PLANNING FOR A DECENTRALIZED BUDGET MODEL: ANTICIPATING CHANGE IN HIGHER EDUCATION

by

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(Under the Direction of Robert Toutkoushian)

ABSTRACT

Designing and planning for a new budget model at a college or university requires commitment from leaders throughout the organization. Leaders must spend a significant amount of time on research, strategy development, and negotiating the guiding principles of the redesign. Creating arenas where differences among the community members are surfaced and compromises can be reached is a critical component of successful organizational change in higher education. The University of Virginia's early planning and development for a new decentralized budget model illustrates how one public institution approaches these issues. Their new model incorporates the basic tenants of Responsibility Center Management. The early planning and design efforts focused on researching peer institutions that adopted similar models to inform decision makers about the various approaches to RCM and the potential drawbacks of adopting the model. This study identifies the importance of strong financial reporting, transparency in the budgeting process, leadership and project management, and appropriate communication

to the entire community about the budget redesign. The study also discusses one approach to differential tuition and the political limitations of raising undergraduate tuition at a public institution.

INDEX WORDS: Responsibility Center Management, the University of Virginia,

Transparency, Leadership, Project Management, Systems,

Budgeting, Strategy, Organizational Change, Higher Education,

Tuition, Public Institution

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DEDICATION

This research is dedicated to my family, whose support and encouragement helped me throughout this academic journey. Trish, your willingness to put up with long weekends of single parenthood, unwavering words of encouragement, and understanding gave me the confidence and determination to see this through. And to Nate, who accepted my many absences from home, t-ball games and quality father and son time. And finally, I dedicate this dissertation to my parents, who instilled in me their values and beliefs in the importance of education.

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CHAPTER 1: INTRODUCTION

Organizational change is a complex and daunting undertaking for any organization. It can be particularly challenging in higher education, where institutions are characterized by diverse populations, competing missions, and loosely coupled organizational structures. Understanding how leaders in such environments encourage and plan for change is important, and looking at particular efforts can help others plan for similar change efforts. Budget model redesigns represent one such opportunity to study an organizational change process, as they often impact every aspect of the institution and can serve as a catalyst for significant organizational change.

Over the past two decades decentralized budgeting models such as Responsibility Center Management (RCM) have become popular among institutions of higher education. Its beginnings can be traced back to successful private institutions such as Harvard and Cornell, but RCM is becoming increasingly popular with public institutions (Hearn, Lewis, Kallsen, Holdsworth, & Jones, 2006). The model purports to place decision making responsibilities in the hands of individuals who are closest to the action, which should lead to better decisions, tighter cost controls, and entrepreneurial revenue generating activities (Whalen, 1991). Critics of decentralized models point to issues such as duplication of efforts, unhealthy competition between units for student revenue, and a lack of adequate financial management training at the unit levels. However, such problems have not deterred public institutions that are looking for any ideas that can help combat the fiscal issues that plague the higher education sector.

The latest recession and its resulting aftermath have left many public institutions in troubling financial conditions. Most state governments, facing budget challenges of their own, have cut public funding for higher education. The resulting cuts coupled with expanding entitlement commitments for the states mean that many schools are facing the likelihood that public funding for higher education will continue to decline for the foreseeable future. This is putting pressure on student tuition and fees and encouraging institutions to pursue other revenue generating activities (Yudof, 2002; Weisbrod, Ballou, & Asch, 2008).

This study looks at how one public research institution, the University of Virginia, is planning for its move to a RCM or decentralized budgeting model. In particular, the study focuses on why the university feels the move is necessary and how participants at different levels of the organization prepare and plan for the changes associated with the new model. Most studies of RCM initiatives are case studies of individual institutions and their post implementation reviews, which are often 5 or 10 years after the model was first implemented (Courant & Knepp, 2008; Gros Louis & Thompson, 2002; Hearn et al., 2006). These studies are useful in that they provide perspectives on how successful the new budget models are and the challenges associated with living in the new system. However, there is little focus on how these institutions planned for the new budget or negotiated such complicated issues as how to set tax rates and allocation models, built institutional buy-in, and linked the new model to strategic planning in the organization. These difficult early decisions and the collaboration necessary to build a working budget model are key elements to the eventual success of the change initiative and its acceptance among members of the community. Research on organizational change in higher

education has highlighted the importance of the perceived legitimacy of the change and the political skill used to promote it (Leslie, Oaxaca, & Rhoades, 2002). Understanding how complicated issues are identified, negotiated, and resolved both from the perspective of the central administrators and the leadership within the various units is important for the campus community involved and can be instructive for other institutions looking at similar projects.

I chose the University of Virginia (UVa) as the focus of my study because it offered the opportunity to explore the early stages of a major budget redesign. The university suffers from a number of the common problems facing many public institutions including declining state support, political pressures to keep tuition and fees low, and units with competing missions and goals. While UVa has done a remarkable job of fundraising over the past two decades, the university still relies on the typical public institution funding sources of tuition and fees and state appropriations to meet the academic missions of the organization. As figure 1 illustrates the amount of state appropriations has been on a steady decline since the 1990's, and tuition has been steadily increasing over the past decade. The combined total of these two revenue streams has remained fairly constant over the last five years as dramatic state cuts have been offset by larger tuition increases. To address this issue, the university began looking at a decentralized budget model as one way to incentivize deans to pursue more revenue generating opportunities and control costs to minimize expenses and find more efficiency in university operations.

The University of Virginia is one on the top public research universities in the country according to *US News and World Report's* annual rankings. It is consistently

rated as one of the best values in higher education by the *Princeton Review* and *USA Today*. This is all done in a climate marked by declining state support that has resulted in significant budget cuts and the shift of a larger burden on private fundraising and on students to cover the costs of their education. The senior leadership at the university recognized that the revenue mix for the university needed to diversify to meet the changing fiscal environment. Under President John Casteen the university began to focus its efforts on fundraising and made significant strides in building one of the largest endowments for a public school of its size (see table 1).

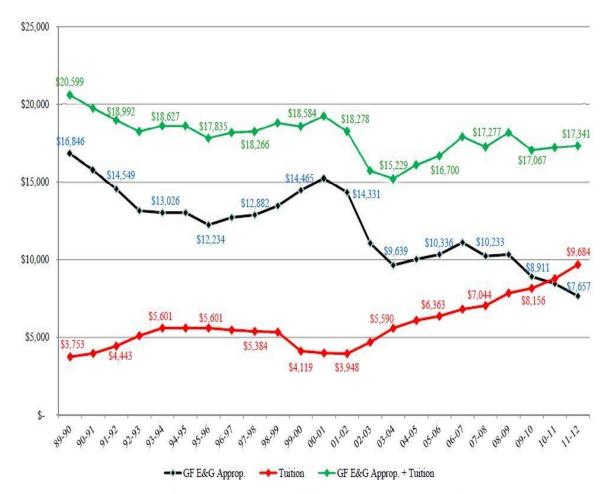


Figure 1. University of Virginia Budget Office (2011) Historical General Funds E&G Appropriation and Tuition (in 2011 dollars), Per In-State FTE Student

Table 1: Endowments per FTE at Public Research Institutions

Institution	Value of Endowment	Endowment per FTE
	Beginning FY 2008-09	Enrollment
University of Michigan	\$7,462,302,000	\$128,894
University of Virginia	\$4,517,750,000	\$145,086
The University of Texas	\$2,772,785,830	\$52,625
University of Minnesota	\$2,722,154,440	\$42,663
University of North Carolina	\$2,335,824,025	\$71,474

Source: U.S. Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS)

However, the new fundraising dollars alone were not sufficient to make up for the continuing decline of state funding. Virginia institutions began to steadily increase tuition to help offset the funding gaps. Leaders both inside the schools and in the state

government recognized that need for redefining the relationship between the state and higher education. Virginia passed a law allowing for greater operating freedoms for public universities and colleges in exchange for achieving performance benchmarks in 2005. The law was initially pursued by the three largest public universities in the state: Virginia Tech, the College of William and Mary, and the University of Virginia. The three schools were looking to address a number of problems including rigid and inflexible state rules and regulations, tuition setting control, declining and erratic state appropriations, unequal market positions, management strength, and political clout among the state's public colleges and schools. Also, there were a handful of schools like the University of Virginia's law and business schools that were incrementally experimenting with independence from state appropriations and setting a precedent for increased autonomy (Leslie & Berdahl, 2008). However, as part of the agreement, the state instituted strict accountability guidelines to ensure some oversight over university activities. This formal structure for enforcing accountability standards represents a general trend in a state's relationship with its public institutions, who are encouraged to decentralize and pursue some degree of autonomy as long as they meet some state guidelines about the product they deliver (Burke, 2005).

The University of Virginia has also experienced a significant amount of turnover in the past three years in its senior leadership positions. President John Casteen retired in August of 2010 after a 20 year tenure, a particularly long period for a university president. Along with Casteen, the executive vice president and chief operating officer, Leonard Sandridge also announced his retirement in July of 2011 after more than a 30 year career at the university. Of the 11 schools that make up the university, 10 have a

dean who has served 3 or fewer years in that role. While this turnover in leadership represents a significant amount of change for the university community, it also creates opportunities to assess organizational structures and approaches and perhaps questioning whether or not the status quo is the best way to operate going forward.

The focus of this study is on how organizational leaders at UVa determine what impacts the new model may have on their unit or the organization as a whole, and what steps they took and plan to take to ensure faculty members, administrators, and staff are aware, involved, and prepared for adopting the new model. The study does not show the end results of the implementation, or even details of how the new model will be applied in the organization as many of these decisions have yet to be made. However, it does provide valuable information on the early stages of the education process associated with adopting a decentralized budgeting model and illustrates how one organization in higher education lays the groundwork for significant change. The study illustrates why nearly every leader in the organization supports the need for the new decentralized budget model, but also surfaces the challenges associated with getting agreement on how the model should be designed to meet the various objectives of the university. Building a foundation for change is essential for its ultimate success. The approach to starting a change effort is not unique to this particular project, and other institutions could use the findings to help guide their initial planning of a similar significant change initiative.

Finally, the study illustrates how the budget redesign process provides insight into the strategic priorities of the organization and how they are supported. The new budget model represents a significant shift in how the various units within the university operate.

As Priest (2002) pointed out, "When new budgeting systems are implemented the process

becomes a case study in organizational change as the new system lays bare the realities of the campus on which the change is being implemented" (p.2). The new budget model clearly defines the resource flows of the university and through this transparency it quickly becomes apparent what the administration values to support its varied missions.

Understanding how the organization fosters an environment where change is possible, particularly in a loosely coupled sector like higher education is important. Navigating the diverse views and approaches to the budget model is a difficult task, as it is in any change effort. Building the arenas where these disagreements can be addressed is critical to the success of the project. Understanding how leaders in various areas navigate the often contentious issues associated with the model and organizational change in general could prove useful for any leader in higher education.

Organizational change is a complex and important topic for leaders in any economic sector. Whether it is looking at how organizations respond to changes in their environment, or simply how a small team in an organization works to improve its output, effectively managing change is an important skill for any member of the organization.

As Machiavelli points out:

It must be realized that there is nothing more difficult to plan, more uncertain of success, or more dangerous to manage than the establishment of a new order of [things], for he who introduces [change] makes enemies of all those who derived advantage from the old order and finds but lukewarm defenders among those who stand to gain from the new one (Machiavelli, 1513).

This somber observation paints a rather bleak picture for organizations embarking on a major change initiative. How members within the organization respond to change is often dependent on many variables. Current research on organizational change suggests that the process can best be explained through political, social-cognition, and cultural

models where the individuals in the organization are responding to changes based on their own personal constructs of reality and what change means to them (Bolman & Deal, 2008; Kezar, 2001).

My research questions center around how individuals within an institution anticipate and respond to significant change. I addressed three question themes in my research. The first was to look at how select individuals within the institution are approaching moving to the new model. Do individuals feel involved in the change process, and what, if anything, are they doing to prepare themselves for the change? Second, I looked at how individuals are planning to use the new model to move their unit or department forward. And finally what can other institutions learn from the University of Virginia's approach to its budget planning and early efforts? The university faces typical issues such as a decline in state appropriations, rising tuition and fees, and increasingly autonomous units looking for a budget and management model that fits the mold of a contemporary college or university. Understanding how individuals within the organization plan and respond to such a change could help other institutions in their preparation for a similar initiative.

