected the broader campus community's deep

dissatisfaction with printing services status. Financial considerations appeared important only to the director of financial affairs; the others wanted an end to the problem by whatever means, suggesting a desire to divest the operation, a management consideration. All, however, shared the perception that the problem lay with the recalcitrant employees of printing services. The collegial model of decision making thus appears to be an appropriate explanation of how the decision was made to outsource printing services. Few elements of the bureaucratic or the political models appeared to be significant, although the regents' emphasis on outsourcing, a political element, did have an influence.

The decision makers use of contracting-out to rid themselves of what had become a difficult personnel and management problem suggests the presence also of the management model, and helps answer why the outsource decision was made. What to do with recalcitrant public service employees has long been the bane of public management, protected as they are by procedural hurdles designed to minimize arbitrary management personnel decisions. In this case, the attitudes and morale of print shop employees were crucial. Whereas private enterprise can lay off personnel or reduce their wages to reduce overhead costs, neither option is available in a public enterprise like the center without protracted, cumbersome procedures. The only other practical option to reduce high overhead personnel costs was to increase individual employee productivity by their working harder and more efficiently. Employees seemed unwilling to cooperate, even when it became clear their jobs may be in jeopardy. The decision to outsource the printing operation thus suggests a divestiture that freed management from dealing with

the difficult problem. Are there other cases in which outsourcing has been used to rid a campus enterprise of an intractable personnel or other management problem? Additional research may help clarify the issue and its role in outsourcing decisions.

The role of the regents provided an unexpected and interesting perspective. Like contracting-out to solve a personnel problem, outsourcing because of emphasis by the regents further moved the decision away from financial considerations. In this case, the regents' role was influential, but not decisive. Their interest in the process reflects the prevailing perception that outsourcing avoids costs and saves resources that can be reallocated. If the financial analysis had tilted toward keeping the printing services in-house, however, would the regents' emphasis have influenced administration's decision to outsource anyway? If so, then an external political consideration would likely have become important in the decision. This suggests an additional line of research into decisions to outsource: do political considerations play a role?

In summary, this study clarifies why and how a higher education institution outsources and suggests patterns to look for in follow-on studies. First, economic and financial considerations were not the decisive criteria. While important, financial concerns provided a baseline against which other criteria were considered. The most important of these was, second, the desire to divest a difficult personnel problem, a management issue. Third, a decision making model, in this case the collegial model, provides an explanation of how the decision was made. Less important, but still

significant, the Board of Regents' pressure to step up the use of outsourcing influenced the decision, suggesting the presence of political influence. Finally, the option to restructure in-house printing as an alternative to outsourcing suggests further studies might examine if restructuring, or reengineering, may be as useful financially as outsourcing.

STUDY TWO

A MAJOR UNIVERSITY'S MOTOR POOL: TO OUTSOURCE OR REENGINEER?

THE CASE

The university's board of regents establishes the policies and procedures governing university administration and management. Resource management is of particular concern to the board; they must approve any university expenditure exceeding \$75,000. This requirement brings the regents well down into the university's day-to-day operations. Although individual members come from a variety of backgrounds, most are successful business-persons and are perceived to reflect a "corporate" perspective. Not surprising, then, when the university began to experience declining resources and increasing costs in the late 1980s and early 1990s, they approached the problems much as corporate america has during the recession: focus on the core mission, downsize or eliminate unprofitable enterprises, reduce overhead costs, and increase productivity and

system efficiencies. For the university, they directed, focus on the university's three-fold mission of education, research, and public service and make efforts to get out of the business of "business." Since the university is a public institution, they argued, it is unlikely able to provide services as efficiently or at as low a cost as private enterprise. Translated, that meant to outsource or contract-out in-house services private vendors might be able to provide, leaving the university free to concentrate on its core missions. The chairman was particularly adamant about outsourcing. And, a number of university services and enterprises were successfully outsourced: the bookstore, vending machine services, laundry services, an airport control tower, and on one of its other campuses, printing services and office copiers. The motor pool, a \$1.7 million, highly visible operation with many university-marked vehicles on and off campus, fell within the regent's interest as an outsourcing candidate. Through the president, the regents instructed that it be considered.

Two years earlier, the regents appointed a new vice president for administrative affairs with strong administrative and management experience. With a Ph.D. in higher education administration, he was well familiar with prevailing management theories and practices promising to reduce operating costs and increase efficiencies, like Total Quality Management and Business Process Reengineering. Although experienced in outsourcing and recognizing its utility, he shares with many administrators the concern that perhaps outsourcing is being used indiscriminately in higher education as a "panacea" for management problems that might more appropriately be addressed by other means. With outsourcing's potential to disrupt careers, adversely affect employee morale, limit

management flexibility in using resources heretofore available, and the difficulty inherent in capturing all tasks to be outsourced, he believes an in-house enterprise ought to have the opportunity to restructure its own operations and processes to become more efficient and reduce costs before becoming a candidate for outsourcing. He concluded reengineering promised to provide the mechanism to reassess, redesign, and restructure the motor pool.

Although the regents had clearly articulated their desire to outsource the motor pool, he hoped to convince them a reengineered motor pool, with reduced operating costs and improved services, was a valid alternative. Moreover, he concluded, reengineering the motor pool would accomplish two additional objectives. First, it would provide benchmarks against which motor pool performance could be measured. Then, if the motor pool was subsequently unable to achieve reduced costs and improved services, the benchmarks would be used to write performance specifications in a request for proposals to outsource. Second, it would establish a process that could be used to reassess and restructure other university enterprises.

To guide the reengineering process, the vice president constituted a steering committee of representatives from his staff of directors, employee groups, and the faculty. To assist the committee, he employed a consulting firm to provide assistance with developing analytical data, developing performance standards, identifying the processes to be examined and reengineered, and with the examination itself. Over a period of six months, the steering committee and smaller working groups, including motor pool employees, examined motor pool operations and processes. As the processes

were examined and a need for improvement was identified, the motor pool incorporated the changes in its operations.

As the working group compared motor pool maintenance with off-campus garages, it became clear the motor pool rates were higher by about \$50,000 per year. Analysis indicated the higher rates were direct results of lower mechanic productivity and higher administrative overhead costs. Typical of many in-house public university functions, the motor pool workloads had changed over the years, in some cases decreasing with consolidations and technology improvements, without corresponding decreases in personnel. Review of actual of workload requirements indicated two mechanic positions and two administrative overhead positions could be eliminated without adversely affecting service response times. The positions were eliminated, reducing costs by about \$80,000 per year and greatly increasing the productivity of the remaining employees. In addition, the working group recommended adopting a computerized management and accounting information system to streamline and eliminate several clerical functions that would, in turn, allow reducing by one more the number of administrative positions. These changes resulted in reduced costs that showed motor pool maintenance a lower-cost alternative to outsourced maintenance by \$30,000 to \$50,000 per year.

Additional university-wide savings were generated by a policy change that reduced by 17% the rates charged to university departments for vehicle leases. Up to this point, vehicles were depreciated and replacement costs assessed over a life of 75,000 miles, and then the vehicle was retired. This figure was based on the generally accepted

industry-wide assumption that beyond 75,000 miles maintenance costs began to exceed economic levels. Analysis of actual maintenance, however, indicated 90,000 miles was a more practical, realistic level. Adopting the higher mileage level, vehicle lease rates were lowered to match the longer depreciation and replacement cost rates. This step saves university departments about \$28,000 per year. Moreover, the motor pool now purchases one vehicle fewer out of five formerly required, thus reducing capital tied up in vehicles and allowing it to be put to other uses.

The committee, the consultants, the vice president, and even the university president, considered the reengineering effort a success. All but the regents. They still seemed convinced that because the university and its motor pool were "public" enterprises, un-driven by competition and bottom-line profit, they would not provide services as efficiently or at as low a cost as a private vendor. The motor pool reengineering effort was commendable, they concluded, but it was faulty because it never grappled with the essential element of free enterprise, competition. Would a private vendor, given the opportunity to bid, offer a motor pool at a lower cost than even a reengineered university motor pool? The only way to determine the answer, the regents argued, was to prepare and release a request for proposals to provide a motor pool operation. Only then, with vendors required to put their money on the line, could it be determined which alternative was better. Their instructions: prepare and release an RFP for motor pool operation. The RFP was prepared in mid-spring and awaited release.

In late spring, and over the next six months, several events occurred that, although not directly related to the study and resulting RFP, nevertheless had great

significance. First, the president announced his retirement to return to the faculty in the summer. Although he had acknowledged the efficacy of the motor pool reengineering, he nonetheless supported the regents in their emphasis on outsourcing. Second, the interim president, designated to serve for about six months, deferred as many policy-related decisions as possible to the incoming president, including the decision to release the motor pool RFP. Third, the new president's much heralded arrival in November further delayed the release decision and resulted in a number of policy shifts that would affect a final decision. Most important, he vowed to re-establish the familial campus atmosphere of his own undergraduate days, and, to win support of the faculty, he declared he would reduce administrative staff levels and reallocate savings to faculty pay raises. Finally, the chairman of the board of regents, the member most adamant about outsourcing, announced he would be stepping down the following spring.

The cumulative effect of all these events and changes was, finally, a decision not to release the RFP to outsource the motor pool, but to let the reengineering stand. Absent board pressure to outsource, and after declaring a desire to reunify the campus "family," yet struggling with a disaffected administrative staff suffering low morale, the new president did not want to cause additional alienation and divisions by "laying off" motor pool employees. Reengineering thus carried the day.

In contrast to the committee's conclusions, which appear to be economically-based and financially-driven, cost and service were not the regents' primary criteria in deciding that outsourcing was more appropriate. The reengineered motor pool clearly

achieved lower costs and improved service. Indeed, the motor pool was a profitable enterprise before reengineering; increased efficiencies and lower operating costs made it more so. Cost and service, financial considerations, were important, if only implicitly. If the motor pool had not been profitable, and lower costs and improved services had not been achieved through reengineering, then outsourcing would have been the clear alternative.

More important to the process seemed the regents' and the steering committee's differing perceptions of outsourcing and reengineering. The regents reflected the perception that the business of a university is not "business," and that outsourcing is less costly and more efficient by its nature. These perceptions thus appeared to override the reengineered motor pool's demonstrated financial savings. In addition, the regents seemed to have little concern for the mechanics and difficulties of preparing an RFP to outsource so complex an operation as the motor pool. Nor did they share the staff's concern that few private vendors were likely to have the ability or experience to provide a comprehensive motor pool operation like the university's. Another university in the same state had attempted to outsource its motor pool several year earlier without success; it could not find a qualified bidder.

From the steering committee's perspective, six of nine members interviewed were aware the regents wanted to outsource the motor pool. Significantly, all believed the final decision would turn on issues beyond the financial considerations alone. Perhaps more important, all believed in-house operations were preferable to outsourcing unless there was convincing evidence outsourcing would reduce costs, increase service

efficiency and quality, and would produce savings or additional revenues. None, however, considered the motor pool a good outsourcing candidate. Based on informal criteria developed and used by the university's director of purchasing, a member of the committee, they judged the motor pool a profitable, customer oriented enterprise with stable, efficient management, high employee loyalty and performance, and not requiring any large capital expenditures. Most of these criteria would have had to be absent before any of the members would consider the motor pool an appropriate candidate to outsource.

On the other hand, all committee members interviewed were eager to try reengineering the motor pool. Interesting, only three thought the regents might accept a reengineered motor pool operation. The others believed issuing an RFP to outsource would be the final outcome. Perhaps more interesting, only two considered reengineering a legitimate alternative to outsourcing. Two others viewed it as a useful step to determine if outsourcing was appropriate. The remaining two considered reengineering a necessary step before outsourcing, but from a unique perspective; it would assist the motor pool become more competitive, thereby enabling it to respond itself as a bidder against off-campus vendors.