Higher education organizations have some unique characteristics that make change in its sector even more challenging for its members. An institution is often characterized by a fragmented population of faculty, staff, administrators, students, and external parties that have varied and in some cases competing goals (Slaughter & Rhoades, 2004; Weisbrod et al, 2008). The higher education sector is a mix of private and public institutions that serve a diverse base of students and employees. These characteristics make rational, structured change difficult to manage and implement.

Understanding how leaders in higher education anticipate change and prepare their areas of influence to be more accepting of the change is a necessity in today's turbulent environment. Declining state support, the changing demographics of students, the increase of part-time faculty, and the rising costs of tuition and fees are just some of the many issues forcing institutions to change and adapt to their new environments. Issues around decentralized budgeting such as revenue allocation models, negotiating tax rates, and the training and education organizations need to successfully manage these environments are critical to the eventual success or failure of the model. Leaders who can anticipate what these changes mean to their constituents can prepare their organization to not only accept the new environment, but also prepare them to be successful.

CHAPTER 2: LITERATURE REVIEW

When conducting a study on planning for a Responsibility Center Management (RCM) budget model and organizational change it is important to look at the research around RCM and organizational change, both in general and in terms of higher education. It is also important to understand the current environment of higher education and particularly the relationship between public institutions and their state governments.

Declining State and Federal Support for Higher Education

Higher education has enjoyed a long history of state support for its public universities and colleges. This is based on a number of principles, most dating from colonial times, where states recognized the importance of educating the future leaders of its fledgling democracy and provided a significant portion of the funding and support to ensure its citizens were prepared to be productive members of the community (Thelin, 2004). Communities embraced the idea of the positive externalities such investments would bring to their cities and towns, and booster colleges supported by local governments were founded across the United States. Civic leaders appreciated the importance of educating its citizens, and recognized the economic contributions a thriving college or university could bring to their local communities (Boorstin, 1985).

Federal and state government involvement in higher education expanded significantly with the Morill Acts which helped fund the establishment of land grant

institutions throughout the mid-west in the late 1800s and early 1900s. Federal support for research at the universities began during this period and expanded through the world wars. The GI Bill also greatly expanded the role of the federal government in providing student grants and eventually loans to students in higher education. This led to the massification of higher education as enrollments and access continued to expand through the 1970s (Slaughter & Rhoades, 2004; Thelin, 2004).

The 1980s and 1990s saw a dramatic decrease in the amount of public funding for higher education. Its funding had always been discretionary in nature, and current government entitlement spending like Medicare and Medicaid have limited states' ability to fund such discretionary items (Goldstein & Meisinger, 2005; Slaughter & Rhoades, 2004; Smith, 2000). Couple this with a shift in the tax payer perspective that higher education is a private benefit from its traditional role as a positive externality and the ability of governments to raise taxes to pay for higher education becomes more difficult. Many feel this represents a fundamental shift in how the US views higher education and its relationship with government. The mutually beneficial arrangement where the state provides funding and the university educates productive members of society is deteriorating which is leaving traditionally public funded institutions with too few resources to meet the demands of today's higher education environment (Yudof, 2002).

This decrease in government support has placed pressures on higher education to find revenue sources elsewhere, primarily through increases in tuition and fees (Heller, 2006; Weisbrod et al., 2008). Also, management teams within institutions are increasingly turning toward more entrepreneurial efforts to leverage emerging markets in the knowledge economy (Slaughter & Rhoades, 2004). This is leading to a fundamental

shift in the cultural and political environments within institutions. Rhoades (1998) argues that we are seeing the emergence of the importance of the college administrator and a shift of faculty to a role of managed professionals, where their day to day jobs are increasingly governed by a growing organizational bureaucracy. One university president describes the current environment such that, "Economic, social, and technical factors are stimulating powerful market forces that are likely to drive a massive restructuring of the higher education enterprise. We are being driven toward a revenue-driven, market responsive system" (Duderstadt, 2007).

Another important trend in recent years is the increased demands for accountability both inside and outside the institution. Despite the fact that government support is on the decline, it still represents a substantial portion of the revenues for many public institutions. Also, the states have made a significant investment in the infrastructures of the various campuses. Naturally, government leaders and the tax paying public want to ensure these investments are being diligently managed, and many have concerns based on the rising tuition and fee costs in recent years. Internal accountability issues are also prevalent in the modern higher education institution. As the institutions have grown, the bureaucracy that supports them has grown as well. Couple this with a growing emphasis on specialization and fragmentation within the institutions, and the ability to centrally manage the day to day business of a university becomes very difficult. Indeed, public higher education has enjoyed a trend of decentralization throughout the twentieth century, where governments and leaders within the institutions have allowed decision making authority to move from upper to lower levels of the institutional governance structure (McLendon & Hearn, 2009).

Managing these decentralized environments can be challenging. As the organizations become larger and more diverse, central planning and control becomes more difficult. Administrators began looking for ways to empower local decision makers and leverage their knowledge and expertise in their particular unit.

Organizational Change in Higher Education

Adopting a new budget and management model represents a significant change for the university. RCM has the potential to redefine how units interact with each other and the central administration. It can change how a sub-unit pursues its stated missions or objectives and often demands a new skill set from the individuals charged with designing and implementing the new system. RCM can provide individuals within the organization with newfound responsibilities and decision-making opportunities and a wealth of financial information with which to act on them. But how does such change happen? What are the steps the organization must take to enact such change? Are there unique characteristics for higher education organizations that make their change processes unique from organizations in the traditional business world? The literature on change in higher education provides answers to some of the questions. As Adrianna Kezar (2001) points out in her review of organizational change in higher education, "As a campus begins to engage in a change process, members of the organization need to first examine why they are about to embark on the process, the degree of change needed, and what is the best approach to adopt" (p. iv). An organization preparing for change needs to understand these questions and how they apply to their environment, and theoretical models of change can provide members of the organization with insights into how to instigate and manage the process.

Models of Organizational Change

There is an extensive body of research on organizational change, particularly as it applies to the corporate world. Some of these theories attempt to explain organizational change in rational, evolutionary frameworks, where leaders are key drivers or instruments of change. Other models point to the importance of cultural and symbolic elements of the organization in the change process, where human interactions and perceptions are critical to organizational change. To simplify discussion of the various schools of thought, Kezar groups the various theories into six models: evolutionary, teleological, life cycle, political or dialectal, social cognition, and cultural (Kezar, 2001).

Evolutionary models explain organizational change as a systematic process in response to changes in their environments. Change is driven by the organizations adoption of variations over time, selecting and retaining attributes or characteristics as it competes for scarce resources (Van de Ven & Poole, 1995). Evolutionary theories differ on where the change occurs at a macro or micro level, and how the variations are adopted within the organizations. Those who prescribe to the Darwinian theories of evolution maintain variations are inherited through intergenerational processes that occur gradually over long periods of time (McKelvey, 1982). Others theorists believe that traits can be acquired within a single generation by learning and imitation (McKelvey, 1982; Weick, 1979).

Teleological models are often compared to evolutionary models in their structured approach to organizational change. Its rational, planned approach to change places heavy emphasis on the importance of change agents, management techniques and strategies (Kezar, 2001). In a teleological change model, the organization is trying to achieve a

goal or end state through a purposeful plan of action. However, the change does not occur in a pre-defined way, as the outcomes depend on a decision-making by members of the organization that could take a number of paths to reach their goals based on rational reactions to the environment and the organization's resources (Van de Ven & Poole, 1995).

Teleological models have a number of benefits, but many feel their most important contribution is the recognition of the importance of involvement of organizational members in the change process. This is not limited to just the primary change agents, but also to other members of the organization who can serve as proponents or impediments to change efforts. Teleological models are often criticized for their rational and linear approach to change efforts, which ignores the chaotic process researchers associate with the cultural models (Kezar, 2001). Many critics also feel the models place too much power in the hands of change agents, and that organizations do not simply bend to the will of a few key individuals. Organizations are often complex, and far beyond the ability of one person to control (Birnbaum, 1988).

Life-cycle models take the idea of human involvement in the change process to an even more granular level. Changes within an organization are actually a reflection of the systematic individual changes taking place among its members. Change is not seen as something that is planned; rather it is something that happens naturally as people within the organization progress through individual changes. Life cycle models are related to evolutionary models, but they focus more on human development and less on the deterministic nature associated with its evolutionary cousins (Kezar, 2001; Van de Ven & Poole, 1995). Individual learning and responses to their environment lead to a natural

progression of development, both for the individuals and for the organization as a whole. The roots of the theory lie in early childhood development, where each stage is a steady progression from, startup (birth) to eventual decline (old age), and change is a natural part of development (Kezar, 2001).

Bolman and Deal (2008) refer to the life cycle models in their human resource frames, where change occurs in an organization through human motivation, group dynamics, training, and development. This makes change difficult for individuals as well as organizations, for the change often requires significant retraining and a willingness on the part of the individuals to embrace a different approach to doing their work. This shifts the emphasis of the change process from the importance of a few key individuals, to a model that embraces the importance of people throughout the organization (Kezar, 2001).

In a political or dialectal model, change is the result of conflict and clashes in ideology or belief systems. The forces are competing for power, and it is this competition that creates stability or change. When one opposing faction gains enough power over the others, the status quo is challenged, and the organization adopts change in order to move to some new organizational standard. However, in most cases the change is not exactly what the part who gains power is agitating for, but rather a compromise between the change it wants and the competing views within the organization (Van de Ven & Poole, 1995).

One interesting characteristic of many dialectal models is the assumption that not everyone within the organization is involved. Inactivity from organization members is

common (Baldridge, Curtis, Ecker, & Riley, 1977). Bolman and Deal (2008) highlight some additional common attributes of a political organization.

Organizations are coalitions of assorted individuals and interest groups. Coalition members have enduring differences in values, beliefs, information, interests, and perceptions of reality. Most important decisions involve allocating scare resources – who gets what. Scarce resources and enduring differences put conflict at the center of day-to-day dynamics and make power the most important asset. Goals and decisions emerge from the bargaining and negotiation among competing stakeholders jockeying for their own interests (p.194-195).

Much of the conflict, particularly in higher education, tends to revolve around the scarcity of resources. The lack of resources mobilizes individuals who then agitate for change (Kezar, 2001). But the process of creating change within the organization relies on a number of skills such as agenda setting, networking and coalition building, and bargaining and negotiation (Bolman & Deal, 2008; Kotter, 1985).

These models also explain change that is not always beneficial to the organization. Rational models assume a structured, planned approach to organizational change, but in a political model the change process is often chaotic and difficult to control. It is often a negotiated solution between competing power groups and could be defined as irrational. This process could lead to situations where the change is actually regressive (Kezar, 2001).

Social cognition models place a heavy emphasis on the individual learning within the organization. These models do not presume that there is some sort of shared view of the organization for its individual members. Instead they maintain that as individuals learning more about the organization and its environment they are more likely to achieve cognitive dissonance, where pieces of conflicting information are brought together.

Change occurs as a reaction to this cognitive dissonance, where "people simply reach a

point of cognitive dissonance at which values and actions clash or something seems outmoded, and they decide to change" (Kezar, 2001).

Leaders shape the change process through interpretation and their knowledge of how individuals within the organization interpret and make sense of change. It is up to the individuals within the organization to control the success or failure of a change initiative, and its success can often be attributed to how willing the leadership and the individuals are to let go of past strategies and successes. It entails moving beyond Argyris' single loop learning which retains existing norms, goals, and structures in an attempt to improve current practices. Instead, it requires double loop learning where existing norms and structures are discarded in an attempt to produce innovative change (Argyris, 1982; Kezar, 2001).

Perceptions of the organization and its environment are also an important element of social cognition models. Theories about viewing the organization through different lenses and the belief that there is no one way to see the organization suggest that change can be accomplished through looking at issues through different perspectives (Bolman & Deal, 2008; Kezar, 2001; Weick, 1995). Bolman and Deal (2008) see change as an organizational issue through the structural frame; as a learning and training issue through the human resources frame; as a power and conflict resolution issue through the political frame; and as a cultural issue through the symbolic frame. These different perspectives need to be fostered and encouraged by effective leadership within the organization.

Cultural models of change blend aspects of the social-cognition and political models. They assume change occurs naturally in response to environmental changes, and that cultures are in constant state of change. History, traditions, and myths are important

for understanding the organization and the perceptions of the individuals are shaped by these elements. Organizational change is often irrational, unplanned, and can be either regressive or progressive. The models often seek to explain unintended consequences of the change process. Leaders rely on symbolism, language, and metaphors to guide change processes, but their ability to control the process is often very limited (Kezar, 2001; Schein, 2010).

There has been a great deal of research on the various steps or phases an organization moves through when undergoing change. Approaches such as Kotter's 8 Steps for change agents lays out recommendations for leaders to pursue for effective change. This model includes:

- 1. Establishing a sense of urgency
- 2. Forming a guiding team or coalition who embrace the need for change
- 3. Create a vision to accomplish the desired result
- 4. Communicate the vision through various channels
- 5. Remove or change obstacles such as policies and procedures
- 6. Plan for creating short-term wins, and publicize them
- 7. Consolidate improvements and change other structures that aren't consistent with the vision
- 8. Institutionalize the new approaches by linking the change with organizational success (Kotter, 1996)

This managed process for change, and others like it, highlight the importance of the contextual environment in which the change takes place. Managers and leaders who want to be effective change agents must look at the process through the eyes of the participants, learning about the implications of the change as the members of the organization progress through the process (Armenakis & Bedeian, 1999; Bolman & Deal, 2008; Schein, 1996).

Drawing on the importance of participants learning through the change process, some research has identified stages that participants progress through as part of the process. Isabella points to how individuals participating in the change process interpret the initiative. The first stage is anticipation, where participants construct their own reality based on rumors and incomplete information. The second stage is confirmation, which occurs when the participants have enough information to construct a picture of the change and in many cases attempt to relate it to similar personal experiences. Assumptions on the current change initiative are created on the basis of previous experiences and they form the conventional wisdom for what will happen. The third stage is culmination, where participants discard assumptions made according to conventional wisdom and reframe the event based on what participants feel is actually occurring. This can also be considered the hands-on learning stage of the process. Finally, the fourth stage is aftermath, which is where the event is evaluated and participants build a new frame of reference based on what they perceive as the outcomes of the effort (Isabella, 1990).

Organizational Change Models for Higher Education

The models summarized above can all be used to describe change in a particular organization. However, some researchers suggest that borrowing elements from the various models and combining them into a mixture of different approaches can provide valuable insights. Also the nature of the organization being studied lends itself to particular approaches that might be found across a number of models. This makes it difficult, if not impossible for one model to describe organizational change. Van De Ven and Poole (1995) maintain that one model is not sufficient to explain change, especially

in a higher education setting. However, what is it that makes higher education organizations unique?

Higher education organizations are incredibly complex, and often defy direct comparisons with corporate institutions. Higher education organizations are characterized by ambiguous goals that are difficult to reach consensus on, and in many cases conflict with each other (Weisbrod et al., 2008). They serve clients, such as students, alumni, state politicians, and donors who demand a voice in the decisionmaking process. Faculty members within higher education serve in a professional bureaucracy, where members demand autonomy for their work as well as a voice in the governance of the institution. This also leads to loosely coupled organizations where faculty members have more loyalty to their department or their area of specialization and often exhibit disinterest to governance issues at the institutional level (Baldridge, Curtis, Ecker, & Riley, 2000; Mintzberg, 1979). The culture within higher education is also unique in that it relies more on consensus and is less rational than a traditional corporate environment (Birnbaum, 1988; Kezar, 2001). Cohen and March describe the higher education organization as an organized anarchy with little central control where the president's power is often amorphous and difficult to exercise (Cohen & March, 1986). What combination of models can help to explain organizational change in such a diverse environment?

As stated earlier, organizational change in higher education does not necessarily follow the same change processes that we see in corporate environments. The loosely coupled, decentralized environments that are prevalent in higher education, particularly large research universities, are more likely to follow gradual and evolutionary change

models. These models place less emphasis on the value of strategic vision or strong leadership, and focus more on a conceptual model where individuals within the organization form their own interpretive perspectives on the change and the contexts in which it occurs (Simsek & Louis, 1994). Robert Birnbaum's research into the organizational dynamics of higher education supports a model for change where leaders monitor feedback loops that are placed throughout the organization and adjustments are made based on the information gathered. As the organization becomes more complex the ability of one person to control it becomes difficult. As Birnbaum notes, presidents are still the most influential people on campus, but still must rely on others to effectively run the organization (Birnbaum, 1988). Therefore the organization responds by increasing the number of decision makers who can break down complex problems into smaller units that can be addressed independently of each other. This increase in decentralization creates a natural fit for budget models such as RCM. Change is only considered when something alerts the feedback loops that problems are falling out of the normal selfcorrecting ability of the organization. In a cybernetic organization, the leadership would look at a set of solutions that have shown success in the past, either within the institution or among its peers (Birnbaum, 1988).

George Lueddeke's (1999) framework for guiding change in higher education relies on a constructivist approach where individuals use their own knowledge of the organization to shape their understanding of the environment and any change. As shown in figure 2, his Adaptive-Generative Development Model (A-GDM) contains six elements: 1) needs analysis; 2) research and development; 3) strategy formation and development; 4) resource support; 5) implementation dissemination; and 6) evaluation.

Lueddeke draws heavily on the work of Bolman and Deal and their idea of matching frames to specific change initiatives. Looking at criteria such as commitment and motivation, ambiguity, conflict, resources and whether the change is top down or bottom up are all important elements to understand. Only looking at one or two lens will mean a leader will misread the environment and struggle with the change process, missing the fact that events have different means for people within the organization (Bolman & Deal, 2008; Lueddeke, 1999). Bolman and Deal explain how organizations maintain steady state environments and respond to changes through an emphasis on the importance of organizational culture. This culture relies heavily on rituals, ceremonies, heroes, and myths rather than rules or managerial authority. Also the facts of this culture are constructed by those who live in it (Bolman & Deal, 2008; Lueddeke, 1999).

Lueddeke's framework highlights the importance of individual learning specific to the situation of the learner. The context of the learning influences what the individual learns and what they view as important to study. The A-GD model places more reliance on involving the change participants, even to the point of allowing them to determine whether or not an initiative is worthy based on their own personal experiences. Such an approach involves the entire community, from academics to administrators and staff in a process of identifying concerns and striving for consensus on how to address them (Lueddeke, 1999).



Figure 2. Lueddeke's (1991) Adaptive Generative Model for Organizational Change in Higher Education

Based on her review of the literature on organizational change and its application in higher education, Adrianna Kezar provides some practical guidelines for institutions pursuing change initiatives. Kezar draws upon theories from each type of change model, but emphasizes elements that are particularly important to higher education. Her guidelines include:

- Promoting organizational self-discovery
- Realize that the culture of institution and the types affects change

- Be aware of politics
- Lay groundwork
- Focus on adaptability
- Facilitate interaction to develop new mental models and sensemaking
- Strive to create homeostasis and balance external forces with the internal environment
- Combine traditional teleological tools such as establishing a vision, planning, or strategy, with social cognition, symbolic, and political strategies
- Realize change is a disorderly process
- Promote shared governance or collective decision making
- Articulate and maintain core characteristics

These guidelines can be help shape a model for organizational change in higher education, and more importantly remind leaders that successful change in higher education must entail looking at the organization through multiple frames that recognizes the unique cultural dynamics of colleges and universities (Kezar, 2001).

Responsibility Center Management

Responsibility Center Management (RCM) is one decentralized budgeting approach that many institutions have implemented in the past two decades. RCM attempts to decentralize decision making and move it closer to where the actual revenue is being generated (Whalen, 1991). In higher education, this is often the academic units or schools. RCM pushes accountability for revenues and expenses to these responsibility centers, and provides incentives for the leadership to achieve positive financial performance. With these new responsibilities deans become in effect CEOs, and assume the risk and rewards associated with managing a business environment. The units gain flexibility in their pursuit of revenues and cost control measures, but also assume the

financial consequences of its actions. Balances, both positive and negative, are typically carried over into the next fiscal year (Priest, 2002; Strauss & Curry, 2002).

Public universities began experimenting with RCM in the late 1980s, adopting the process from private universities such as Harvard who often described the budget model as "Every Tub on Its Own Bottom" (Fuller, Morton, & Korschgen, 2005). In fact, there are a number of different terms used to describe Responsibility Center Management. They include Incentive Based Budgeting Systems (IBBS), Value Centered Management (VCM), and Responsibility Center Budgeting (RCB). Irrespective of the terminology used to describe the approach, they all share the same basic principles of decentralization and moving budgeting and management decision making to the individual units (Hearn et al., 2006).

Structure of RCM

To better understand how RCM works, it is often helpful to compare it against the traditional funding model of a public university. Historically, public universities allocate funding to the individual academic and support units from a centrally managed fund. The bulk of the fund is made up of student fees (tuition and student fee charges), indirect cost recovery from research, restricted and unrestricted gifts, and state appropriations. Central administrators determine the funding allocations for the units typically based on some increment of the previous year's budget. The majority of the centrally managed fund is typically the state appropriation and tuition and fees (Goldstein & Meisinger, 2005; Weisbrod et al., 2008).

RCM reverses this central control by moving the budgeting responsibility to the individual units, who receive all, or most of the revenue they generate through tuition and

fees, research grants, and any other revenue generating activities. State appropriations are distributed to the units based upon an agreed upon formula, or through an incentive structure managed by central administrators, but agreed upon by the various unit heads. In addition to revenue allocation agreements, the units also assume the responsibility for covering the costs of running their unit (Fuller et al., 2005; Goldstein & Meisinger, 2005; Whalen, 1991).

In its simplest form, RCM includes a few key elements. The first is the organizational, or responsibility centers that make up the institution. These units usually consist of the academic schools and research units that house the faculty who are charged with teaching students and conducting research. Additional units can include housing, student services, libraries, athletics, and campus police (Whalen, 1991). A responsibility unit is usually determined by how it receives a significant portion of its revenue, and if the revenue generation is a function of what the unit does. Obviously not all of these units have access to revenue streams such as tuition and research dollars. For example, a library does not generate sufficient revenue to support its operations on the functions it performs on a daily basis. In most cases, a unit such as a library would be centrally funded or funded through assessments on other responsibility centers (Courant & Knepp, 2008).

Revenue allocation or attribution of income determines the funding sources for the various units. Income categories include state support, student tuition and fees, course related fees, other fee income, indirect cost recovery income, interest income, rental income, gifts and grants, and auxiliary service charges (Whalen, 1991). State support for public institutions is generally the largest portion of the revenue, despite the

recent declines (Weisbrod et al, 2008, p.30), and the institution allocates the funding based on some accepted formula (number of students, credit hours, central administration discretion). Tuition and student fees make up the bulk of the remainder of the funding for academic units, but even this is not as straightforward as one would hope. Students may be enrolled in one particular school, but they may take courses across several different schools. To ensure schools are receiving the revenue for the courses they are actually teaching, RCM models often rely on formulas that try to capture the true credit hours taught by each school (Courant & Knepp, 2008).

Support service units such as student affairs and campus police forces do not have access to traditional revenue streams such as tuition and fees, and the services they provide are often viewed on campus as free goods. There are a number of approaches RCM models take to address this. Indiana University uses a model where the support units charge or assess the academic units for the services they provide. For example, library services are charged as an assessment to the academic units based on a weighted per student formula. This does two things. First, it provides the necessary revenue for the library responsibility unit, and second, removes the illusion of library services as a free good for the university community (Lang, 1999; Whalen, 1991). Another way some RCM intuitions handle support service units is to continue to fund them centrally. This may not push the true cost of operating the university to the academic units, but it does provide central administration oversight of a key mission resource for the school and avoids a potential politically charged debate over the merits of charging for a traditionally free public good (Courant & Knepp, 2008).