During committee deliberations, some discussion focused on whether the reengineering process ought to include "test" RFPs to help determine if performance benchmarks were adequate, and if prevailing wage data used in the analysis were accurate. That is, limited-scope RFPs could be prepared and released, and the responses analyzed to determine adequacy and accuracy of analytical data. Several members

reflected that if the committee had done so, and if the results confirmed the committee's own analytical data, then perhaps the regents would have been more willing to accept reengineering. For practical and ethical reasons, however, none of the committee supported test RFPs. They believed soliciting bids intending not to award a contract reduces the integrity and credibility of the bid process. Moreover, they were concerned the process would unnecessarily lower the morale of employees likely to be affected by outsourcing. Additionally, preparing a bid in response to an RFP requires considerable time and cost; none thought it fair to require this of vendors deliberately with no prospect of awarding a contract.

ANALYSIS AND CONCLUSIONS

This study postulates that an economically-based, financially-driven decision model, when used to outsource higher education in-house functions, may be an incomplete explanation of the process. Focusing on how and why higher education institutions outsource, it seeks a more complete decision model by asking two questions: (1) what non-financial, non-economic considerations play a significant role in outsourcing decisions, and (2) how does their presence affect the decision? Two corollary questions are implied: (a) are costs the major criterion upon which the decision to outsource was made; if not, then (b) what decision model is more appropriate or complete? A review of the literature suggests three hypotheses and associated models. First, outsource decisions are economic-based and financially-driven. Second, outsource decisions are management-based, and driven by possible efficiencies and the benefits of

divestiture. Third, outsource decisions are driven by the decision process dynamics inherent in higher education: bureaucratic decision processes, collegial decision processes, or political dynamics decision processes.

The case study clarifies several issues associated with how and why higher education institutions outsource. First, financial considerations did not appear to be the decisive criteria, and thus the economic-financial decision model provides an incomplete explanation of the decision. While financial considerations did appear to drive the steering committee's evaluation and decision to reengineer rather than outsource, in the end they provided only the baseline around which other dynamics swirled. Other events and perceptions played more important roles. Second, an important additional perception was the regents' view of outsourcing that follows a fundamental management theory tenet: divest non-core enterprises to allow management to focus on the organization's core activities. An articulated regents' policy, it reflects many of members' perceptions of management, particularly those, including the chairman, who are successful business persons. The study thus confirms the efficacy of the management model and provides additional explanation of why outsourcing was emphasized in this case.

Third, the political dynamics decision model provides the most decisive explanation of how the decision was made. The regents believed that outsourcing by its nature was preferable to in-house operations in non-education support functions. That several university operations were successfully outsourced no doubt reinforced their perceptions. In contrast, the steering committee members believed that in-house operations are preferable to outsourced if the in-house enterprise can be restructured or

reengineered to make it less costly, more efficient, and more responsive to customers. This did not appear to mean they believed outsourcing is not useful to reduce costs and improve service; all interviewed members acknowledged outsourcing is valid and appropriate under the right circumstances. Nevertheless, their belief that the motor pool was not an appropriate candidate to outsource, while probably right, led directly to the committee's decision the regents found unacceptable. Two decision-making groups, each with a different perception of a problem and its solution, and both believing their solution provided the best outcome, were in conflict. Which would succeed in exerting power and influence?

If the outcome were dependent only upon which of the two groups had greater authority, a bureaucratic model criterion, then the motor pool would likely have been outsourced. The regents have more authority than the steering committee. Despite the regents' greater authority, however, the motor pool was not outsourced. With the retirement of the president and the appointment of an acting president, the vice president and the committee never submitted the question formally to the regents for a decision, a highly effective political tactic; if you can't win, wait until another day when circumstances are more favorable. With the announced retirement of the regents' chairman, other matters no doubt became more pressing to the regents; they became indifferent to the motor pool. Indifference is a clear characteristic of the political model. Finally, with the arrival of the new president and his approach to cutting administrative costs, his interest in minimizing further disaffection among the administrative staff illustrates a political tactic designed to win support and enhance influence.

This case provided additional information that may prove useful to the study. An unexpected insight is use of five informal criteria the director of purchasing had developed over a number of years to determine if an enterprise should be considered for outsourcing. Is the enterprise profitable? Are customers satisfied? Is the current management effective in accomplishing the enterprise's mission? Are employees loyal, motivated, and productive? Are capital resources adequate, or does the enterprise require significant equipment renewal or replacement? In the director's view, outsourcing would be an appropriate alternative if one or more of the questions could not be answered affirmatively.

While outsourcing is increasingly advocated as a means to reduce operating costs and reallocate savings to more direct educational functions, the use of business process reengineering as an alternative to outsourcing does not appear to be as widely used. Is it a useful and valid method to achieve the same end? Little in higher education administrative literature suggests an answer. This case provides interesting and perhaps useful insights into the possible relationships between outsourcing and reengineering, and further clarifies the phenomenon as identified in the first case. It appears to confirm that reengineering can be an effective alternative to outsourcing. Reengineering worked. The motor pool reduced its costs and increased its productivity, and avoided potential disruptions and turmoil inherent in the outsource process. In addition, the case highlighted additional reengineering considerations. The process can be used to "benchmark" cost and productivity measures that would prove useful to evaluate responses if the function were outsourced. Or, reengineering might enable an in-house

enterprise to become more competitive itself, allowing it to respond as a bidder if the decision was made to outsource. Reengineering's presence as a major criteria in two cases suggests an emerging pattern to look for in following studies.

In summary, the motor pool case confirms the inadequacy of the economic-based financially-driven explanation of the decision. Financial considerations were nonetheless important as they provided the baseline from which other dynamics operated, and were important to both the outsource and reengineering processes. The management-based model, in particular the divestiture consideration, also played a significant role as it appeared to be the basis for the regents' articulation of and their emphasis on outsourcing. The two models thus provide an explanation of why outsourcing was considered. More important than why outsourcing was at issue is how the decision was made. The decision processes clearly illustrate the political dynamics decision model, and in this case explains both how and why the outcome occurred. Finally, the case confirmed that there may be a relationship between outsourcing and reengineering, a consideration identified in the first study.

STUDY THREE

LIGHTING RETROFIT AT A MAJOR UNIVERSITY

HEALTH SCIENCES CENTER

THE CASE

The health sciences center is an 82-acre urban campus of 15 buildings, part of a 200-acre complex that comprises the city's health center near downtown. The center consists of seven medically-related colleges with a faculty and staff of about 2,500, and an annual enrollment of around 3000 students. Its annual expenditures total just over \$200 million. Its 15-building physical plant equates to about 1.5 million gross square feet, with about \$4.5 million going to annual maintenance and construction costs. Utility costs, for heating, cooling, and lighting, equate to around \$3.5 million per year. Of this, approximately \$1.3 million go to building lighting.

The campus' buildings, typical of many college campuses, were constructed over a period of 70 years. Two buildings are 72 and 67 years old respectively, one is about 40

years old, seven are around 20 years old, two were built within the last 12 years, and three were completed within the last two years. Maintenance and utility costs in general are, not surprisingly, higher for the older buildings than the newer. Somewhat surprisingly, however, electrical costs alone are highest in the buildings constructed in the early 1970s. This is attributable to several factors: construction occurred just before energy costs began to come under scrutiny; the buildings contain electrical-intense laboratories and clinics; and somewhat paradoxically, the oldest buildings by their nature required system updates over the years to remain usable and, as a result, contain reasonably-modern utility systems. Thus, the average electrical cost-per-square-foot for the 12 buildings 10 years of age or more was \$1.09 per gross-square-foot, whereas for five of the seven buildings about 25 years old the average was \$1.33.

The physical plant staff consists of many long-tenured employees who are, consequently, intimately familiar with each building and its systems characteristics. In addition, the staff included two certified professional engineers: one a civil engineer, and the other a utility systems engineer. The combination of longevity and high professional staff qualifications resulted in high institutional loyalty and professional concern for the physical plant's well-being and efficiency. As a result, the staff has consistently looked for opportunities over the years to reduce operating costs by seeking more energy-efficient utility system upgrades and reducing the price it pays for its energy. For example, in the late 1980s, the staff contracted for and installed a computer-controlled thermostat system in most buildings that automatically adjusts heating and cooling to their optimum comfort and efficiency levels. In addition, the staff retro-fitted variable-

speed heating and air conditioning fan motors to reduce the system operating costs when heating and cooling demands were lowest. These two installations resulted in an estimated annual energy cost avoidance of \$138,000.

To reduce the price it pays for energy, the staff annually negotiates with utility companies for energy and emergency generator curtailment rebates, and, together with the main campus, negotiates bi-annual natural gas purchases on the spot-market. As a result, the center avoids an additional \$124,000 in estimated annual utility costs. Cost avoidance estimates are based on multi-year average energy and utility costs before the changes, compared to subsequent years' costs.

The staff's continuing interest in reducing energy costs led it to seek additional cost-avoidance mechanisms. Aware of advances in high efficiency building lighting technology over the past decade, the staff routinely invited proposals and demonstrations from lighting-fixture manufacturers and vendors. With a total of almost 19,000 light fixtures in the 12 buildings, even a small savings from more energy-efficient florescent bulbs and ballasts in each fixture would equate to a significant total. Vendors, however, were selling improved reflectors or fixture lenses they claimed would reflect or diffuse more light into the room from existing bulbs, but test rooms set up in campus buildings using improved reflectors and lenses showed that savings possible from existing light bulbs and ballasts were marginal at best. The cost of replacing 19,000 reflectors and lenses would never be recovered from the small savings.

On October 1, 1992, President Bush signed a broad national energy bill that required manufacturers to stop making some very popular, low-cost, but notoriously inefficient types of bulbs by 1995. Within seven years, or by the year 2000, these bulbs would no longer be allowed to be sold. The center's fixtures used the florescent bulb identified in the legislation. This event added urgency to the staff's interest in finding and installing more energy-efficient lighting on campus.

Coincidental with the legislation came the marketing of a more energy-efficient florescent bulb that met all the legislation's restrictions and, as claimed by the manufacturers, used 28% less energy. Using an electronic ballast already available on the market that uses about 50% less energy than the older mechanical ballasts, it would now be possible to retrofit existing lighting fixtures with new bulbs and ballasts that should reduce energy use for lighting by about 40%. Forty percent of an annual lighting budget of \$1.3 million is \$520,000, a highly-significant potential annual savings. Technology and the market now appeared to offer an additional mechanism for the center's physical plant staff to continue its quest for lower energy costs.

In late 1994, the staff was contacted by an energy company from Tulsa, Oklahoma. One of a very few now-emerging lighting retrofit companies, they were interested in replacing the bulbs and ballasts in the 12 campus buildings with the new energy-efficient bulbs and electronic ballasts. Not only would they guarantee energy savings, but they would also agree to be paid only out of the savings as they accrued; no savings, no payment. Intrigued with both the potential savings and the prospect of funding the project out of accumulated savings, the staff concluded a test project would

be appropriate. They were hesitant to agree to a campus-wide retrofit at this point because of a number of uncertainties. Would the savings come close to those claimed? Would the proposed substitutions be acceptable in the laboratories where employees were used to current light levels and colorations (there are, believe it or not, different “colors” of white light)? What if the entire campus was retrofitted, and the building occupants were dissatisfied? Did all the existing fixtures require re-lamping, or could some be “de-lamped?” Perhaps most important, could the physical plant staff complete a retrofit at the same or lower cost?