For deans or the leadership in the responsibility center units to assess the impact of their decisions on the unit's budget, they must have a full understanding of the costs associated with their unit. To facilitate this understanding, RCM decentralizes the costs of the entire institution to the individual units. Units are charged for costs such as financial aid, teaching and office space, utilities, and support services from other units. The expectation is that local leadership will recognize the budget impact of decisions such as adding additional course sections, and this recognition will make them more efficient and cognizant of the cost implications of adding additional students (DesJardins, 2009; Lang, 2001; Whalen, 1991).

Subvention is a term used to describe the resources provided from central funds. In many cases it can also be used as a tool by central administrators to influence the responsibility centers and insure that they are following the institutional goals of the organization (Whalen, 2002). In many cases, the individual units need some form of subvention from central to balance their yearly budgets. As John Curry from the University of Southern California explained, "The argument for subvention requires that the individual school makes its case in the context of University-wide goals and priorities. (We imagined a decentralized system integrated by the common need for subvention.)" (Whalen, 1991). There are a number of ways to fund this subvention pool. One is using some portion of the tax receipts charged to individual units, which is often the case with private institutions (Strauss & Curry, 2002). Some public institutions use state allocations to fund its subvention pool, or a mix of state funds and tax receipts (Courant & Knepp, 2008; Hearn et al., 2006).

Theorized Benefits of RCM

One of the major tenets of RCM models is that responsibility for decision making is placed in the hands of leadership at the unit level. It is believed that local leadership has the best information and insight into the impact their decisions will have on revenues and costs for the unit. These units are responsible for setting their revenue and expense targets, and are held accountable for the results. Incentive structures reward units for meeting targets, usually in the form of keeping most of the revenue they generate. Also, the units are often responsible for meeting any deficits and must carry them over into the next budget cycle. The decentralized approach provides strong incentives for revenue growth, entrepreneurial activities, and cost management (Office of Budget and Planning, 2005; Strauss & Curry, 2002).

Improvement in services offered to customers, in this case students, is also often cited as a benefit of RCM based approaches. To protect and grow tuition revenue, recruitment and retention of students become top priorities of academic units, who recognize improved service levels and meeting the expectations of their customer base are important goals (Gros Louis & Thompson, 2002). This customer focused approach also highlights the contributions of the support units like student services, who are responsible for attending to the needs of students outside the classroom. Academic units have a greater appreciation for the importance of these services, and are more willing to pay for them in the form of assessments.

Flexibility is also another important benefit of incentive based budgeting approaches. Not only are units free to respond to market forces as the opportunities arise, but they also have the freedom to respond to unforeseen budget issues. For example, if a

program did not hit its expected enrollment numbers for the current academic year, an academic dean in a RCM setting has the flexibility to move funds from other areas to support the costs associated with running the program below its expected revenue levels (Stocum & Rooney, 1997). Responsibility centers also gain flexibility through their ability to use carry-forwards for long-term strategic planning. Carry forwards are revenues over expected costs that units are allowed to keep from one budget cycle to the next, and serve as incentives or rewards for generating new income streams and effectively managing costs (Priest, 2002). These funds can then be used on strategic goals such as raises, hiring new faculty members, or replacing research equipment in labs.

Budgets in large organizations are complex, and it is often difficult to appreciate the impact a departmental level decision can have on the organization as a whole. Responsibility management is one attempt to simplify this size constraint, as budgeting and resource decisions are moved to the individual units. This reduces layers of institutional management and should provide more transparency to the impact of budget decisions on the individual units (Lang, 1999). In fact, Whalen argues that this benefit of RCM is the primary reason to decentralize management and budgeting decisions. Large organizations can readily reap the benefits of decentralization, while smaller organizations can be effectively managed centrally (Whalen, 1991).

Another benefit of decentralized budgeting is the improved transparency of unit fiscal performance and significant cross subsidies between the various units. A RCM model exposes the revenue and cost structure of the individual units to increased scrutiny. It quickly becomes apparent which units are self-sufficient and which ones are not. Also,

units are forced to take an in depth look at the costs associated with running programs. Identifying potential revenue sources and responding to market opportunities are great benefits of RCM, but understanding costs is a fundamental first step, and it provides the starting point for any discussions about what revenues are needed by the individual units (Gros Louis & Thompson, 2002). With a clear understanding of costs and revenues, the leadership can then make a determination about pursuing new opportunities or moving resources to support underperforming efforts. The cost identification process also provides a clearer picture of programs that will never be self-sufficient, but nevertheless serve as important contributors to the academic mission of the school (Whalen, 1991). Improved transparency also applies to the central administrators of the institution as well. Strategic decisions for subvention and other incentives used under RCM are public knowledge, and presidents and provosts must defend these decisions on a regular basis (Strauss & Curry, 2002). The improved transparency from RCM makes it readily apparent to the community what programs are strategically important to the university based on subvention and other support from central funds.

A more thorough understanding of cross-subsidies is another important benefit of careful cost and revenue tracking under RCM. Cross-subsidies are programs that span academic or responsibility units where one unit may reap the benefits of the efforts of another unit. For example, students enrolled in the business school may be required to take courses in math or economics that are taught in other schools within the university. Most RCM models find ways to ensure the unit performing the actual instruction is compensated for the expense of teaching the students (Courant & Knepp, 2008; Gros Louis & Thompson, 2002).

Finally, incentive based budgeting models allow central administrators to focus more on institutional strategy and not the day to day duties of budgeting for the university. This frees administrators to focus on shaping institutional objectives, establish priorities and policies, pursue long-term planning and strategy, and coordinate activities among the various units (Massy, 1996; Whalen, 1991). The budgets of the individual units should clearly reflect the institutional goals of the organization. RCM should provide the details on how the individual units are aligning resources to these institutional goals and objectives (Strauss & Curry, 2002).

Incentive based budgeting can also be used as a tool by central administrators to shape or direct units with incentives for performance. For example, some central administrators may institute tax policies to discourage hoarding of carry forwards and spur investment of resources, or direct central funds to an underperforming unit that is important to the academic mission of the school (Stocum & Rooney, 1997). Central administrators at the University of Southern California require deans to submit requests to use their surplus funds. This forces deans to justify their requests, and provides oversight for the provost, who can ensure funds are being used properly to meet the strategic needs of the institution (Rahnamay-Azar, 2008).

Theorized Drawbacks of RCM

There are a number of potential issues associated with RCM and incentive based budgeting models. Naturally, many in academia lament what they perceive as the growing corporate influence in higher education. They see the budgeting and management models like RCM as a capitulation to market forces which stand in stark contrast to the traditional role of education for the public good. The encroachment of too

much of a focus on the economics of managing revenues and costs undermines the educational policies that should be driven by cultural, moral, civic, and religious enterprises (Adams, 1997).

One of the primary concerns with RCM is that it could encourage the unit to seek revenue maximization that benefits the unit, but at the expense of the university as a whole. For example, a unit may offer programs that generate revenue, but do not meet the rigorous academic standards of the institution. The unit is tempted to relax academic standards to encourage increased enrollments, but the reputation of the institution as a whole suffers due to the resulting decrease in quality (Priest, 2002). With resources at the control of the individual units, it is difficult for central administrators to encourage behavior for the good of the entire organization. The rigorous focus on cost control also encourages units to fill teaching positions with part-time or adjunct faculty in an effort to maximize teaching hours at the lowest possible cost. This puts pressure on the units to reduce the number of professors; increase faculty teaching loads; support only funded research; and eliminate programs with small enrollments despite their cultural value (Adams, 1997).

If tuition revenue follows the student, this could lead to increased competition between units for students or credit hours to capture this revenue. The increased competition could foster distrust and self-serving activities such as advising students to take courses in one unit versus courses in another. The units may lack proper incentives to collaborate and provide service teaching if the proper reward mechanisms are not in place to foster such activities. A profitable academic unit may resent the size of the tax rate assessed by central administrators, especially if the tax revenue is used to support

underperforming, but mission important units. Productive units may view the underperforming units as free-riding on their unit's productivity (Adams, 1997; Lang, 2001).

Responsibility centers also have a tendency to duplicate efforts to leverage a potential revenue generating opportunity (Hearn, 2008). For example, a business school may be tempted to hire adjunct faculty members to teach required introductory math courses that are traditionally taught in a different academic unit. Under this approach, the business school would protect its tuition revenue stream for the credit hours the students would normally be using in a different unit, but this does not optimize the resources of the university as a whole since the classes could easily be handled by the existing math department. RCM's encouragement of revenue maximization at the unit level can create scenarios where duplication of efforts and non-optimal uses of academic resources are commonplace (Goldstein & Meisinger, 2005). Units are also incentivized to encourage students to take classes within their departments or responsibility units. This may maximize revenue for the unit, but it creates an atmosphere where faculty advisors are steering students toward courses that help the bottom-line, at the expense of the educational growth of the student (Adams, 1997).

Incentive based budgeting approaches create another challenge for universities as it becomes difficult to adequately fund institutional wide efforts since the bulk of the university's revenues have been returned to the various responsibility centers (Rodas, 2001). Central administrators must either reclaim some of that revenue through taxation or build consensus among responsibility centers that a project should be funded through some charged assessment to the various units. Formulas for taxation or assessments can

be complex (Whalen, 1991), further complicating the implementation and acceptance of RCM models. Tax rates and assessments are difficult to determine, and require significant long term strategic planning by central administrators. These administrators must not only have a strong understanding of the units that will need general fund or subvention support, but also have access to enough resources to ensure strategic new investments outside the individual units can be adequately funded (Strauss & Curry, 2002).

Pushing greater budgeting and management decision-making to the individual units also uncovers another perceived weakness of RCM models, which is the lack of experience many deans and departmental leaders have with managing complex financial budget models. For example, most deans are appointed by faculty and traditionally come from the academic side of the organization. The new demands placed on local leadership are often outside the comfort and experience zone of many academic leaders. RCM models essentially make the deans of the units into CEOs, and they lack the training to be effective fiscal managers (Lang, 1999; Priest, 2002). As Strauss and Curry point out, "entrepreneurial systems do not necessarily create entrepreneurs" (2002, p. 40). The institutional leaders must be willing to make changes at the unit level to ensure their leadership has the correct skill set for managing in this new environment (Strauss & Curry, 2002).

Ultimately RCM models tend to place an increasing emphasis on tuition to fund the unit activities. Tuition is one of the main revenue sources that responsibility centers can influence, either through pursuing more student enrollments or through increasing tuition and fee charges. Some RCM models allow units to charge differential tuition and

fees, which reflects the different education costs among units and in some cases leverages the premium a professional school education may bring in the job market. This causes a number of problems. For one, in public universities tuition and fees have never been an adequate measure of the cost of providing higher education (Weisbrod et al., 2008) Tuition is heavily subsidized, either through state allocations or other revenue sources such as fund raising. An unfortunate side-effect of this tuition subsidy is that the public has no real appreciation for what it costs to educate a student. The general public naturally reacts against what it sees as out of control tuition increases as higher education shifts more of the burden of paying for education onto the private sector (Smith, 2000). Secondly, many units do not have the autonomy necessary to set tuition rates at adequate levels to recoup the costs of educating a student and even where they do, it may be politically unpalatable to set the rates at an appropriate level. In many cases, tuition is still set by other state entities such as the governor or the state legislature, and large increases are very unlikely (AASCU State Relations and Policy Analysis Research Team, 2010).

There are a number of significant costs associated with making the switch to a decentralized budgeting system. For one, adequate information systems are needed to support the reporting demands deans will need in order to make informed decisions.

These systems need to be designed with the individual units in mind, but funded and maintained centrally (Lang, 2002; Strauss & Curry, 2002; Whalen, 1991; Whalen, 2002).

Finally, it is unclear if the RCM or other incentive based budgeting efforts are producing measurable results that would vindicate its adoption by an organization.

Outcomes for higher education are difficult to measure, and institutions try to achieve a

variety of goals simultaneously and in many cases those goals are often in conflict.

Measures such as the number of published articles or the number of graduates are often common statistics cited for outcomes, but these measures say very little about the actual quality of the outputs (Cohn, Rhine, & Santos, 1989; Priest, 2002; Toutkoushian & Danielson, 2002). Adopting decentralized budgeting and management structures to encourage increased productivity and improve educational outcomes are difficult to justify if one cannot point to empirical evidence to support the cost of transitioning to the new information systems necessary to support the model. In theory, educational quality should improve as units use this focus on quality to attract perspective students.

However at Indiana, many felt it was quantity not quality that was driving teaching approaches as units added additional sections of popular courses or created new more appealing courses (Gros Louis & Thompson, 2002).

Research Findings on RCM

The literature on RCM primarily deals with structures and the theories behind how RCMs are implemented at various universities, and the observed results of specific implementations. While case studies of RCM at particular schools are not sufficient to make definitive statements about the success or failure of the budget and management approach in general, the research literature does provide scholars and practitioners with examples of what one can expect to find in a typical RCM implementation.

Edward Whalen, who was heavily involved in Indiana University's implementation of RCM, gives a detailed description of the mechanics of the Indiana implementation. Indiana was the first public institution to implement RCM, so Whalen's descriptions of revenue and cost allocation from the public perspective serves as roadmap

for many early public adopters (Whalen, 1991). However, Whalen's heavily formula driven approach has fallen out of favor with recent implementations, where the focus has turned to simpler allocation models that are easier for participants to understand (Courant & Knepp, 2008). Kenneth Gros Louis and Maynard Thompson conducted a case study of two RCM reviews at Indiana in 1995-1996 and 1999-2000. Their findings highlighted the initial expectations about what the new budget model would bring to the university and what the reviews found actually happened in practice (Gros Louis & Thompson, 2002).

One interesting finding was that the RCM system at Indiana actually benefits students more than originally expected. To protect student enrollments and their corresponding revenue, schools now had an incentive to maximize seats for popular courses, eliminating the previous problems with shortages as those courses quickly filled to capacity. Schools that have previously limited course offerings for non-majors are now providing quality courses for all students. This helped the bottom line for the school, and provided the students with an opportunity to acquire a more well-rounded education. In addition, a larger percentage of the university's operating budget was being dedicated to instruction. Finally, student satisfaction survey results showed dramatic increases in customer satisfaction after the RCM implementation. Many felt that the accountability relationship RCM created between the various schools and their internal service providers such as Student Services and Financial Aid offices was a direct contributor to this increase in customer satisfaction (Gros Louis & Thompson, 2002).

Stocum and Rooney (1997) discussed their experiences in the School of Science at Indiana, where their school implemented RCM down to the department level in order

to capture more of the expected benefits of RCM. The RCM model implemented at the School of Science broke with the traditional model of implementing RCM at the Dean level. In the traditional model the Dean allocated resources to the various departments based on the lobbying efforts of departmental chairs or complex resource allocation models. The School of Science decided to push the financial decision making to the department chair and faculty level as this level was responsible for most revenue and expense generation within the school. After implementing RCM, the School of Science experienced an increase of annual income of 56%, increases in starting salaries by 10%, and the addition of 10 new faculty and 17 staff positions during the period of 1990 to 1997 (p. 56). Not all these gains can be solely attributed to the RCM implementation, but the new budget model certainly contributed to the dramatic turnaround of what was then an underperforming school within the university.

Not all the findings of the RCM review at Indiana were positive. Gros Louis and Thompson (2002) lamented the misconceptions and myths associated with the RCM implementation at Indiana. For example, many in the community voiced concerns about RCM's impact on competition between the various schools, where units would attempt to poach students and their associated tuition revenue by offering courses traditionally taught in other units. However, there was no evidence to support the claims (Gros Louis & Thompson, 2002). Stocum and Rooney (1997) highlight one of the fundamental challenges in any RCM implementation, which is the ability of the dean or department chair to operate their unit as part of the greater university. RCM encourages activities that maximize returns at the various levels of the organization, and an actor's inability to see their unit as part of the entire organization may hinder the university as a whole, as all

efforts are focused on maximizing the local unit's performance. Finding deans, faculty members, and central administrators who can think in these strategic terms is often difficult.

In general, the 1995-1996 and 1999-2000 reviews of the RCM implementation at Indiana were positive. Several recommendations were made to tweak the system, but overall the reviews found RCM had a positive effect on the schools ability to meet its academic goals (Gros Louis & Thompson, 2002). Stocum and Rooney (1997) felt "this type of decentralized management is at least a partial antidote to the outmoded, short-term approach of simple downsizing as a means of increasing organizational efficiency and effectiveness" (p. 57).

The University of Minnesota implemented their hybrid version of RCM in the 1997-1998 fiscal year. The hybrid model, dubbed Incentives for Managed Growth (IMG), consisted of allocation of revenues such as tuition and other funds generated by the units being returned to the school that generated them, coupled with funds such as state appropriations that were still distributed centrally (Hearn et al., 2006). There were two prominent studies of Minnesota's experiences with IMG. The first was a quantitative study by Kallsen, Oju, Baylor, and Bruininks (2001). The study looked at several presumed characteristics of RCM to see if perceptions matched the actual data. The first question was to see what impact RCM had on the revenue flows to the various academic units. With the exception of one school, all the units saw greater revenue growth after the RCM implementation (Kallsen, Oju, Baylor, & Bruininks, 2001). Also, the academic support units such as libraries and information technology have also experienced revenue growth. Of course, all of this growth cannot be solely attributed to RCM, but the initial

fears of units being separated into "winners and losers" such as the College of Liberal Arts and the various academic support units appear to be unfounded (Kallsen et al., 2001).

Next the researchers wanted to confirm one of the basic tenets of RCM, namely that resources flow to the areas that are generating additional revenue. Kallsen, et al. (2001), found that RCM did indeed reward units generating revenue with additional resources, particularly in the case of indirect cost recovery (ICR). Minnesota moved from a discretionary, central administered allocation strategy for ICR to a model that returned ICR to the units that generated the sponsored awards. The researchers found the new RCM formula approach delivered a nearly perfect flow of revenue to the units generating the research, and removed much of the uncertainty around ICR disbursements (Kallsen et al., 2001).

Kallsen, et al. (2001) also looked at a common critique of RCM models where schools attempt to hoard students to capture their revenue, either by requiring more courses within the school or offering popular courses in an attempt to attract more students. By comparing the percentage of student credit hours taken by students within their home college before the RCM implementation with the percentage of student credit hours after, the researchers found only a .5% increase.

The Hearn et al. (2006) study of the RCM effort at Minnesota highlights some of the common phenomena we see with many public implementations of the model. First, the state allocation still plays a key part in the various units' budgets and it is still centrally controlled and allocated. Central's management of this substantial funding resource undermines some of the incentives a decentralized model produces. Next the

leaders in the various units appreciate the transparency in revenues and costs that facilitate planning. This understanding of revenues and costs coupled with increased autonomy and accountability has led to revenue maximization and cost optimization in the various units. But many of these findings are still plagued by one of the common critiques of RCM, which it is difficult to prove how much of the positive effects seen in the study are truly attributable to the budget model (Hearn et al., 2006).

Summary of Literature Review

This literature review informs the study in a number of ways. First, I explored the current higher education environment and the changing relationship between public institutions and state governments. State appropriations are not keeping pace with the costs of educating students. The recent recession, weak recovery, and growing cost of entitlement programs has led to cuts in higher education funding. However, despite the decline in state support, many legislators are exerting pressure on institutions to control costs, keep tuitions low, and demonstrate sound management fiscal management of resources. In response to these pressures, college and university administrators are looking for ways to generate more revenues and demonstrate fiscal responsibility.

Next I explored the research on organizational change, and in particular how researchers believe change occurs in higher education. This provided a number of frameworks that I leveraged in my research to illustrate how leaders within one higher education institution approached a significant change initiative. The goal of my research is not to test these various frameworks, but rather to pick elements from select models of organizational change to illustrate how administrators approach such a significant change effort.

An example of such a change effort is the adoption of a budget and management model such as RCM that seeks to create an environment that rewards entrepreneurial behaviors, encourages cost management, and provides transparency into the flow of resources throughout the organization. The literature review summarized the history and structure of RCM, its theorized benefits and drawbacks, and the research findings on the results of RCM implementations at various schools. Some of the gaps in the research I address in my study are how individuals plan and negotiate the structure of a budget model such as RCM. My research addresses what issues may be important even at the outset of such a project, and what individual leaders hope to accomplish once the model is implemented.

CHAPTER 3: RESEARCH DESIGN

My research questions center around how individuals within an institution anticipate and respond to significant change. In this study I looked at a pending move to a decentralized budget and management system that is currently in the early stages of planning at the University of Virginia (UVa). I addressed three question themes in my research. The first was to look at how select individuals within the institution are approaching moving to the new model. Do individuals feel involved in the change process, and what, if anything, are they doing to prepare themselves for the change? Second, I looked at how individuals are planning to use the new model to move their unit or department forward. And finally what can other institutions learn from the University of Virginia's approach to its budget planning and early efforts? I think the challenges faced by the UVa leadership represent common problems other institutions will face going through a similar budget model redesign. The university faces typical issues such as a decline in state appropriations, rising tuition and fees, and increasingly autonomous units looking for a budget and management model that fits the mold of a contemporary college or university. Understanding how individuals within the organization plan and respond to such a change could help other institutions in their preparation for a similar initiative.

Setting and Research Design Choice

I chose a qualitative research design using a single case study in order to uncover how individuals within a public research university approach the implementation of a new budget model such as RCM, and in general how the leadership affects change within their organization. Qualitative research, particularly a case study approach, is an appropriate research design because by definition it helps to answer the why and how questions being proposed to the study participants (Yin, 2009). In the context of my study, I looked at how individuals within the university responded to looming change. The study focused on the how and why questions associated with the move to the new budget model.

I chose to study UVa because as an employee of that university I had access and opportunity to delve deeply into the personal decision making of various leaders throughout the organization. It is a single case model, which has the potential vulnerabilities of misrepresentation and insufficient access to data, but I feel it is appropriate because the institution is not a typical public research institution looking at a decentralized budgeting model and offers an opportunity to study issues that are applicable to both public and private institutions of higher education. The school's mix of a variety of budgeting approaches, its large endowment for a public of its size, and the subsequent competing interests of many of the individual units and schools make the situation unique and appropriate for a single case study (Yin, 2009). The single case study consisted of embedded cases where analysis focused on subunits within the university consisting of central administrative offices, academic unit leadership, and faculty members across various departments and disciplines. These embedded case

studies were necessary, both to illustrate the competing perspectives inherent in any loosely couple academic environment and to provide, "significant opportunities for extensive analysis, enhancing the insights into the single case" (Yin, 2009).

Sampling

I chose the participants or embedded cases using a combination of purposeful sampling and the snowball effect. Based on a review of the literature of RCM, I identified members of the university community that have key roles to play in any new budgeting and management implementation. These included central administrators such as the president and chief financial officer, as well as the deans and administrative staff of various subunits that represented the already self-sufficient units, and a cross section of undergraduate schools such as the College of Arts and Sciences, Engineering, and the undergraduate business school. This purposeful sampling represents a population that is well informed about the issues surrounding the research questions, and has the potential to provide the most information about the topics in question (Marshall & Rossman, 2010). Snowball sampling was used to uncover other participants who were identified through interviews of the purposeful sampling (Marshall & Rossman, 2010; Merriam, 2009). This was particularly useful in identifying members of the community who were actively engaged in governance issues such as budgeting and management, and had some understanding and knowledge of the budget model redesign. I interviewed ten individuals from various leadership positions around the school. The size of the sample was determined by saturation, which Corbin and Strauss describe as the point where additional sampling is unnecessary as no new data is being uncovered during the research

process (Corbin & Strauss, 2008), which was evident when I began to hear similar statements and concerns during the interview process.