To test the concepts, the staff selected the biomedical sciences building for a retrofit, one of the 25 year old buildings. It was the largest on campus with 205,000 square feet, and its lighting cost-per-square-foot, compared to the campus-wide average of \$.95, was the highest at \$1.77. Moreover, it had a cross-section of laboratories, conference and class rooms, and office space. The test would confirm a level of savings, determine the suitability of the new bulbs, and indicate whether the in-house staff should perform future retrofits a building at a time. A request for proposals was prepared and released in the spring of 1995. Eight vendors requested copies. Three proposals were submitted, including one by the Tulsa company. Based on the highest total number of fixtures they proposed to retrofit, the total bid cost of \$254,000 for the project, and projected energy cost savings of \$135,000 per year, the Tulsa company submitted the best offer.

Up to this point, the action had been largely confined to the physical plant staff. Seeking technical solutions, preparing the RFP, evaluating the responses, and

determining whether in-house or outsourcing was more appropriate, were tasks generally left to the physical plant office. With a successful bid, however, two decisions required inclusion of the vice president for administrative affairs. First, did the board of regents need to approve the project? If the project were completed in-house, it probably did not require regents' approval. If outsourced, then it did. Given the estimated comparative in-house versus outsourcing costs, \$259,000 in-house versus \$261,000 by contract, outsourcing was clearly the better alternative since the contractor could complete installation within 60 days whereas completing it in-house would likely take 6 months. The project therefore required regents' approval. Second, should the project be financed by the center, or should the Tulsa company's offer to finance it out of energy savings be accepted? If the company financed it, did that equate to a debt by the state that required the state bond oversight commission approval, a tedious, lengthy process? With a pay-back of about two years, the center had reserve funds that could finance the project. To avoid the question, the director of campus operations and the vice president made the decision to finance the project internally. The company's proposal was approved by the regents at the end of June, installation began in July and was completed by the end of August.

Initial indications suggested the test was successful. Comparing September through November electrical consumption rates with the same period a year before showed a savings of from \$6,000 to \$8,000 per month, or from 30% to 35%. Although less than the 40%, or \$11,000 per month initially estimated, the savings was nonetheless significant and the project was considered successful. Even if the savings approached

only 30%, the potential savings seemed significant enough to warrant continuing. The company volunteered to survey the remaining buildings to determine potential costs and energy savings, and the director and vice president made the decision to continue the retrofit based on the company's findings.

How should the center continue? Several questions arose. Should the remaining buildings be retrofitted one-at-a-time, or should all be done together? One-at-a-time would allow in-house replacement, by now an attractive alternative. Estimated costs for sequential in-house replacement came to about \$915,500, but using only in-house staff would require at least three years to complete. Hiring additional staff just for the project would increase the costs to a contractor's likely cost. In the meantime, the center would be foregoing a potential \$265,000 cost savings each year. Alternatively, outsourcing the project to a qualified vendor would allow completion within 90 to 120 days with savings accruing to the center that much sooner. The director and the vice president concluded outsourcing the project would be more cost-effective.

Should the RFP require a "shared-savings" payback as the company had offered the previous year, or should the center seek an alternative source of financing and pay off the contractor upon completion? Under previous year's proposal for a shared savings concept, the vendor would be paid quarterly out of accrued savings at the ratio of 80% to the vendor and 20% to the center. This approach would enable the retrofit to go forward with no capital outlay by the center and would allow a payback within four years. Moreover, if no savings accrued, then the vendor would receive no payment. By finding alternative outside financing and paying the vendor in total at the project's completion,

however, the center would probably be able to reduce the overall project cost by about 15%. This alternative's downside was that the center would incur interest payments equating to about two-thirds the cash-payment savings. Together with the cost of the financial staff's time to seek and secure outside financing, interest costs would come to about the same as the savings from full payment to the contractor upon completion. The director and the vice president therefore concluded the shared-savings approach would make more sense.

Since no additional costs would accrue to the center with this approach, the request for proposal would include the requirement for the project to be financed out of shared-savings. Using the same approach and contract format as the previous year, with the addition of the provision for a shared-savings contractual payout, the staff prepared an RFP and released it for bid. The proposal was sent to 18 potential bidders. By the mid-June bid closing date, only one bid had been submitted. The Tulsa company proposed to retrofit the remaining 11 buildings for \$1,054,000.

Although it was the only bid, the Tulsa company's proposal was very attractive. First, its cost-per-fixture rate was slightly less than the previous project, \$65.10 versus \$65.64, and the previous year's price of \$65.64 was more than \$5 per fixture less than the next highest bidder. Second, the offer estimated a savings in electrical costs of \$225,000 per year, or about a 24% reduction. Adding savings from reduced heating and air conditioning loads deriving from the cooler-burning lamps, the company estimated a total annual energy savings of \$270,000. Third, the contractor would replace all lamps and ballasts as they failed, and perform all fixture maintenance, during the period of the

contract. This operational savings equated to about \$62,000 per year to the center, the average cost of physical plant employees and supplies currently required to perform the same services.

In total, the company estimated \$332,000 per year in energy and operational savings to the center. They would accept payment quarterly from accrued savings, as verified by an independent auditor, at the ratio of 80% to the company and 20% to the center until the \$1,054,000 was paid. At that rate, payment would be complete within four years. Fourth, the offer was only \$98,000 more than the in-house estimate, an effort that would have taken three years. The director, the physical plant staff, and the vice president agreed the offer was good for the center and an agenda item was prepared to submit the contract to the board of regents for approval. To all then concerned, the program appeared to be heading for a successful conclusion, much like the previous year's test project.

It was not to be. First, the head buyer in the purchasing department grew concerned that only one bid was received. Although not technically correct as two additional firms responded with a No Bid, a recognized response category, and receiving a single bid in itself did not invalidate the bid process, the buyer nonetheless voiced her concern to the vice president. Since the project was over \$1 million, and since the shared-savings approach was new to the center, how could the center be certain it was the best offer available? Moreover, she argued, are we certain a shared-savings contract does not create a debt by the state requiring approval by the state bond oversight commission? Acting on her own, the buyer had contacted the commission staff who

warned her that any such project must be reviewed by the commission even though their jurisdiction was uncertain. Responding to the buyer's concerns, the vice president delayed forwarding the contract to the regents and its subsequent award, and decided to review the project.

Second, to resolve the question of the bond oversight commission's jurisdiction, representatives of the commission's office and the center met soon thereafter. The commission's staff was very interested in the project as it had received several shared-savings proposals in recent years for approval, but none had been true shared-savings contracts. They were looking for one to use as a pattern for state-wide use. Although the staff raised a number of technical questions, among them how the savings would be calculated and verified, they observed that the center's contract seemed to be valid. As to the commission's jurisdiction over shared-savings contracts, the commission's staff was not able to provide an answer. The state legislature had passed a statute authorizing shared-savings contracts by state agencies, but it did not clarify the question of whether such contracts established a debt by the state requiring review and approval by the bond oversight commission. The commission's staff agreed to refer the question to the office of the attorney general for an opinion.

Third, to resolve the question of whether the single bid was valid and likely to be the best the center could obtain, the contract was referred to the architectural and engineering office for an opinion. On most campuses, A&E is part of the physical plant office and thus part of the physical plant staff process, but at the center the office is independent. As a result, the retrofit project was not originally coordinated with the

center's A&E office because it was considered a simple ballast and bulb removal and replacement, a routine maintenance procedure. Upon review, however, A&E did not address the question of the contract's validity, but instead concluded it was more properly a construction project requiring the preparation of detailed plans and specifications for the light fixtures in each of the 11 buildings' rooms. Only by such measures, they argued, could the center be certain it received a valid bid and could savings be calculated and verified. Given the contract's cost, in excess of \$1 million, concluded A&E, then perhaps it would be best to engage an electrical engineer to survey each building's lighting requirements, and have him prepare detailed plans and specifications. A&E's cost and time estimates for a re-engineering was \$35,000 to \$40,000, and four to six months. Their suggestion: prepare engineering drawings and rebid the project.

Fourth, the Tulsa company was growing anxious about the project. Knowing they were the only bidder, that their bid was now a matter of public record, and having already invested considerable time and money in the project preparing their proposal, they were dismayed at the prospect of losing the project through no fault of theirs. The firm took two significant steps. It sent a letter requesting the contract be awarded to them since they had complied with all provisions of the request for proposals, and suggesting they would resort to legal remedies if the contract were not awarded. Then, the company's president contacted a member of the seven-member university board of regents, a business acquaintance, to intervene on the company's behalf. The last step had profound significance as the project was thrust directly into the political arena.

In an effort to resolve the questions and conclude if the project should proceed, and to get out of the growing quagmire, the vice president convened a meeting in late June of representatives from physical plant, A&E, legal counsel, purchasing, and finance. The meeting was to focus on three questions: should the contract be awarded, should it be rebid, or should it be canceled and completed in-house? Several additional questions surfaced during discussion, however. Does the project require the lengthy and expensive process of re-engineering campus lighting? If so, then why not contract directly with an engineer to identify lighting changes, and then perform the work in-house rather than share savings with an outside contractor? How can the savings be calculated and verified? Can the single bid be awarded, or were there irregularities in the bid process that limited the number of potential bidders, thus requiring a re-bid? Could the center get a better price with a re-bid? Finally, can the center award a contract based on payment through shared-savings, or must the oversight commission approve it?

Ensuing discussion concluded it would still be in the best interest of the center to outsource the project. Whether the project should be re-engineered and re-bid was partially reconciled with the conclusion that the offer appeared to be good; the contract price was slightly less than last year's project for which three proposals were submitted. A&E's technical concerns with the proposal, in particular a methodology to calculate and verify the savings, could likely be reconciled through negotiations with the company. Whether the project fell within the oversight commission's jurisdiction would have to await the opinion of the attorney general's office. The remaining question appeared to be

whether the center had inadvertently or otherwise limited the number of bid responses in its RFP and should therefore re-bid the project. Legal counsel promised an opinion.

In early July, the regent to whom the company had appealed, called the vice president to inquire about the contract's status. The vice president explained his and his staff's concerns, indicating legal counsel was considering what action the center should take. The regent was nonetheless insistent: irrespective of the vice president's concerns, had the company complied with all legal provisions; that is, was it a valid offer? If so, were there any legal justifications for not awarding the contract to the company? The vice president replied that the contract could probably be awarded, but that he wanted to work through the other questions before making a decision. As a consequence, however, the president's office, located on the main campus, began to take a close interest in the project.

In early August, the center's legal counsel affirmed the bid was probably a good offer and would likely benefit the center. It seemed to meet all legal provisions and could therefore be awarded. A case could be made, however, that because the company had been working on campus and had access to all buildings for an extended period of time, the firm may have had an undue advantage in preparing its proposal. It had access to information the other bidders' were unlikely to be able to develop in time to respond to the RFP. Consequently, legal counsel concluded, the project should be re-bid. In response, the vice president instructed the director of operations and A&E to begin preparing plans and specifications for a re-bid. In early September, the attorney general's office issued its opinion that even though bond oversight commission

jurisdiction was ambiguous in the legislation providing for shared-savings contracts, the commission ought to review and approve the contract.

At this point, because the company appealed to a member of the university's board of regents, the president's office effectively took control of the project from the center. The main campus legal counsel, to whom the center's legal counsel was responsible, and who worked directly for the president, instructed the center's vice president to stop further action. He would determine if the Tulsa company's bid should be awarded, and if the contract required submission to the bond oversight commission. As the university is a state constitutional entity, there was also a broader question of whether the bond oversight commission had jurisdiction over the university. Award of the contract thus became a political issue.

No further action on the project was undertaken at the center until late October when the president's office instructed the vice president for administrative affairs at the center to proceed with negotiations with the company over the technical concerns surfaced earlier by the center's architect. The contract was to be submitted to the board of regents at its meeting in early December for approval. Negotiations ensued, the technical questions were resolved, including agreement on the methodology to calculate and verify savings, and the company accepted the modified contract by the first week of December. At the president's review meeting shortly before the board met, the president and the board chairman complimented the center in its efforts to reduce energy costs, and on the decision to seek the regents' approval to award the contract to the Tulsa company. The president also concluded the contract should be presented to the bond oversight

commission for approval even though it was probably not required, observing it would be “good politics” to do so. He assured the staff that approval would be forthcoming. The board approved award of the contract to the company at its meeting shortly thereafter.

The contract’s award awaited only approval by the bond oversight commission. The commission met at the end of January and approved the contract subject to two conditions: the company could not sell the contract as a means to finance it; the company could not use the university’s name as security to obtain financing. The company agreed to both conditions. Thinking all that remained was the contract signing, the director of operations scheduled a meeting to complete the process. Not so fast, argued the campus architect. Yet to be agreed upon was the methodology and formula for calculating the savings. Although the contract specified the formula, agreed in principle by both parties, and required that an independent third party calculate the savings, the architect insisted on clarification. An ensuing meeting resulted in satisfactory clarification, and the director again tried to arrange a signing. Not so fast, argued the architect again. The estimated hours of operation identified in the contract, one of the important elements in calculating energy savings, appeared to be in error. They should be recalculated. Subsequent recalculation confirmed their accuracy. Another contract signing was scheduled. Not so fast, argued the architect yet again. How do we know that the company is in compliance with the bond oversight commission’s restrictions? Although the director argued that it is not the university’s responsibility to enforce the oversight commissions’ rulings, by now the overly-cautious vice president grew even more cautious given the contract’s visibility, and agreed with the requirement that the

company must present a letter from the commission acknowledging that the company was in compliance with its restrictions. After a delay of three weeks, required documentation was provided and the contract, at last, was scheduled for signing in late April, almost a year later. By the first of May, however, the contract was still not signed. In the meantime the center had forgone an estimated \$335,000 in utility savings.

ANALYSIS AND CONCLUSIONS

This study postulates that an economically-based, financially-driven decision model, when used to outsource higher education in-house functions, may be an incomplete explanation of the process. Focusing on how and why higher education institutions outsource, it seeks a more complete decision model by asking two questions: (1) what non-financial, non-economic considerations play a significant role in outsourcing decisions, and (2) how does their presence affect the decision? Two corollary questions are implied: (a) are costs the major criterion upon which the decision to outsource was made; if not, then (b) what decision model is more appropriate or complete? A review of the literature suggests three hypotheses and associated models. First, outsource decisions are economic-based and financially-driven. Second, outsource decisions are management-based, and driven by possible efficiencies and the benefits of divestiture. Third, outsource decisions are driven by the decision process dynamics inherent in higher education: bureaucratic decision processes, collegial decision processes, or political dynamics decision processes.

This third study further clarifies how and why higher education institutions outsource. Analysis of the decision to outsource a campus-wide lighting retrofit at the health sciences center confirms that the decision was not based solely on economic or financial considerations, even though they were significant. At each major step the decision to outsource the project rather than complete it in-house was reaffirmed by cost-benefit analysis. The one-building test project came close to a solely economic-based, financially-driven decision. The case therefore confirms that financial considerations are important and play a major role as a base-line in outsource decisions. As the project grew, however, decision process dynamics expanded beyond financial considerations alone.

The decision process at times illustrated all three decision models. The bureaucratic and collegial decision process models adequately explain the decision process leading to the test project, evaluation of the test, and the decision to proceed with the campus-wide project. The participating members of this group included the director of operations and three of his four assistants, one of whom was an engineer. Each was acting in his organizational and bureaucratic capacity. In addition, they enjoy a collegial relationship, making decisions after eliciting and accommodating the views and concerns of each member. Expanding the group to include the vice president was an easy evolution as he is an insistent primary participant in all physical plant decisions.

When the follow-on decision process to retrofit the remaining 11 buildings expanded beyond this group, the bureaucratic model continued predominate. The chief

buyer's response reflected the department of purchasing's routines and procedures. An RFP should have more than one bid to maintain the integrity of the bid process and to be in the best interest of the center. Because the contract potentially created a debt by the state, it should be referred to the bond oversight commission's staff. That staff, in turn, reflected its own routines and procedures by reviewing and commenting upon the contract even though its jurisdiction was not certain. Finally, A&E's response was most typically bureaucratic. Their purpose as an organization is to prepare drawings and specifications for renovation and construction projects in campus buildings, and to oversee contract completion and compliance. Their response was therefore predictable, even though the bulb and ballast retrofit was a maintenance-related project in which they would not have routinely become involved.

The decision, finally, reflected the political decision dynamics model. Defined as a diffused process in which individuals and groups vie for influence, it describes purchasing, the campus architect, and the operations director arguing and maneuvering for their respective positions. In particular, the architect's insistence on three occasions before the contract signing that his concerns be accommodated, although they had minor influence on the contract itself, is classic political dynamics. The contractor also entered the political arena when he appealed to the regent. The regent, in turn, vied for influence in the process by going to the president's office. The president's office illustrated both the bureaucratic and political models; it "won" by exerting its influence in making the decision to award the contract, but its influence stems from its organizational position and prerogatives. The vice president's eager acquiescence to the

president's office, even though this was clearly a local campus issue, reaffirms the political model's efficacy.

The study also identified a pattern that, on review, was also present in the motor pool case and may be significant. A major factor in this cases' decision process escalation was the project's cost. The test project's cost was \$254,000, and, although significant, appeared to entail minimal risk. It would be funded from the utility budget where the savings would likewise accrue. At this stage, the decision process was limited to the physical plant staff and the vice president. Cost of the campus-wide project, however, increased by four times, to just over \$1 million. At that level, the project's visibility and risk seemed to become more significant. Hence, the chief buyer was uncomfortable with only one bid in response to the RFP even though receiving one response to an RFP was not unusual. In addition, concern over potential risk was illustrated by questions being raised several times over a methodology to calculate and verify energy savings. It thus appears that the higher the potential cost in an outsource decision, the greater the visibility and the further the decision moves from solely economic and financial considerations, and the greater the number of decision participants. This is a pattern to look for in subsequent cases.

This case reaffirms a pattern suggested by the first two cases. Restructuring or reengineering an in-house enterprise appears to be a significant consideration in the decisions to outsource. Re-engineering in this case refers to the more traditional definition of recalculating technical specifications and, with the project thus being re-defined, to completing it in-house to reduce the project's cost. In addition, its intent

parallels the concept of “process reengineering” illustrated in the first two cases; let’s restructure the organization and its processes to become more efficient and competitive and thereby keep the enterprise in-house. More explicitly, reengineering was addressed in both the test building and the campus-wide project by estimating the costs of completing the projects, to include hiring additional staff if necessary. This study thus seems to reaffirm the efficacy of reengineering as an alternative to outsourcing, although in the end outsourcing was the more cost-effective approach.

In summary, the case adds to a more complete and satisfactory understanding of how and why higher education institutions outsource by confirming that economic-based financial considerations, while important, are an incomplete explanation of why the decision was made to outsource. More important to the process, indeed at times even bringing into question award of the contract, were the decision process dynamics: the influence of the bureaucratic and political dynamics. The management-based model does not appear to have influenced the decision. The case also confirms the role of reengineering, and, finally, suggests what appears to be an important phenomenon, a link between project cost, visibility, and decision dynamics.

STUDY FOUR

OUTSOURCING AT A RURAL UNIVERSITY: SETTING THE STANDARD

THE CASE

The university is a public four-year liberal arts university located in the central rural area of Oklahoma. Sited on gently rolling hills in farm country, its closest significantly-sized town is eleven miles to the west south-west (population 10,000), and its closest urban area is Oklahoma City, well to the south. Student population on campus is about 2500, with enrollments at its two urban centers bringing the total student population to just over 4,000. Organized into the five schools of Arts and Sciences, Business, Education and Behavioral Sciences, Environmental Sciences, and Nursing and Health Professions, the university offers 30 undergraduate majors and a Master of Education program.

Established in 1897 as a land-grant college, its growth and development were marked by the struggles typical of many colleges and universities: under-funding, accreditation, faculty recruitment, and consensus over its mission. During World War II, the university participated in national defense programs, and following the war, reaped the benefits of greatly-increased enrollments stimulated by veterans programs. Like almost all american colleges and universities, it experienced its greatest growth during the post-war period of the late 1940s and 1950s. And, also like most american colleges and universities in the early 1970s, the university experienced the problems of declining enrollments following the “baby boom” peak: surplus capacity, and declining revenues.

The Civil Rights movement and Affirmative Action programs of the late 1960s and 1970s were both a blessing and a bane to the university. While the programs opened additional sources of revenue, they also led to crippling competition for students from major universities trying to comply with the civil rights acts. Whereas the university enjoyed stable, if not growing enrollments, aggressive recruiting and enticements by the major universities all but dried up its traditional student pool. As a consequence, enrollments plummeted to less than 600 students, and administration was in turmoil. The mid-1970s saw a series of interim and short-term presidents come and go, two dismissed for alleged financial mismanagement. By 1976, the university was bankrupt.

At this point, the board of regents for Oklahoma State University and the A&M colleges stepped in by appointing an experienced, determined vice president for fiscal affairs, and somewhat later, a well-qualified, strong president. The new vice president

faced a daunting task. Revenue bonds were in default. University-wide revenue collections had been sporadic; accounts receivable and cash were just not making it to the bank. Food services and the bookstore were hemorrhaging through mismanagement or theft. The physical plant had seriously deteriorated, with even routine operations, maintenance, and repair tasks being neglected. Students, faculty, and staff were dismayed at its poor condition and sub-standard services. The new vice president was not able to produce a competent or reliable financial statement because financial records were in disarray; his first one began with a gross operating loss. It was largely because the core of dedicated, loyal, and conscientious faculty were determined to persevere that the doors stayed open.

After spending most of his first year getting financial controls and records in order, the vice president turned to food services and the bookstore, auxiliary enterprises whose buildings were financed with revenue bonds. Defaults on these bonds were putting at risk the personal assets of the members of the board of regents. He had tried to put together a management and staff team from among university employees during his first year that could operate the cafeteria at a break-even level, but he was unsuccessful. The employees seemed unresponsive to the critical need for improvement, and the vice president suspected a stream of food was going out the back door. Moreover, the university's relatively isolated location made it difficult to attract a pool of candidates from which qualified employees could be selected. The cafeteria continued to operate at a loss. As he entered his second year at the university, he therefore turned to the only other apparent alternative, offering a contract to run food services to an off-campus

provider. With the president's support he quickly outsourced food services. The regents enthusiastically supported the action. Although growing pains included changing the contractor's manager several times, food services' turn-around was quick and dramatic. Students, faculty, and staff were uniformly pleased and impressed with the results.

As it became clear that the food services contract was going to be successful, the vice president began considering the bookstore as an outsource candidate. Though he had made improvements in the bookstore operations during the preceding two years, particularly in its financial management, he still could not make the operation profitable. He estimated at one point that every book the bookstore sold cost the university 25 cents. He tried recruiting new management in an effort to turn things around, but the university's location again worked against finding qualified candidates willing to travel the distance or relocate. Outsourcing once more appeared the only solution. This time, however, several faculty members and a senior administrator expressed concern about outsourcing. Would contracting the bookstore to a private firm increase the price of books and reduce their variety?

With financial concerns his driving motivation, the vice president, again with the president's support, nonetheless moved quickly and outsourced the bookstore. The regents once more approved the contract with little discussion and no expressed concern. Indeed, they had witnessed the dramatic turn-around in food services and were enthusiastic supporters of the concept at the university, particularly as profitable operations removed the threat of bond forfeiture. By the vice president's fourth year at the university, both food services and the bookstore were profitable operations. In

addition to improving services and paying revenues to the university, the contractors had renovated and upgraded the facilities.