Interviews

Interviews were the primary method of data collection. For qualitative researchers, "interviews are used to obtain unique information or interpretation by the person being interviewed and for finding out about "a thing" that the researchers were unable to observe themselves." (Stake, 2010). As stated above, I used a review of the literature to identify a purposeful sampling of individuals for the first round of interviews. These include several members of the university central administration who had knowledge about the current budget environment or were actively working on the new initiative.

I also interviewed deans and the senior associate deans at various schools within the university. Their perspectives on leading change within their units proved extremely insightful. For the deans, their roles as de facto CEOs and entrepreneurs in a decentralized environment means that many of them could see a significant change in their leadership responsibilities. However, as the research points out, higher education organizations are characterized by loosely coupled units, and change often occurs independently in these individual units so their plans, opinions, and actions will have a telling impact on the success of change within the organization as a whole (Kezar, 2001). The senior administrative deans are often the individuals who are responsible for drafting and implementing the budgets for the various units. A decentralized budgeting model brings a significant amount of change to how they do their day to day jobs, as well as the impact on the skills and talents of those that report to them.

Finally, I interviewed faculty who are engaged in governance issues within the university and who are aware of the decentralized budgeting implementation and its potential impact on academic departments. As one might expect, few if any of the faculty were actively engaged in these early planning stages of the new budget model. However using snowball sampling through conversations, interviews, and document reviews, I identified members of this community that were involved to some small extent in the process.

Accessibility

As with any case study, particularly a single case such as this one, accessibility to the sample participants and relevant research resources is a primary concern (Yin, 2009). To address this issue, prior to conducting the study, I contacted several potential participants to ensure they were amenable to interviews about the topic of decentralized budgeting and change within the university. These participants included deans and senior associate deans from various schools, members of central administration, and the chair of the faculty senate. All of them agreed to participate in the study or provided assurances that their colleagues would be willing to discuss this important topic of interest for the community. I did have concerns with gaining access to the president and some of the deans due to their busy schedules and a lack of an existing personal relationship, and I was not able to interview the president. However, her office provided me with access to a number of central administrators and I used public statements and speeches from her office to deduce her feelings on many of the issues associated with the new model.

Confidentiality

I gave participants the option of selecting confidentiality on their informed consent forms which is attached in Appendix A. Most opted to be identified in the study, but I chose to not identify anyone in the findings because I did not feel their identity was relevant to the actual results. However due to their unique positions and perspectives within the institution, it may be possible for the reader to deduce who made a particular statement.

Question Types

I asked questions that were separated into two specific categories and are included in Appendix B. The first category dealt with the interviewee's perceptions of decentralized budgeting and management and how it is being implemented at the university. I asked questions about whether or not the individuals felt the new budget model was a necessary change, and if so, what issues did they hope it will address. I also asked interviewees to discuss what they felt were hurdles for the successful implementation of RCM and what steps they were taking to mitigate these risks. These questions were informed by what the literature views as common concerns associated with RCM such as adequate financial management experience within the units and competition among schools for students, often to the detriment of the educational experience of the student and the institution as a whole.

The second category was guided by the research on organizational change, particularly as it applies to higher education. Pulling from the literature and various models of organizational change, I explored what best explains both why the organizational change is occurring and how the individuals within the various units

planned to address change. Also, I looked at what change means for the various units. For example, the new budget model represents dramatically different changes to the environment in the college of Arts and Sciences which is receives most of its funding through general funds from central administration, versus a unit like the Darden School of Business that has been operating as a self-sufficient unit for a number of years. Using change models such as Bolman and Deal's Reframing of Organizations, Birnbaum's Cybernetics of Academic Organizations, and Lueddeke's Adaptive-Generative Development Model, I posed questions that focused on the importance of individuals' personal convictions and the influences of structural, cultural, political, and symbolic frames on change within the institution. I placed particular emphasis on the early stages of Lueddeke's A-GD model and John Kotter's 8 Steps for Leading Change which had more relevance to the questions around how individuals plan and implement change.

Triangulate Data Beyond Interviews

In case study research it is important to use other forms of data collection in addition to interviews.

The use of multiple sources of evidence in case studies allows an investigator to address a broader range of historical and behavioral issues. However, the most important advantage presented by using multiple sources of evidence is the development of converging lines of inquiry, a process of triangulation and corroboration" (Yin, 2009, p. 115).

I accomplished this data triangulation through reviews of documents such as meeting minutes from budgeting steering committees and faculty senate meetings. In addition, I gathered data through observations, both as a direct participant as a member of the research sub-committee on the new budget model task force, and as an observer in budget discussions at an organizational level. I also reviewed documents such as speeches or

public pronouncements and documents from the president and other leaders at the university that address the new budget initiative.

Data Storage, Management, and Analysis

I digitally recorded all interviews, but gave the interviewee the option to turn off the recorder at any time they felt uncomfortable. The interviews were transcribed and also available in digital format. I kept electronic copies of all interview notes, field notes, document reviews.

Data analysis and organization consisted of generating categories, which at least initially was guided by the theories of RCM challenges and organizational change models in higher education. Many of the interview questions revolved around the themes identified in the literature review, so the initial categories and themes reflected this (Yin, 2009, p. 130). Once the general themes were established, I completed a deeper analysis of the data using coding techniques outlined by Corbin and Strauss. Identifying codes and writing detailed analytic memos provided a deeper understanding of the data and uncovered additional themes and categories leading to more analytical memos, which became more detailed, complex and accurate through this process (Corbin & Strauss, 2008, p. 164). This deeper analysis used axial coding that illustrated relationships between two or more concepts (Corbin & Strauss, 2008, p. 183). The goal was to uncover patterns in the data using a constant comparative method of data analysis which identified additional themes and categories (Merriam, 2009).

Trustworthiness of the Data

There are a number of approaches I used to ensure the trustworthiness of my data and findings. First, using the constructs described by Lincoln and Guba (1985) and

Creswell and Miller (2000), I took actions to provide for credibility, dependability, confirmability, and transferability of the research data.

To assure credibility, I used member checks where I share my data and analysis with case study participants. Member checks allowed the participants to confirm preliminary interpretations of interviews and ensure the research is presenting an accurate interpretation of their views and experiences (Merriam, 2009). As the data started to reach the point of saturation, I saw common themes and patterns emerge from the research. These common experiences, concerns, and approaches also brought credibility to the study. An additional way of ensuring credibility of the study was through triangulating data from multiple sources such as meeting minutes and public speeches. Combining this data with data gathered through interviews improved the credibility of the study.

Providing transferability of the research study means that the findings can readily be applied to similar cases of RCM implementations and organizational change. The idea is to provide enough detail and support that the findings could be used by other institutions looking at similar change initiatives. However, it is difficult for case study findings to be used to make generalizations about a population as a whole. That burden may more appropriately apply to the researcher who is trying to confirm the findings with their institution (Merriam, 2009). The generalities or findings could be applied to other schools or support units within the university that are not a part of the embedded cases, or to other public research universities going through a similar budget model change, provided there is enough context and detail in the research study (Merriam, 2009).

Providing dependability or reliability in qualitative research can be described as the equivalent of replicating results in a quantitative study. However, since qualitative studies focus on human behavior and perceptions, it is impossible to guarantee that results will be repeated under additional studies (Merriam, 2009). A more realistic goal for dependability in a qualitative study is that the findings are consistent with the data analyzed in the research. "Rather than demanding that outsiders get the same results, a researcher wishes outsiders to concur that, given the data collected, the results make sense – they are consistent and dependable" (Merriam, 2009, p. 221). I used triangulation, peer examination, and an audit trail that allows others to logically follow the process of my data collection, analysis, and findings to ensure dependability of the study.

Confirmability of the findings involves ensuring the data can be confirmed by someone other than the researcher. This is not to say another researcher would find the exact same findings that I uncovered, but rather that my findings do not reflect my own inherent biases as a member of the community I am studying (Toma, 2006). This means the questions needed to be neutral, and that my data collection is confirmed through member checks and a thorough audit trail. Marshall and Rossman highlight several strategies designed to provide confirmability to the study. These include showing the logical inferences and the interpretations of the research through a critical reader, designing ways to limit research bias in the study through:

- Cross checking, peer debriefing, and time sampling
- Using existing literature, rechecking data, and examination of possible alternative explanations

- Providing detailed descriptions, nonevaluative note taking, and the use of two sets of notes. One that is purely descriptive and the other including tentative categories and reactions
- Citing previous researchers who have written about bias, subjectivity, and data quality
- Planning for the audit trail of the data collection and analytic strategies (Marshall & Rossman, 2010)

My Role as the Researcher and Acknowledgement of Potential Biases

I am an insider at the University of Virginia, as I have spent the majority of my adult life with some sort of ongoing relation with the institution, first as a student, then alum, and finally as an employee for the past 10 years. However, I do not have a critical role in the implementation of RCM at the university, aside for direct responsibility for budgeting and management of the technology budget within the undergraduate business school. Also during the course of my study I was added to the budget redesign research sub-group to assist the budget task force with research on RCM and decentralized budgeting. However, I was not a full member of the task force and did not provide input on decisions or recommendations that were escalated to the executive leadership team. I am not naïve enough to think that this lack of direct involvement in the process means that I do not need to guard against any personal biases in my research. I come to the project with a number of opinions about the university, both based on my experiences as a student and as a member of the faculty and staff. By being explicit about my potential biases during my research design, I can guard against it during my data collection and allay any fears or skepticism reviewers about my have about my objectivity (Marshall & Rossman, 2010). Having "lived" in the current central budgeting model for the last ten years, I admit that I am frustrated by allocation models that are difficult to explain. In the current budget, revenue for undergraduate tuition and fees are not allocated based on any formula reflecting the cost of teaching students, but rather on some increment of what the school received the year before. However, I do not know that a decentralized budgeting model represents a more rational approach, and I fully expect to find a wide variety of opinions that fall on both sides of the issue. To guard against potential personal biases I will keep my questions neutral.

Also, the decision to adopt the decentralized model has already been made. So biases about whether or not the model is a good approach are somewhat irrelevant. The research questions being asked dealt with potential hurdles to implementation and how they will be addressed, as well as how the leaders in the various units enact or encourage change. The richness of the varying opinions about RCM, coupled with the uniquely constructivist and personal approach to change in higher education organizations, meant that individuals were excited and willing to share their personal perspectives about the process.

CHAPTER 4: FINDINGS AT THE UNIVERSITY OF VIRGINIA

My analysis of the data began with themes from the literature on RCM and organizational change. During the course of my analysis, additional themes began to emerge. Table 2 illustrates the significant themes that emerged through the analysis process. This chapter summarizes these findings and their relevance in the context of the budget redesign process at UVa and the management of this significant organizational change.

Table 2. Themes that Emerged from the Data

Why move to a RCM model?

- Providing better alignment of resources to academic mission
- Improve transparency in the budget process

What steps were taken to prepare for the change?

- Importance of constant communication
- Research and development
 - o Informal, personal research
 - o Creation of committees to focus research and inform the community

Strategy formation and development

- Providing forums to discuss competing interests
- Importance of transparency in central and unit costs
- Faculty involvement varies from school to school

Additional themes

- Tuition
 - Varied tuition approaches across the university
 - o Political realities against dramatic tuition increases
 - o Importance of additional revenue sources
- Current reporting systems are inadequate
- Changing organizational dynamic at UVa
 - o Increase transparency throughout the organization

- Strengthening the provost position
- Need to improve strategic planning
- o Increasing accountability on deans

One of the first questions any of the new leaders at UVa may ask when they start their new roles is "how does the budgeting process work at the university? How do I get the resources to do my job?" In the current environment those questions do not have a straightforward answer. At its most basic level, the university operates on a traditional incremental budgeting model where the central administration receives its state appropriations, student tuition dollars, endowment income, and other revenues which are then distributed to the various units in a block amount based on some increment of what the unit received the year before. But the rational for the base amount is often unclear. As one central administrator pointed out, "when they (deans) came in and said, how did my budget get to be [this amount]...we couldn't give them adequate answers."