Improvements in the physical plant operations and maintenance did not seem as difficult. Soon after his arrival, the vice president was able to hire an experienced engineer to direct improvement efforts in the physical plant, and facilities improvement became one of the president's primary concerns. Demonstrating his interest and commitment, the president met weekly with the vice president for fiscal affairs, the director of physical plant and his managers, including from time-to-time his vice presidents for student services and academic affairs. Participants openly and frankly discussed physical plant problems, and the improvements they thought were required, together with how and when to make them. With re-established revenue streams, improved university-wide financial management, and the president's support, campus facilities began to show improvement. Maintenance was being performed, building systems were operating smoothly, campus-wide clean-up and redecorating significantly improved dormitories and common-use facilities, and improvements were made in landscaping. Students, faculty, and staff once again began to take pride in the campus' appearance.

By 1979, the university had made a significant turn-around. The two auxiliary enterprises were operating profitably, and the physical plant was much improved. Outsourcing had proven to be a success at the university, even though its success had been mixed at the few other institutions in Oklahoma where it had been tried. Could outsourcing bring similar improvements to other campus enterprises? While outsourcing

had enabled two failing enterprises to become successful, could it further improve a satisfactorily operating enterprise like the physical plant? This question had been recurring often to the vice president for fiscal affairs as he visited the campuses of other universities where he observed physical plant operations and improvements he wished he could bring to his university. He concluded, however, that his plant's capabilities and resources were too limited. Added to his wish for even greater physical plant improvements were his growing concerns that complying with the many developing environmental, health, and safety restrictions might be too difficult for the present physical plant operation to handle.

Concluding that outsourcing could answer both concerns, he began contacting contractors providing educational facilities management whenever he planned to visit another campus to determine if they were operating in the area. If so, he asked the contractors for a tour of the facilities and observed their operations. Impressed with what he saw, he developed a list of services and service performance standards that would improve his university's physical plant well beyond the plant's current capabilities. Contractors were providing other campuses with up-front capital improvements; experienced and highly-qualified management; a broad range of in-depth skills; economies of scale that reduced procurement and operating costs; and quick, responsive service.

About this same period, the university's president was growing aware that outsourcing could serve a purpose becoming increasingly important to him. As a consequence of food services' and the bookstore's successful outsourcing, he soon began

to appreciate that he no longer had to spend time and effort worrying about and overseeing their operations. He was able to leave that to the contractors, whose responsibilities were clearly defined in the contracts. Though keenly aware that both enterprises' successful operations continued to be his responsibility, he was relieved at being able to delegate their management to the contractor. Could the same principle apply successfully to other management-intense campus support activities, like the physical plant? Outsourcing these activities might allow him more time to focus directly on the university's primary missions of education, research, and public service.

Outsourcing's potential to relieve his management burdens became more clear during periodic retreats he attended with other university presidents. The presidents invited to the retreats representatives from private industry to present programs they were offering to improve campus operations and finances. One presentation in particular, by a firm specializing in physical plant management, caught his attention. Upon his return, he and the vice president for fiscal affairs concluded that outsourcing the university's physical plant might offer many advantages to the institution.

This time, however, they proceeded more slowly and deliberately. No other college or university in Oklahoma had attempted to outsource their physical plant, so reactions were uncertain. Moreover, physical plant operations had already improved significantly, so convincing the campus community, and perhaps even the regents, that outsourcing the plant was appropriate and advantageous might be more difficult. And, in contrast to the former university employees in food services and the bookstore, physical plant employees were more highly skilled, higher paid, and were likely to be more

forceful in opposing a contract if they perceived their jobs to be at stake. To minimize this possibility, they decided to outsource the physical plant in two phases. First, they would outsource plant services employing lower-paid trades: custodians, grounds-keepers, painters, and the motor pool mechanics. Second, if all went well, they would solicit a contract providing the mechanical trades: HVAC technicians, plumbers, carpenters, and electricians. To ease university employee fears of being displaced by contract employees, and make the contracts more acceptable by all, the contracts would include the requirement to hire the university's in-place employees for at least six months.

As these strategies were being developed, the president regularly included his vice presidents and other key administrators in discussions and deliberations. He was very concerned that all sectors of the campus community, particularly the academy, be aware of and have a voice in the decision process. He remembered well the dark days not long passed when everything appeared to be in decline and the university seemed to be fracturing. He did not want anything similar to recur.

The regents were likewise kept appraised. They were by now firm advocates of outsourcing as they saw its successes in food services and the bookstore. Nevertheless, they expressed concern about outsourcing the physical plant, an already-improved enterprise, and the potential loss of university employees who were trying hard to improve the plant. Convincing them required significant effort, in contrast to the first two outsource proposals, as the president and vice president outlined, documented, and presented to the regents the advantages and safe-guards to be included in the contract.

The provisions requiring the contractor to keep in-house employees for six months, and with comparable pay and benefits, revolutionary concepts at the time, were the decisive reassurances the regents wanted. They approved the first phase outsource contract for the physical plant operation in 1981.

The contractor moved quickly to provide promised improvements. Custodial services showed dramatic improvements almost overnight. Painting crews, previously uncoordinated and sporadically employed, now provided uniform quality and color-coordinated schemes. The contractor invested heavily to improve landscaping and paved several parking lots. Within three months, campus facilities were so improved, even beyond the significant improvements of the previous five years, that the regents were invited to campus to view the results. Uniformly impressed, they authorized the vice president to proceed with the second phase.

The second phase also went smoothly and quickly. All of the mechanical-skilled employees stayed with the contractor, and all but a few remained after the six month period. Significantly, several of these employees went on to transfers and promotions to other contract sites operated by the contractor. In a surprising and unusual development, the first-phase contractor failed to win the second-phase contract. Two service providers thus found themselves responsible for separate parts of the university's physical plant. Although the arrangement could have led to significant problems, they didn't materialize. In fact, having two major national-level contract providers on campus

worked to the advantage of the university; both competed to provide the better and more responsive service, and a capital improvement made by one was matched by the other.

Pioneers in outsourcing in Oklahoma higher education, the university demonstrated that outsourcing provides convincing benefits. It enabled the university to continue to provide successfully two important, yet failing, auxiliary services: food services and the bookstore. Later, it enabled the university to improve its physical plant well beyond its in-house capabilities by bringing in up-front capital investment, critical employee skills, in-depth management expertise, and more efficient and productive services. The vice president estimates that over the years, the contractors have brought to the university over \$2 million in capital improvements at little or no cost to the university, generated savings and efficiencies of up to 20% that have been put back into campus operations, increased the quality and levels of service, and generated revenues for the campus. When asked if they had ever considered bringing any of the operations back in-house, both the president and the vice president quickly answered no. Indeed, the university recently completed an \$8 million dormitory construction project on campus at little cost to the institution by outsourcing. The university is leasing on-campus real estate to a developer on which dormitories were constructed at no cost to the university. The university, in turn, guarantees a minimum occupancy level. At the end of 20 years, the developer will recover project costs and a return on investment, and the dormitories will revert to the university. The project illustrates the university's continuing commitment to outsourcing.

ANALYSIS AND CONCLUSIONS

This study postulates that an economically-based, financially-driven decision model, when used to outsource higher education in-house functions, may be an incomplete explanation of the process. Focusing on how and why higher education institutions outsource, it seeks a more complete decision model by asking two questions: (1) what non-financial, non-economic considerations play a significant role in outsourcing decisions, and (2) how does their presence affect the decision? Two corollary questions are implied: (a) are costs the major criterion upon which the decision to outsource was made; if not, then (b) what decision model is more appropriate or complete? A review of the literature suggests three hypotheses and associated models. First, outsource decisions are economic-based and financially-driven. Second, outsource decisions are management-based, and driven by possible efficiencies and the benefits of divestiture. Third, outsource decisions are driven by the decision process dynamics inherent in higher education: bureaucratic decision processes, collegial decision processes, or political dynamics decision processes.

The rural university case yields a trove of information useful in analyzing outsourcing. The study examined three outsource decisions: food services, the bookstore, and in two phases, the physical plant. The decisions to outsource food services and the bookstore, respectively the first and second decisions, closely follow the economically-based, financially-driven decision model and can be considered valid examples. The decisions help explain why the university outsourced the enterprises. In both cases, the enterprises were unable to break even despite some effort in both to

restructure or reengineer. Employee attitudes, mismanagement, and the lack of a nearby labor pool from which to find qualified management and employee replacements appear to be significant factors. After economic and financial analyses, outsourcing thus offered a clearly better alternative to continued efforts to improve in-house operations.

Moreover, an opinion issued by the Oklahoma state attorney general's office that the university's regents were personally liable for default of all bonds they had approved gave urgency to the need to find a financial solution to the unprofitable operations of both enterprises. The buildings housing each enterprise were constructed from bond proceeds. The regents' encouraged and approved the decisions without questions.

While the economic-based, financially-driven decision model is clearly evident, the vice president's ability to move quickly and largely unilaterally to outsource both functions, albeit with the president's approval, stems from his role and responsibilities as the university's chief financial officer. That is, his actions are more completely explained if they are considered in the context of the organizational-bureaucratic decision model, thus explaining how the functions were outsourced. Financial considerations were vitally important and impelled action, but the response was largely a result of the vice president's organizational position and prerogatives. Thus the university's first two decisions are also clear illustrations of the bureaucratic decision model.

The decisions to outsource the physical plant, however, moved beyond both the economic-based, financially-driven and the bureaucratic decision models, and provide useful contrasts to explain why and how it was done. The vice president was concerned

that despite its improvements and satisfactory current operations, the plant needed improvements current capabilities were unlikely to allow. Outsourcing, with its economies of scale and access to a wide labor pool, management-based concerns, provided a means to achieve them. Concurrently, the president's realization that outsourcing provided him relief from managing non-educational activities likewise moved the decision into a management model: outsource non-core activities to allow greater focus on core activities.

Moving beyond outsourcing food services and the bookstore, both decision makers realized that the decision to outsource the plant represented an important evolution in outsourcing's use at the university. Financial imperatives were not as significant, and outsourcing appeared more discretionary. Moreover, the value and magnitude of a contract to operate the physical plant meant that more members of the campus community would be affected, directly and indirectly. In particular, a larger number of more highly-paid, highly-skilled, and likely more vocal employees would be affected in contrast to the employees affected by the food services and the bookstore contracts. Consequently, the president adopted a collegial approach to decision making by ensuring representatives from all campus communities were involved in the decision process. Interviews with the vice presidents for fiscal affairs, academic affairs, student affairs, members of the faculty, and managers of the physical plant determined they all believed they had significant input into the decision to outsource the physical plant and agreed with the assessment that the process was collegial.

Although the decisions primarily followed the collegial model, political dynamics played an important, though lesser role. The decision to outsource the plant in two phases based on trade skills was an effort to minimize potential opposition from a likely vocal group while the concept was tried, proven and accepted. So likewise was the decision to include in the contract the requirement to hire in-house plant employees for at least six months at comparable wage and benefit rates. Unusual for the time, these contract provisions successfully limited opposition from the affected employees, satisfied the regents' concerns, and provided satisfactory answers to two state legislators who inquired on behalf of their constituents.

Beyond confirming decision models as an appropriate explanation of how outsource decisions are made, the study provided additional insights into outsourcing in higher education. First, the physical plant decisions appear to confirm that the higher the value and magnitude of a potential contract, the more significant non-economic and non-financial considerations become, and the more likely the decision is to reflect the collegial and political decision dynamics models. This possible phenomenon was identified in two of the previous cases, and implicit in the first case. Food services and the bookstore were failing enterprises, but their operating costs were individually about one-third the operating costs of the physical plant, with fewer resources thus at risk. Second, restructuring or reengineering, though not a major effort, nonetheless occurred at some level. The vice president tried restructuring food services and the bookstore before concluding outsourcing in each case offered a better alternative. At about the same time, he reorganized the physical plant and hired a professional director. Significant

improvements resulted over several years. The vice president's subsequent conclusions that the university was unlikely to be able to make the improvements he viewed elsewhere with the plant's current capabilities and resources was implicit reengineering; he made a judgement that further reengineering would not bring further improvements

Finally, the case study confirmed many outsourcing benefits often cited in higher education management literature. Outsourcing brings up-front capital funding at no or little cost to the institution. Outsourcing brings increased productivity and lower costs through economies of scale buying and more responsive, quicker purchasing.

Outsourcing brings increased productivity by reducing employee absenteeism and providing a larger pool of qualified employees on which to draw when non-routine problems arise. Outsourcing can increase revenues from auxiliary enterprises.

Outsourcing, through its efficiencies, can reduce the cost of providing services and provide savings that can be reallocated or retained in the outsourced activity to improve services further.

In summary, the rural university's experiences with outsourcing confirm that a more satisfactory explanation of how and why a higher education institution outsources is provided with a broader decision model. The university outsourced to reduce operating costs and to increase revenues, confirming the economic-based, financially-driven decision criteria. It also outsourced to divest enterprises in order to allow greater focus on its core activities, and to achieve improvements through economies of scale, confirming the management criteria. Both models provide more complete explanations of why the institution outsourced.

Explanations of how the decisions were reached are provided by the decision process dynamics models. The bureaucratic model is illustrated by the largely unilateral decision process used by the vice president of fiscal affairs when deciding to outsource food services and the bookstore. The collegial model is illustrated by the decision process the president and vice president used when proceeding with the first and second physical plant outsource phases. Elements of the political process dynamics model, though not as apparent, were present as the collegial group decided to outsource the plant in two phases in an effort to mute potential opposition. Finally, the case confirms the role and significance of reengineering in deciding to outsource, and also appears to confirm that the higher the value and magnitude of an outsource contract, the more significant non-economic and non-financial considerations become.

STUDY FIVE

A SMALL LIBERAL ARTS UNIVERSITY:

A WORK IN PROGRESS

THE CASE

The small liberal arts university enjoys a reputation as a high-quality, innovative institution. A state-supported university drawing 94% of its 1700 students from Oklahoma, it is located in a community of 16,000 to the southwest of Oklahoma City, the closest urban area. It is also about 25 miles from one of Oklahoma's flagship universities, a proximity that allowed the university's president, a former dean at the flagship university, to establish, maintain, and draw from a close academic relationship. Several prominent, retired flagship faculty, including a former president, have taught courses at the university over the past two decades. Its own faculty is also distinguished, with 80% holding the highest degree in their academic field and being required to

demonstrate competence in more than one field. A student-faculty ratio of 23:1, the lowest of all state universities, ensures personalized attention and instruction. Offering undergraduate degrees in 27 academic programs and 6 pre-professional programs, its general education courses are uniquely interdisciplinary, merging disciplines and cross-disciplinary teaching teams. The high quality of its education earned national recognition in 1995 when it was listed among the top liberal arts colleges in the nation by *U.S. News and World Report*. It was the only public liberal arts college to achieve this distinction.

The university was established by the state legislature in 1908 as a women's college, remaining so until it became coeducational in 1965. In common with all institutions of higher education during the early and mid 1970s, the college struggled with declining enrollments and increasing costs. In 1974 the college's mission was redefined, and the college was renamed. Its current president was hired a year later. With determined and deliberate but gradual efforts, and tight, careful, fiscal management, the president and regents brought the university to the prominence it enjoys today.

Outsourcing at the university is a recent phenomenon; its first contract was awarded in 1994. The president first became aware of and interested in outsourcing when he finally grew weary of his bookstore continually losing money. While attending an annual conference of the American Association of State Colleges and Universities, he visited a bookstore vendor's display booth and explored how a contract to operate the campus bookstore might benefit the university. He assumed the vendor would have little

interest in operating a bookstore on a campus with only 1700 students, and at the time, gross sales of about \$450,000. He was pleased when the vendor made a proposal sometime later. The offer was attractive; the contractor would employ the bookstore's current staff for at least one year, and would pay the university 6% of gross sales. In addition, the contractor would redecorate the bookstore facility. The regents approved the contract with little discussion, and soon the university was receiving \$30,000 to \$40,000 a year from the bookstore when not long before it was losing almost that much each year. He and his vice president were pleased and impressed with the contract and the concept of outsourcing.

A year later, the director of food services retired. A long-term employee, she had built food services into a well-run, well-liked and profitable enterprise. A particularly successful part of the enterprise was catering non-university social and professional events in campus facilities. The university's facilities provide the town's only attractive and accessible facilities for large events, and the high quality of university food catering made them particularly desirable. Replacing the director therefore became very important to the president and to the continued success of the enterprise. Upon reviewing university employees for a candidate, however, he concluded he would need to look elsewhere.

The bookstore's success encouraged the president to consider outsourcing food services as an alternative to advertising for and selecting a new food services director. By the time he went through a hiring process and selected an unknown, he reasoned, he could request proposals from food services vendors and select a contractor. Again at a

conference, he became acquainted with a group of educators who had become impressed by the quality of the people associated with professional food management. Knowing several presidents who had food services contracts, he discussed their experiences with them. All were pleased. His vice president for fiscal affairs prepared and released a request for proposals and several contractors responded. Reviewing their references and qualifications, he and the vice president did not select the vendor who offered the greatest financial benefits, but rather the vendor who seemed to have the best record and reputation. Again the regents approved the contract with little discussion.

The new contract had an inauspicious beginning, however. The new manager had worked as an assistant manager for food services at another Oklahoma college, earned a degree in hotel management at an Oklahoma state university, and seemed to please the cafeteria patrons, particularly students. Appearing to be well qualified to run food services, one of his first catering events did not go well, and served as a harbinger of continuing problems. A chamber of commerce banquet held annually at the university was scheduled to occur soon after he arrived. Although he had adequate time to prepare, the event was described as a disaster. Tables were not adequately set up, the food was not prepared as ordered, and service was poor. Although the manager reduced the charge by 50%, recognizing the problems, the poor impression remained. Several large subsequent banquets showed improvement, but they were still unsatisfactory enough to cause townspeople to look for alternative locations. Indeed, a recent luncheon in honor of the governor went particularly poorly.

The contracting firm, a national corporation, promised to correct the catering problem, and asked for time to improve. A year later, the firm was acquired by another corporation, an event that appeared to delay corrections. After two years, the manager still runs food services, and while he is popular among students, improvements in catering have been insufficient to win back lost customers. The president is growing concerned that the new company, with contracts at campuses with over 25,000 students, may just not care much about a campus with 1,700 students. The vice president continues to work with the contractor to improve catering, determined that it must improve in order to continue the contract.

After a year into the food services contract, however, its problems did not seem so intractable as to discourage the vice president for fiscal affairs, by now an advocate of outsourcing, from considering additional outsourcing opportunities. Knowing of the great success the rural university described in the previous study had experienced with outsourcing its physical plant operations, he began to look at how his university might be able to benefit similarly. Like the rural university, the small university's physical plant operations -- its maintenance, repair, and custodial services -- were adequate. But also like the rural university, he concluded, improvements would be unlikely if tried in-house with its current staff. Worker productivity, institutionalized overhead costs like employee benefits, and purchasing procedures would probably limit the potential for improvement.

Using the rural university as a model, and working with his director of physical plant, the vice president analyzed physical plant operations. They concluded several

benefits could accrue to the university with a contract to operate the physical plant.

First, the university's campus is small, less than 500,000 square feet, so the limited range of skills inherent in a correspondingly small staff allowed only routine maintenance.

Innovative approaches would be unlikely, and compliance with new federal environmental and occupational mandates would be difficult. A contractor, however, would have available a wide range of expert staff skills that could be called upon as necessary to provide advice on what and how to improve. Second, a contractor would not be constrained by the often-unwieldy and time-consuming state purchasing and bid procedures. Things could get done quicker. Third, contractor employees would likely be more productive with fewer days off and a wider labor pool available for special requirements or during holidays and vacation times.

Encouraged by the possibility of improvements likely under a contract to operate the physical plant, and using the rural university's experience as a model, the vice president and the director of physical plant concluded they should prepare and release a request for proposals. Anticipating a contract, the director had already begun to reduce the number of physical plant employees through attrition. By the time the contract was likely to be awarded, just over half the physical plant employees would be gone. This time around, however, the president appeared to have a few concerns, perhaps stimulated by the catering problems under the food services contract. What about costs? The vice president concluded total costs would be a little higher, but the improvements to facilities and the quality of services would more than justify them. What about responsiveness? Would the contract limit flexibility to fix physical plant problems we may not anticipate

now? Will we give up too much control? The vice president assured the president that the contract would allow both flexibility and control.

Whatever concerns the president may have had about outsourcing physical plant operations, he had explicit faith and confidence in his vice president for fiscal affairs. With broad experience in higher education finance and management, he had been recruited by the president explicitly to help him improve the university. Indeed, he describes his vice president as “one of the best financial vice president presidents in the state, not solely because of his abilities in finance, but also because of his overall understanding of higher education.” With his successful efforts to outsource the bookstore, high expectations of improvements in food services performance and, perhaps most important, his confidence in his vice president for fiscal affairs, the president was prepared to let the vice president move forward with a contract. He instructed the vice president to present the plan to the vice presidents for academic affairs and administrative affairs during a scheduled staff meeting, and then to two additional campus groups. Finally, the vice president presented the proposal to the regents, who subsequently approved it. The RFP was released, bids were received, and a highly-experienced, national-level contractor was selected.

About three months after the contract for physical plant management was signed, and just as the contractor was beginning to demonstrate improvements, the vice president suddenly and unexpectedly passed away. The passing of this highly skilled, respected and much liked individual directly and indirectly resulted in a number of lingering

problems that have adversely affected the physical plant contract performance. First, the contract allowed current university physical plant employees to choose either to remain university employees working in the physical plant or to transfer to the contractor. About half the employees chose to remain with the university. This arrangement created two parallel, dissimilar personnel structures: two separate pay structures; two separate vacation and holiday schedules; and limited control of personnel by the contract manager. Difficulties soon surfaced. With more generous holiday and vacation benefits, the university employees scheduled or took time off when they didn't like work assignments, disagreed with the contract manager's decisions, or when they pleased. If they didn't take unscheduled time off when they disagreed with the manager's decisions, they claimed to be university employees and therefore not subject to his orders.

A highly unusual provision, it was designed to engender employee support for the contract, to protect long-term employees from losing generous retirement benefits, and to reassure regents and other decision makers that university employees would be treated well. When participants in the decision process were asked if both the contractor and the university had anticipated these problems, the responses generally acknowledged that they had, but that the vice president for fiscal affairs either had a plan or would know how to "make things work." A delay of about six months in hiring a new vice president for fiscal affairs no doubt exacerbated the problems which, though difficult, were not intractable. Current and ongoing discussions between the contractor and the new vice president will likely resolve the issue, but the contract has been in effect for over a year and these problems have not endeared it to many participants.

A second and related continuing problem concerns the former director of physical plant. Also retained as a university employee, his role was envisioned to provide contract oversight, and to liaison and coordinate between the contractor and the university. In practice, however, he continued to try to direct maintenance and repair priorities, frequently at odds with the contract manager. His efforts appear to stem from an attempt to fill the void left by the vice president's death. The new vice president has moved to limit the former director's influence in physical plant operations by assigning him as a purchasing agent for supplies available at lower cost through the state system, and for special projects for which the contractor would charge the university additional management fees. The former director's enthusiasm for and support of the contract continues lukewarm at best.