The existing model also suffers from a number of other weaknesses. For example, the budget is historically based and not necessarily aligned with the current activity of the institution. Units received funding based on past allocations that often had no ties to the actual cost of the activities being provided. The current model also does not allow a unit to consider all available funds and does not enable multi-year financial planning. Many cited the lack of incentives for creative approaches to generate revenue. As one administrator pointed out:

The state wants the University to help meet its goal of 100,000 additional degrees over the next 10 years, but under the current model there is no guarantee that a school would get more funds for additional students. If that's the case, why would they do it?

There are also exceptions to the incremental budgeting model. Two of the professional schools, the Darden School of Business and the Law School, work under a

self-sufficiency model where the schools directly receive all their revenues from tuition and other income sources minus a 10 percent tax to cover centrally provided services. The schools are allowed to set their own market tuition and receive little to no subsidies from the state or the university. The McIntire School of Commerce, which is the undergraduate school of business, has a similar arrangement for some of the focused graduate programs it offers, but still receives block funding for its undergraduate students. Most of the auxiliary units also functioned as self-sufficient units, and received little to no subsidies from centrally allocated funds. Many of the study participants pointed out the myriad budgeting arrangements among the units and a general lack of transparency in the budgeting process as two significant weaknesses in the current model.

The new president, Teresa Sullivan, agreed and made designing a more transparent and responsive budgeting process one of her top goals of the new administration. Drawing on her experience as provost at the University of Michigan which operates under a decentralized budgeting approach, president Sullivan launched a taskforce to design a new budget model that:

- Places financial authority with the underlying activity at the appropriate level.
- Establishes institutional reserves to meet strategic priorities, fund cross-unit initiatives and safeguard university and school interests.
- Provides a set of tools to estimate multi-year effects of scenarios on financial outcomes at both the institutional and unit levels.
- Includes flexibility to adjust to changing environments or adjust for unintended consequences.

- Establishes a collaborative planning approach within and across all the units that
 provides for reporting and decision-making transparency, as well as increased
 operational efficiencies.
- Creates incentives for behaviors by all stakeholders that support the mission of the institution and its units.
- Encourages the highest level of stewardship for the assets entrusted to us ("Statement of purpose UVa Budget Model Task Force," 2011).

Many of these tenants are hallmarks of decentralized budgeting approaches like RCM or Activity Based Budgeting (ABB). But the president was wary of the negative connotations often associated with those names, so she directed the taskforce to make sure public communications simply referred to the project as the New Internal Financial Model. Taskforce membership is one of the main sampling criteria I used to select participants for the study. These individuals are all in senior leadership positions within the institution and have direct involvement with the new change initiative.

The task force is made up of two committees. The first group is the Steering Committee which is a high level team consisting of the deans from 6 of the 11 schools within the university, the provost, chief operating officer, chief financial officer, chief information officer, and the vice president for Management and Budget. The Steering Committee (SC) is charged with providing recommendations to the president on the structure and substance of the new model. The SC is supported by the Core Work Group (CWG), which consists of the administrative deans from all 11 schools, representatives from central administrative units including the office of the Provost, Budget and Financial Planning, Information Technology, Business Operations, Facilities

Management, and the Comptroller. I joined the CWG in May of 2011 as a member of the research sub-committee looking at peer institutions who had gone through similar budget changes. The CWG is tasked with educating the Steering Committee about the various issues associated with the new model and providing recommendations where appropriate ("Statement of purpose UVa Budget Model Task Force," 2011).

Approaching the New Model

The first of my research questions dealt with how leaders within the organization are approaching the new model. There were a number of common themes that evolved through the course of the research that almost every participant felt were important things that they needed to do to make the model successful. The first was acknowledgement that there were problems that could be addressed through a new budget model. There was a general consensus among administrators that the university needed a new budget model. The reasons for the need for change tended to vary among individuals. Central administrators were looking for ways to incentivize effective use of resources, deans were looking for ways to expand revenues to pursue unit missions, and faculty members were looking for resources to improve the teaching and research missions of their areas. Most agreed that the current model is opaque and does not adequately reflect the changing environments within the institution.

Communicating the need for change is one of the core tenants of Kotter's approach to leading change. Building a sense of urgency about the need for change and communicating that to the stakeholders is a crucial element of success (Kotter, 1996). The president regularly reinforces the need for a new budget model in her public speeches and statements. She highlights that the status quo is untenable and points out

that when she first arrived on grounds questions about how the budget model worked were met with, "I don't know." President Sullivan regularly states, "It's very hard to get alignment about goals and priorities if nobody understands how the budget works." She has put together a task force that can provide recommendations to "make the budget model more transparent, easier to understand, and better aligned with our goals and resources."

As Kotter (1995) points out, a strong change leader who communicates the vision is essential to a successful change effort. One example of this at UVa is President Sullivan. As one central administrator pointed out, "If she [Sullivan] had not come in and been so committed to it, I don't think that any provost or COO would have the stomach to implement it." To stress the need for change, the president regularly uses short stories in her public speeches to drive home the need for change. Whether it's the example of a science dean realizing the exhaust hoods running 24 hours a day costs the school money that could be used elsewhere or statements about the grim state of the economy and the lack of any additional help from the Commonwealth means we must find ways to generate revenue on our own, these stories all drive home the importance of having a budget model that incentivizes entrepreneurial activity and cost controls in the various units. She regularly points out that deans must be encouraged to "grow the revenue pie" through teaching more students or launching new programs. President Sullivan also highlights the importance of the new model for controlling costs. The president points out if schools are charged for their costs "you are going to turn the lights out" to minimize those charges. And when it comes to the university's relationship with the Commonwealth, President Sullivan stated, "I apply an offense, defense and special

teams model when dealing with the state. I want to bring in more money, secure more funding for new faculty; beat back things that can hurt us; and take advantage of opportunities...[and this new model can help us do that]."

Organizational change can often be seen as a process that is shaped by the contextual environment in which it occurs and subject to the perceptions of participants who make up the organization (Armenakis & Bedeian, 1999; Bolman & Deal, 2008). Part of the process that shapes the change initiative at UVa is researching the pros and cons associated with implementing a decentralized budget, and trying to understand the impact of budget related decisions on the various missions of the institution. Leaders at various levels within the organization set out from the beginning to educate themselves on what a decentralized budget means for a university. Lueddeke (1999) considers this research and development phase critical to success in change initiatives in higher education, and it is a key component of his Adaptive-Generative Development model. Much of the UVa research to date was centered on RCM and how various schools have implemented their forms of the model. The idea was that the leaders could uncover some of the potential pitfalls and pick and choose the best elements of the various implementations and use them in the UVa environment.

The first formalized step in the research and development process was to form a small work group that was tasked with looking at the available financial data to create a sources and uses report and consider possible revenue and expense allocation models. This group was made up of the Vice Provost for Administration and Chief of Staff, the Assistant Vice President for Budget and Financial Planning, and Associate Deans from the McIntire School of Commerce, College of Arts & Sciences, Darden School of

Business, and the Curry School of Education. As part of this process, the group researched peer institutions operating in decentralized environments, developed sample models, and developed a list of possible allocation options. The group also conducted a needs or gap analysis at each school around system reporting, both in terms of what issues exist in the current centralized budgeting model and what might be necessary in a more decentralized approach. It quickly became apparent that the reporting systems currently in place were a major issue for all the units.

The findings from the small working group confirmed what many leaders around the university already knew. The current reporting infrastructure was not robust enough to provide unit and institutional leaders with the data they needed to strategically manage their budgeting efforts. The needs analysis uncovered a diverse and inefficient amalgamation of reporting systems that lived within each school. Some of the findings from the school needs analysis included:

- 12 different sources of information needed to prepare unit level financial reports
- 66% of the 12 units who responded indicated the use of a manual process of data pulls and Excel spreadsheets to report the information
- Only 25% relied primarily on centrally provided reporting services
- 1/3 of the schools invested in locally hosted reporting systems
- Lack of ability to use data to forecast to support long term planning

Clearly leaders throughout the organization understand the limitations of the current reporting infrastructure. As one administrative dean pointed out:

[The] financial reporting tool that is the foundation of all management reports is Oracle. The Oracle [system] was never fully implemented when it was initially installed in 2001 and has never been able to provide any of the basic management tools that this organization needs to manage our operations. It doesn't project forward and it doesn't provide any retrospective analysis. You can't budget [with the Oracle system].

This feeling was also shared by central administration. One administrator explained:

the financial reporting piece of it is something else that became very important. So, I think that the financial reporting isn't directly tied to the budget model, but the fact that we don't . . . and I'm absolutely on this bandwagon . . .we don't have good internal financial reporting. We haven't since we implemented Oracle, and I think that that's been a real hindrance to folks. And that makes it feel even more . . . a greater lack of transparency because you can't run reports and know what's going on. But the reporting doesn't exist, and so that's been a hindrance to the feeling of transparency. And so, as a new dean came on, and as a new president came on, and the inability to kind of run these reports and see where you are and feel good about where you stand also contributed to the feeling of we need to better understand what's going on.

Another pointed out that a new reporting system must be considered even without a new budget model:

One of the things that we have got to do that would have been done under any circumstances, and it has to be done now, even with the new budget model and that is that the management information system that goes with it has to be strengthened dramatically, and that—in my view—is almost a big a task as the new budget model.

However, another central administrator pointed out that it may be more than just a technology problem when it comes to reporting:

There is something about how our general ledger is organized that actually doesn't facilitate identifying service based costs. So I believe that we organize around projects. So everything is assigned a project number and that is great if all you are doing is looking within the project. But if you have to suddenly look across projects and allocate costs across its very hard to that. I think there are some structural questions about the approach we have taken to budget and accounting here that are going to be asked...But I am not convinced that it is a technology problem, but I believe that somewhere along the way we will end up spending money on technology to make it better no matter what.

Leaders at the unit and institutional level recognize that the current reporting infrastructure does not meet the university's needs. Therefore, part of the earliest discussions about the new model revolved around incorporating the necessary reporting requirements in the system. Leaders also recognized that weak reporting may influence some of the decisions around allocation approaches. If the current reporting systems

cannot provide the detail necessary to track credit hours and the school of instruction then that weakness must be addressed in able to consider that as a viable revenue allocation approach for a new model.

Once the CWG began meeting on a weekly basis, the group decided to form sub-committees to focus efforts on particular aspects of the new model. The sub-committees consisted of research, sources, uses, reporting, and policy. The research subcommittee looked in-depth at 14 RCM schools, which were picked either because they had detailed budget information readily available, had recently changed their budget model, or were members of a peer group of institutions. Of this group, the CWG picked a subset of five schools to present to the Steering Committee that represented various decentralized approaches along a continuum that had "Every Tub On Its Own Bottom" on one end (Harvard) to a model that consisted of large tax rates with a significant amount of centrally controlled subvention back to the various units (Michigan). The goal was to give the steering committee a basic overview of the types of possible models. Getting firsthand feedback from the various schools also helped identify some of the issues the task force would need to address when designing a model for UVa.

Another reason some leaders gave for spending such a tremendous amount of time researching various approaches at other institutions was to simply have data about how UVa compared to its peers. Any of the big conversations about tuition rates, unit tax levels, and central administrative costs will need to be informed by how UVa sits in relationship to its peers. One professional school administrator described why a particular research project was pursued:

Upon learning of the University's initiative to put in place a new budget model built around responsibility management; I initiated a benchmarking survey among

my peer (graduate school) institutions. In large part, I wanted to understand the various practices already in place and to assess how disparate or common these practices were. I thought it would a good way to calibrate our own situation, given that the amount of tax levied by the university affects directly our ability to compete for outstanding students, faculty and staff. I also wanted to surface the pros and cons of the various practices and to have a mind share around how each institution perceived and managed the underlying challenges, or advantages. It turned out to be a timely exercise, as there clearly was heightened shared interest among my counterparts to gain an understanding of each other's' practices. This is driven by the increasing trend across universities and colleges to levy taxes to the schools to help fund university-level initiatives, or to require schools to operate without any financial subsidies from the university.