A third unresolved issue concerns the status of the motor pool, shipping and receiving, and campus security. Originally part of the physical plant, their status was not addressed in the contract, and downsizing in anticipation of outsourcing limits available resources to continue the functions under the university. It appears the motor pool and shipping and receiving were originally envisioned to fall under the contract, and all agree it is likely a problem the former vice president intended to work out. The contractor has nonetheless agreed to operate the motor pool, and the arrangement, likely to require an adjustment in the contract's fees, continues under discussion with the university.

Although the university's administration is generally pleased with the results of the physical plant contract, its future appears somewhat uncertain. The president and vice presidents acknowledge that maintenance and repairs are timely and of good quality,

grounds keeping and landscaping have improved, and the contractor has repaired, replaced, upgraded, and generally improved the campus infrastructure, important improvements not generally visible. The contractor has also provided technical specialists from within its corporation when needed to assist with improvements. The administration is also pleased with the contract manager's responsiveness and dedication. His proactive efforts have done much to offset the lingering problems in the administration's view of the contract, as has the contractor's willingness to negotiate changes to the contract.

Successful resolution of the personnel issues, and renegotiating several of the contract's management fees, appear to be central to the contract's continuation. In the president's mind, no doubt reinforced by the former director of physical plant, bringing physical plant operations back under the university remains an option. With half the physical plant employees still remaining under the university, including the former director, he believes he still has a core staff that can take the physical plant over and then hire additional staff. The president nonetheless appears committed to efforts to resolve the outstanding problems. If agreement can be reached on personnel, he states, he would be satisfied with some increase in the contract's cost and would support its continuation. The new vice president for fiscal affairs continues vigorous efforts toward that end.

Outsourcing at this small liberal arts university thus remains a work in progress. The bookstore contract is considered highly successful. It generates significant revenues for the university and set a standard. The food services contract is less successful, particularly in catering, but the contractor has promised improvements and the president

seems willing to allow them to try. The physical plant contract is still being negotiated, over a year after it was originally signed, with none of the problems appearing to be intractable. Despite the absence of more than one proven success in outsourcing, the president and vice presidents still remain favorably disposed toward outsourcing as a concept and its benefits to the university.

ANALYSIS AND CONCLUSIONS

This study postulates that an economically-based, financially-driven decision model, when used to outsource higher education in-house functions, may be an incomplete explanation of the process. Focusing on how and why higher education institutions outsource, it seeks a more complete decision model by asking two questions: (1) what non-financial, non-economic considerations play a significant role in outsourcing decisions, and (2) how does their presence affect the decision? Two corollary questions are implied: (a) are costs the major criterion upon which the decision to outsource was made; if not, then (b) what decision model is more appropriate or complete? A review of the literature suggests three hypotheses and associated models. First, outsource decisions are economic-based and financially-driven. Second, outsource decisions are management-based, and driven by possible efficiencies and the benefits of divestiture. Third, outsource decisions are driven by the decision process dynamics inherent in higher education: bureaucratic decision processes, collegial decision processes, or political dynamics decision processes.

Outsource sequencing at the university is similar to outsourcing at the previous case's rural university and demonstrates similar patterns even though the cases are separated by over 20 years. The same campus enterprises are involved: the bookstore, food services, and the campus physical plant. Both outsource efforts began with smaller enterprises, and initial success led to additional outsourcing efforts. Unlike the rural university's experience with outsourcing its food services and bookstore, however, the small university's interest in outsourcing these enterprises was not based on compelling financial concerns. Although the bookstore was not profitable, it was not in danger of default. Food services had been a highly successful enterprise, and the decision to outsource was influenced by the bookstore's successful contract and the president's concern that he would be unable to find a qualified manager to replace the retiring manager. Economic-based, financially-driven concerns were important to the bookstore, but marginal to food services.

The university's justification for outsourcing physical plant management likewise follows the rural university's pattern. Both physical plants were operating adequately, and the decisions to outsource reflect the desire to improve operations and the expectations that outsourcing would offer management-based benefits deriving from economies of scale purchasing and greater productivity. Indeed, the university's vice president for fiscal affairs and director of physical plant drew explicitly and heavily on the rural university's experience.

The decision processes were also similar. In both cases, participation in the decisions to outsource the bookstores and food services was limited to the presidents and

the vice presidents for fiscal affairs. At the rural university, however, financial considerations required quick action, thereby limiting deliberation, whereas at the liberal arts university it appears the president's determination to outsource and both enterprises' limited impact on the campus community could explain the narrow decision processes. On both campuses and with both enterprises, the actions and decisions of the respective presidents and vice presidents nevertheless fall within their organizational and bureaucratic roles and reflect that decision model.

When the decisions were made on both campuses to proceed with outsourcing the physical plants, the decision processes were expanded to include a broader decision group, reflecting in both cases recognition of the wider impact outsourcing physical plant operations would have on the respective campus communities. Of particular importance is the significantly greater cost of the physical plant contracts, and the number of higher skilled and higher paid long-term physical plant employees. Further, in both cases the decisions to outsource the physical plants reflect the collegial decision model. At the small university, however, political dynamics played a marginal role in the bookstore and food services decisions, and a secondary role in the physical plant. This does not imply political dynamics had no impact on outsourcing. To the contrary, concern for the welfare of physical plant employees and the need for their support led directly to the decision to allow employees to choose to go with the contractor or remain with the university. That decision, in turn, is now causing contract and operating difficulties.

To summarize, the economic-based, financially-driven decision model at the university appears to play a less significant role than the management-driven model, and

is an incomplete explanation of the decisions. In all three, there were no compelling needs to outsource for financial reasons or to divest campus operations. Like the first case, these considerations were important but not decisive, and help explain why the decisions were made. The management-based model, postulating that outsourcing can provide efficiencies, increased productivity, and economies of scale, was a primary explanation of why the physical plant was outsourced. More important were the decision process dynamics explaining how the decisions were made: the bureaucratic model in the decisions to outsource the bookstore and food services, and the collegial model in the decision to outsource the physical plant.

Beyond confirming that the decision models provide a more complete explanation of outsource decisions, the university's experience appears to reaffirm the pattern identified in the earlier cases: the higher the value and magnitude of a potential outsource contract, the more significant non-economic and non-financial considerations become. The bookstore's gross sales are now about \$500,000 per year. Food services' sales are running about \$350,000 per year. The physical plant budget, however, is over twice those amounts at \$1.2 million, and represents about 20% of the university's total annual budget.

In addition, together with the rural university's experience, the small university's experience seems to suggest another pattern; on small campuses, bureaucratic and collegial decision models are more likely, and political process decision dynamics are less important. Finally, although the university is experiencing difficulties with two of its three contracts, it nonetheless reaffirms again many benefits associated with

outsourcing. In particular, outsourcing can increase revenues and decrease costs. It can bring up-front resources either unavailable to, or difficult to obtain by campuses. And, it can increase productivity and reduce costs through economies of scale and with a larger labor pool.

Somewhat a surprise, the university's experience with outsourcing did not appear to include explicit or implicit reengineering efforts. With the bookstore, reengineering did not appear to be considered at all. With food services, the enterprise was already successful and reengineering seemed unnecessary. With the physical plant, reengineering was considered unlikely to result in any improvements given the limited skill pool and long-tenures of in-house employees. Likewise a surprise, the management-divestiture model was little in evidence. The president and vice president continue to be actively engaged in managing Food Services and the Physical Plant. An explanation may be that both conclude the food services and physical plant contracts have not proven as successful as anticipated.

"Make/Buy" Competitive Procurement Program

William D. Middleton
Assistant Vice President, Facilities Management

Jay Klingel
Director, Work Management

Richard Fowler
Director, Facilities Operations

William Stauff
Director, Business Operations
University of Virginia

I. INTRODUCTION (William D. Middleton)

Throughout higher education, and the public sector generally, there has been a growing interest in the idea of privatization as a means of reducing costs and improving quality of support services. The perception - and sometimes the reality - is that a public sector or institutional work force is inefficient and non-responsive. We should let the private sector, and competition, work to assure that services are provided at the lowest possible cost and in the most responsive possible manner.

The Federal government has had privatization programs for years, and many state and local governments have followed suit. In Virginia, our former Governor, Gerald Baliles, several years ago mandated a "make/buy" competitive procurement program. This required that we compare the cost of services provided in the public sector with the cost of contracted services.

Even if it isn't required, shouldn't we as prudent managers be doing this as a matter of course?

At the University of Virginia we have given much thought to just how we could best carry out such comparisons, and have developed a program based upon the framework provided by Governor Baliles's "make/buy" executive memorandum.

In developing our program we reached one essential conclusion: The issue is not privatization versus in-house performance; the issue is competition.

David Osborne, who has done a great deal of study and writing on improving efficiency in government, has established as one of his basic guidelines: "Whenever possible, inject competition into public service."

Osborne quotes the city auditor at Phoenix, Arizona, Jim Flanagan, who has discovered there is no truth to the old saw that outside business is always more efficient than government. The important distinction, says Flanagan, is not public versus private, it is monopoly versus competition.

"Where there is competition," says Flanagan, "you get better results, more cost-consciousness and superior service delivery."

In developing our program in Virginia, we didn't want to just trade an in-house monopoly for a contractor monopoly.

Think about it: Isn't this what we often do when we contract out a service ?

In principle, our "make/buy" competitive procurement program is one under which our internal work force competes for facilities projects or service contracts against private sector contractors. In establishing the program we had three principal goals:

1. We wanted to assure ourselves, and our customers, that facilities projects and services are being provided at a satisfactory level of quality and in the most economical manner available.
2. We wanted competition to act as a force to enhance the cost-consciousness, efficiency, and productivity of our internal work force.
3. Similarly, we wanted the force of greater competition to enhance the competitiveness of outside contractors.

We have established as basic policy that we will make the broadest possible use of competitive "make/buy" solicitations for all forms of facility services, whenever

feasible. To do this effectively, we recognized that some fundamental restructuring of our organization and revision of responsibilities would be necessary. The principal changes have been:

1. Our work management department has become our "program manager" for most of the University's facilities maintenance and services budgets allocated directly to facilities management, and acts in a similar capacity for all of our reimbursable customers. Their charge is simply to get the work done for the lowest possible cost at an acceptable level of performance.
2. Our operations department has been recast as an "entrepreneurial" unit which is expected to compete for work much like any private sector business. They are now responsible for establishing pricing and schedules for work performance, and are fully accountable for the financial results.
3. Our business operations unit has established a comprehensive system of financial responsibility centers throughout the facilities management organization. Each such center is held accountable for the profit or loss of their "make/buy" activities.

We initiated this "make/buy" approach at the University of Virginia not quite two years ago, and have now completed more than \$2 million in procurements under this program. Today we'll give you an overview of how we have modified the organization and established procedures to effectively conduct a competitive procurement program, we'll summarize the principal results to date, and will offer some advice based upon this experience for anyone who might be contemplating a similar venture.

Jay Klingel, director of work management, will first discuss the procedures through which his office functions as program manager for facilities projects and services, the several different procedures we've established for our "make/buy" contracts, and our procedures for evaluating bids or proposals and administering "make/buy" contracts.

Next, Dick Fowler, director of facilities operations, will discuss how we've reorganized our principal operating department to make it a more businesslike entrepreneurial unit, how we are using financial responsibility centers as a way of providing management incentives, and how we have begun to change the culture of the organization to provide a greater emphasis on productivity and competitiveness.

Third, Bill Stauff, our director of business operations, will talk about the formulation of the responsibility center concept; our approach to planning, budgeting, reporting, and controlling under this concept; and our cost accounting system.

Finally, we'll talk a bit about the effects of "make/buy" procurement, both as perceived by our customers, and as we have seen it inside the organization, and we'll summarize the results to date and offer advice from our experience for others interested in this competitive procurement approach.

II. "MAKE/BUY" PROGRAM MANAGEMENT (Jay Klingel)

The program has required some fundamental changes in our facilities management organization. As mentioned, the work management office has become more of a program management group.

Our job is to get the maintenance and improvement work completed at the lowest possible cost at an acceptable level of quality. We manage maintenance programs and budgets by controlling the flow of work through a series of "make/buy" comparisons. The work management group no longer has the responsibility to "keep the shops busy", but to do as much maintenance for the money as possible through competitive comparisons.

As we began to implement our ideas on the "make/buy" program, we realized that contract development, or preparing the procurement specifications, would be the first key to a successful program.

The position of service contracts manager was established as part of our work management office. The duties of this position include specification development, procurement coordination, contract administration, and reporting. We were fortunate to attract a candidate with procurement experience in the public sector, bringing the skills and knowledge necessary to establish a consistent and accurate program of writing specifications. By

combining the technical expertise of operations personnel and procurement experience we feel we have been able to develop solid and equitable specifications.

The types of contracts we have established vary from long term (multi-year) service contracts, to yearly unit rate agreements, to spot or lump sum purchases for specific projects. These different types of procurements allow us to compare prices of in house and outside contractors in three distinct ways:

1. Long Term Service Contracts. These contracts are based on providing a basic service on an annual or multi-year basis. Examples of this type of contract for which we have completed "make/buy" comparisons based on direct competition include custodial services, elevator maintenance, grass mowing, and fire detection and inspection.
2. Unit Rate Standing Contracts. These contracts are awarded to outside contractors for yet-to-be determined services based on a unit rate. Once contracts are in place we are able to make an indirect comparison of in-house versus contracted costs for a specific job. Examples of this type of contract include interior paint, suspended ceilings, tile floor, and concrete sidewalks. If our Operations crews are able to provide services at a lower cost than the contract unit rate, the work is assigned to them through that method of indirect comparison.
3. Spot Procurement. These contracts are awarded through a direct competitive bids for a specific project. Examples would be a renovation project, painting the exterior of a building, or moving a department from one facility to another.

Through these three basic procurement methods we feel we have built a foundation to eventually compare costs for virtually the full range of services provided by our Facilities Management organization.

We are obviously unable to develop comprehensive specifications for all services at one time. We have tried to identify those items that would result in the most savings from a competitive comparison. Services that had been traditionally contracted that we felt our own

forces may be able to accomplish and, as well, those services we normally provided with in-house forces that were not competitively priced, were targeted first.

As a state institution, all of our procurements must be in accordance with the Virginia Public Procurement Act. For all our directly competitive comparisons we ask that our Operations Department abide by the same rules as their competition.

The level of quality must be emphasized in the specification. While the cost of services is foremost in many of our minds, especially in our current financial climate, an acceptable level of quality must be maintained. Describing that acceptable level of quality, especially for a service, is perhaps the specifier's most difficult task.

Evaluation of Bids/Proposals

After the need is developed for a particular contract, a solicitation must be issued to both outside contractor and in-house forces. The bid or proposal from our in-house forces is treated almost identically as bids from the private sector. Facilities Operations must develop a bid price based on solicitation requirements and submit it to the same office which issued the solicitation to the private sector. Once bids are received, the in-house bid is compared to the lowest responsible/responsive bid from outside contractors. A "make/buy" analysis is completed based on these two bids. The solicitation requirements may need to be clarified to assure that all parties involved in the procurement have a full and complete understanding.

When evaluating bids/proposals within the "make/buy" program, researching the capabilities of both in-house and the outside contractors is an essential element when making an award. One should take the time to do the necessary research to determine if the apparent low bidder has the capabilities to complete the contracted work. Contractor or in-house capabilities to be researched might include:

- Financial Data/Fund Availability
- Available Technical Equipment/Personnel
- Production/Delivery Capacity
- Quality Assurance Program

After researching the capabilities of Facilities Operations as well as the outside contractor, an award is

made. Various types of information about the award should be provided to both end user departments as well as Facilities Management personnel. Such information would include; what type of contract was awarded, for how long, to whom, and any "make/buy" cost analysis data for key management personnel.

Contract Administration

The Work Management Department has been delegated the responsibility to handle contract administration. This includes the determination of what types of services are to be analyzed under the "make/buy" program, developing specifications, reviewing bids when received, completing a "make/buy" analysis, recommending award, and performing inspections on contracted work.

Work Management is also responsible for coordinating contract work and performing a final inspection on contracted work. This includes the establishment of a tracking system on all contractual work, showing work schedules for each particular contract, establishing project performance dates, and performing final inspection of projects when completed. Whether work is completed by in-house forces or by outside contractors, a quality assurance program should be established to monitor performance and to offer solutions to problems. Work Management monitors and assesses contractual solutions to assure that they are appropriate to the problems and competently implemented.

III. COMPETING UNDER "MAKE/BUY" (Richard Fowler)

Facilities Operations reorganized the maintenance and renovation shops into individual responsibility centers (cost centers). We used zero based methods to establish our budgeting and spread appropriate divisional, departmental and overall assignable Facilities Management overhead to the individual cost centers. We then fine-tuned the billing rates of selected cost centers as required to enhance their competitiveness.

In "make/buy" comparisons we compete head-to-head with successful local contractors. An examination of examining fourteen recent "make/buy" comparisons for our renovations shops during the 1991-92 time frame reveals that Facilities Operations was low bidder on nine projects at an average of 15% below the next low bidder. However, in this tight economy we have found that some contractors were providing loss leaders just to make payroll. Our

renovations superintendents have been actively courting project managers and customer facilities representatives to learn of additional work opportunities.

Some of the problems associated with the "make/buy" approach include a diminished control of our work load. Our backlog of work has been reduced significantly because the decision point in determining when we are awarded projects has been delayed until very late in the life of a project.

Additionally, the recessive economy contributed to a paucity of projects of any sort to be accomplished. Due to our competitive environment, we have been forced to reduce the amount of advice, pricing and other "free" services we previously provided to others.

We have increased our productivity awareness and have actively marketed our services to the University community. We have additionally solicited work from other state agencies and local governments. This has provided opportunities for us to perform sign making, asbestos removal consulting, furniture renewal and establishing recycling programs for local school systems. We have started putting on "dog-and-pony" shows to demonstrate our capabilities and to foster the thought that work could be cost-effectively accomplished by us during this period of diminished activity.

We have additionally begun a series of discussions with customers concerning performing design-build projects using our own staff and teaming up with Facilities Planning & Construction Department to buy their professional design services for either a piece of the action or on an hourly rate basis. We feel that we can best serve our customers by striking a deal based on a guaranteed maximum price with a negotiated shared savings based on perceived risk to both parties. This procedure not only makes us an advocate for the customer since we both have a strong interest in bringing in a project as cheaply as possible but it takes much of the guesswork out of the composition and timing of our backlog of work, as well as puts a project on an expedited track.

The "make/buy" approach has been a little scary due mainly to the overall economy rather than due to the competitiveness of the system. It has caused the adrenalin to pump a little faster during our work days.

IV. RESPONSIBILITY CENTER ACCOUNTING (William Stauff)

Cost center restructuring is necessary when a company reorganizes. An APPA evaluation team and an independent facilities consultant organization made recommendations resulting in changes to our organization. Cost center restructuring followed based on a three-fold harmony of establishing the cost system with budgets in sync with the organizational structure (Figure 1).

We reviewed our organization and established responsibility units for each service that we provide. We designed the system to assess the achievement of each profit center including that of the manager in control of its operation. Plumbing supervisors now take on an additional task as fiscal manager, as well as a service oriented manager. Up to this time, forty million dollars (\$40,000,000) was controlled by few and spent by many.

Planning, budgeting, reporting, and controlling is now by profit center. The general theory is to delegate responsibility for managing expenditures to the supervisor at the point where the costs are generated. Decentralization of accountability is now in place. The first quarter review of fiscal year 1991-1992 was an interesting phenomenon. Many of the cost center managers' profit centers were in the "black." In many cases their revenues were down, but the new reporting enabled them to see their bottom line and thus hold back discretionary expenses. So far it's working!

Zero-based budgeting is now in place. Ronald Blickhahn, who applied zero based budgeting at Duke, emphasized: "This system requires each function, activity or program to be justified on the basis of its own merit to the organization. Zero-based budgeting calls for resource allocations to be committed only after each activity or program is analyzed and justified from scratch or 'based' zero."

Thirty-three cost center managers prepare budgets which are reviewed and approved in accordance with established organizational goals and objectives.

The cost accounting system is part of the Facilities Management system (FMS). David J. Gojdics from Emory University, talks about the need for a university's facilities management system to be "the primary planning and control tool of the physical plant department." The system that the University of Virginia is putting in place

allows the facilities management budget structure to be arranged in cost centers that match the various functions or shops. The system has the capability to summarize cost and budget data in the NACUBO/APPA reporting formats (Figure 2). The accounting system integrates with the facilities management system and interfaces with the administrative mainframe for uploading and downloading. The system allows users on-line access and query capability.

V. The Results of "Make/Buy" (Jay Klingel)

We felt it was important to track the progress of the "make/buy" program both in terms of the number and types of procurements as well as the financial impact. We are tracking the cost differential between Facilities Management's proposals and the low private sector proposals. The difference is not necessarily a savings. For instance, we have traditionally contracted pest control services. In a "make/buy" procurement, if our in-house bid was \$10,000 higher than the low contractor, we haven't saved \$10,000. But, on the other hand, if the in-house bid was \$10,000 lower, we have, in effect, "saved" that amount due to injecting competition. Thus the actual savings realized by the program represents the differential of proposals for those services for which the traditional provider changed as a result of competition.

We have been tracking the financial results of "make/buy" procurements since January 1991. Through March of 1992 a total dollar volume of \$1.99 million had been awarded as a result of "make/buy" comparisons. Of that total, 75% has been awarded to in-house forces. The cumulative differential of in-house bids and the low private contractor bid is \$.59 million. Attached is the reporting format we've developed, indicating financial information through the third quarter of fiscal year 1991-92 (Figure 3).

Effects on the Organization

We've mentioned the move in our organization toward a more entrepreneurial attitude and approach by our operations area. The "make/buy" program forces this approach due to the fact that as more and more basic services are competitively procured, the operations group must become more innovative, more business-like in order to acquire the work to recover their expenses.

We found early in the program that some of our shops, because of rate structures, were unable to compete with the private sector. This resulted, positively, in a lower price for those services.

Negatively, employees in these shops were unable to obtain work. Ultimately some positions were terminated and these employees were either transferred or, in some cases, laid-off. So, there are admittedly morale implications due to the "make/buy" program.

Many employees feel threatened by the possibilities that "make/buy" comparisons present. There are constraints in the Virginia State personnel and procurement systems that limit flexibility in many cases. However, we are finding that those individuals that are confident in themselves and their work are welcoming the challenges that the program offers. Those of us who have heard that "Facilities Management takes too long and costs too much" welcome the opportunity to compete with private contractors, and demonstrate the cost effectiveness of public sector work.

The assumption that private business is always more efficient than government or public work is not accepted in our organization.

We feel that appropriate levels of competitive comparisons will not only reveal where efficiencies currently lie, but will enhance efficiency in both the public and private sector service providers.

One of the key differences between public and private sector business is, of course, profit motivation. Through competition, the private sector earns profit. The public sector, traditionally, has no profit motivation. By combining the concepts of competitive comparisons for services and facilities endowments, the public sector can make a case for earning not a personal profit, but a public profit. By confronting the bureaucratic tendencies of complacency and centralization, we hope to become less of a bureaucratic public organization and more of a competitive entrepreneurial public organization.