This research is important, especially in terms of tuition discussions. The CWG proposed conducting a study of tuition and fees that the various schools within UVa identified as peers. As one member pointed out, "if we are going to have a conversation about raising revenue as it pertains to tuition, we need to have this data to justify the need."

The research also informed the allocation discussions among the budget model committees. Moving revenue to the units that are actually generating it may appear to be straightforward at first glance, but it quickly becomes complicated in execution. For example, undergraduate tuition that flows to a student's school of enrollment does not provide revenue to each unit providing instruction for that student. The student is most likely taking classes outside of her school of enrollment and those other units are bearing some of the costs of instructing that student. Also allocation of central costs becomes an important design principle, especially when units will now be charged for a service that has been free until this point.

One common theme from interviews with school leaders was the importance of identifying a process that showed some transparency in the cost of central services. One proposal was the need for benchmarking central services among peer schools and the private market to see if the costs associated with these services were in line with

organizations of similar scope and mission or could be acquired for a much cheaper rate in the private sector. Justifying central service costs or charges to unit heads as a fair representation of what the units would find in the market was an early discussion point for the CWG. As one central administrator pointed out:

We have to show the work of what we do. I mean, you have to be able to produce. You have to be able to meet certain benchmarks. For example, you have to be able to turn around human resource activities in a reasonable manner and be measured against those benchmarks. And that's what it's going to take, I think, to convince the [deans].

An administrative dean explained the benchmarking process as something that was critical for the success of the model and used the following example:

We all can agree that each unit hiring our own police or the institution outsourcing the police makes no sense. As a design principle, we should agree to benchmark these central costs and any related metrics (i.e. # officers to population), to ensure that whatever is allocated is reasonable and fair.

One central administrator felt he had to embrace the benchmarking process, not only to justify costs to schools, but to serve as a management tool for his unit:

Under any circumstance knowing what your costs are is critical. I think that will be very hard coming from the budget model we have been under. Because right now people manage to their revenues, so my people can tell you where every dime comes from and we can tell you what we spend. And we don't ever spend more than we have. But if you asked me how much does a [service] cost, well I have numbers I can tell, you...accounting numbers that are perfectly legitimate. We negotiated direct cost recovery rates, but we don't manage to those costs. If I walked up tomorrow and I look at our cost of service and [a service unit] cost of \$5 a unit per year and we are going to dump 100,000 units. I am thinking I have \$500,000 to redeploy...not a chance. So what we are doing to prepare for that is doing a cost study today. We are doing it in partnership with Indiana University. They have arguably the best costing framework in higher ed. It took them a dozen years to get there but they are doing it. They have good metrics...They actually manage to it. It is impossible for me to imagine that any budget model we go to won't require us to know those costs and manage to them.

However, another central administrator pointed out one of the problems associated with benchmarking against peer organizations. "The data just isn't out there in a good comparable form. We all track things a little differently, and normalizing that data to make good comparisons is going to be a challenge."

Finally, the research and development phase of the project also served to provide the various leaders with the information necessary to educate the rest of the community about some of the issues associated with a new decentralized model. It also serves as a mechanism for input from others in the institution not directly involved in the new model discussions. For example, one of the roles assigned to the CWG members, "is to serve as ambassadors of the budget redesign...seeking input, feedback, and engagement from all areas of the university." This highlights the importance of maintaining robust and open communications about the project, where all members of the community have an avenue to have their voice heard. This open communication is a constant struggle for an ongoing project, and membership on the various committees was often a point of contention. As one dean who is not on the Steering Committee stated, "I have a problem with [not being on the Steering Committee]. I don't understand why I am not on it." The dean pointed out later:

Why is the process exclusionary? Why aren't deans sitting down at a two day retreat on what are budget models and what are the options and how do they work? Do I really want to spend two days doing that? No. But is it necessary? Probably.

Faculty involvement at this stage of the project appears to be minimal. There are a number of possible reasons for this. One could argue that the average faculty member does not have significant interest or time to invest in the new budget discussions even though most if not all could potentially be impacted by the new model. As one faculty member noted, "Although faculty members are greatly affected by the budget model, they typically do not understand the budget model." This is not surprising considering

the professional bureaucracy characteristics that are often used to describe the professorate. Faculty members are more focused on their departments and research interests and less interested in the policy and governance questions of the organization as a whole (Birnbaum, 1988; Mintzberg, 1979). However faculty members often noted some of the drawbacks inherent in the current centralized system. For example, "the current financial system is a black box. Very few people understand it." Taking steps to educate and bring more transparency to the process is an important way to involve faculty going forward. As one faculty member noted:

The more insight faculty members have regarding the financial system, whether they like it or not, reduces the risk to them. Knowledge empowers them to make better and more productive decisions. I think one of the roles of the Faculty Senate this year will be to help educate the faculty.

To help with this ongoing education process, the faculty community is one of the targeted audiences of the communication plan developed by the budget task force. Regular communications through various channels to the faculty and briefings to the Faculty Senate as the Task Force progresses through the project are clearly critical to the success and acceptance of the redesign.

To make the new model successful, one administrator pointed out, "I want there to be more integration and more joint conversations [among deans and faculty leaders]." Another administrator felt, "the deans are going to have involve them [faculty], because they're going to want their faculty to teach more classes so they can get more students…they're going to have to get faculty to buy-in."

One way to get that buy-in is through educating the faculty about the new model.

Providing that education to faculty members helps them to understand what the new model could mean for their departments. People respond to the incentives built into the

budget model. For example, schools that suddenly see revenue for teaching more students will be incentivized to grow enrollments, which could lead to larger teaching loads for faculty members. A dean at one of the self-sufficient professional schools acknowledged that his faculty members provide entrepreneurial activities through non-degree programs:

The non-degree executive education program is paid on an overload basis. Faculty members augment their full-time salaries by teaching these non-degree programs. So there is a natural, very obvious incentive for them to design and teach in these programs.

Also, if faculty members are teaching in other schools, a new model could provide revenue to the home school to reflect the cost of that instructor's time. This could foster cross disciplinary collaboration and reward an activity that is currently seen as a drain on the home school's resources in the current model. In addition faculty members will be expected to be better fiscal managers and may be tasked with finding more revenue through research grants, new programs, or finding ways to trim costs. As one faculty member stated, "We need to get faculty to better understand the business of academia; to begin to understand the challenges. And that [education] will evolve over time."

People will hear rumors and make judgments on what they think is going on.

Controlling the message or at the very least communicating the process and the stages to the community at large is very important. In fact Kotter points out that many change initiatives fail because the level of communication needed is underestimated by a factor of ten (Kotter, 1996). To address this, change leaders need to take every opportunity to communicate the need for change and the vision of where the organization is going. As part of the approach to address this important component of the change process, the

budget task force developed a communication plan "inform all stakeholders about the project and help prepare them for the changes." The communication plan will:

- Actively include all constituents in all phases of the project
- Listen to constituent concerns and suggestions
- Follow-through on promises
- Provide regular communications early and often
- Explain the need for change and its timing
- Share timely information
- Effectively answer the questions, "What is in it for me? Why should I care? How will this affect me?"
- Receive and respond to ongoing feedback (Draft Communication Plan, August 2011)

A communication plan like the one proposed for the project helps inform the rumor mill that invariably forms around such significant change initiatives. In fact, rumors need not be destructive. Rosnow and Fine describe some rumors as, "bogies" which are "rumors that are neither malicious nor fantastical" (Rosnow & Fine, 1976), and they are used to provide context to the ongoing change. The community uses these rumors as their form of research, and members of the budget task force help inform and educate others on what is actually happening. One committee member related a story to illustrate this point:

And so I was playing tennis ... in the middle of the summer and had been playing with these women all summer, and I really didn't know anything about them except their first names and tennis. And towards the end of the summer, they [asked], "So, where do you work?" And I said something about the budget office, and this woman went "Oh, are you doing that new tuition-based budget model?" And it was a faculty member from the nursing school, and she said, "Oh, that's really going to benefit us," and I was [surprised]. People know that it's going on, and they're interested in it. And there's a certain, some quality, some anxiety in the thoughts of the change and where it's going to take us and some excitement that it's going to be...the magic bullet that solves the fact that the state has cut... \$50 million out of [the] budget [in the] last three or four years. It's kind of

interesting the different perspectives. So, I think that people are very vested; I think they're interested. They're wondering how it's going to impact them, and so communication is going to be critical.

Another way leaders within the organization are approaching the change is to look at it as an opportunity to improve the level of transparency throughout the university. A lack of transparency in the current model was one of the main issues the president hopes to address with the redesign. As she stated publically, "[it is important] that we work towards changing the transparency of the system and also the presumption of where the money goes to start with."

Transparency in the budget model can be broken into a number of categories.

The first is an understanding of the resource flows to the various units. As one administrative dean pointed out, "What do we think some of the wins in a budget redesign could be? I think one of them is more clarity on how resources flow through the university and what guides those decisions on resource flows." Another dean pointed out the new model should force some conversations around current resource allocations. For example, under some allocation scenarios it becomes clear that "You've generated a substantial amount of more revenue than you are currently getting. Shedding light on those issues is going to be beneficial." One dean pointed out, "...in the steering committee itself I have argued that transparency and accountability are two bedrock foundations for making good resource allocation decisions and good strategic plans."

Cost transparency is another significant outcome that many unit leaders are looking for in the new model. In the current model, multiple participants voiced frustration over some of the costs they are currently forced to bear. For example, the

10% tax that Darden and Law pay off the top of their revenue doesn't come with a clear breakdown of what that 10% covers. As one administrative dean pointed out:

I'm not sure if it [the tax rate] has been clarified over the years as to what that includes. Clearly it includes brand and payroll processing and other university infrastructure. But we pay for utilities, building maintenance, IT for classrooms, and cleaning. In a new model the tradeoff for a higher tax is that we may need to understand what services will be covered by [that] higher tax.

The opaqueness of the revenue tax on the professional school is acknowledged even by central administrators who point to it as a function of providing some of the "common good" services, that units cannot opt out or pay on a per use basis.

Imagine this is just a little city. That's the way I like to think about it. The police department is not something you can allow the citizens to decide whether they're going to contribute to the police department or not and then look up when they call and say, "somebody just robbed me." Same thing about the fire inspector. Some of those costs are going to be hard to put on a bill.

Another professional school dean pointed out that the revenue tax alone does not really put the tax rate for the schools in the clearest light.

I don't think people understand the difference between our stated revenue tax of 10% and our actual tax rate once you add in services we pay for like additional central services not included in the 10%, running our own library, building maintenance, capital projects, and IT staff just to name a few. Those are services the rest of the schools get for free right now. When you add that all in, our tax rate is closer to 40%.

Outside of tax rates, unit leaders would also like to see some transparency in the cost of central services they are using. This includes services that would be supported through taxes on the units as well as services that the units would purchase on a fee basis. One of the existing tenants of the self-sufficiency agreements with Darden and Law is that these units are not required to use university providers for services such as housekeeping and security if they can demonstrate that these services are actually cheaper from an outside provider. One theory behind this is that it forces central providers to

remain competitive with the market and not simply charge any amount to a captive consumer. The general feeling among central administrators is that they are able to provide a market competitive price for the services they are providing. One central administrator pointed out, "As long as we are able to compete for the business I think we can do it for a cheaper price. 9 times out of 10 we get the business." The ability to go outside the organization for services is still an open policy question that is being debated by the Budget Task Force.

As stated earlier, even in the absence of these market controls, unit leaders would like to see some form of benchmarking against peers offering similar services to justify the size and costs of running some of these operations. If a central service provider is able to provide some peer benchmarking data on their cost structure, then you have a basis for the conversation with a dean about the cost of that service. Otherwise you are just giving the unit leaders a number and expecting them to accept on good faith that it fair representation of an efficiently run cost center. This is difficult for many unit leaders to accept, as one administrator said:

I do not think central administration has moved one inch towards figuring out how to identify peer comparative cost data for central services nor in creating a cost database to use and refer to as the tax question heats up. This has to happen first, if we are going to have a meaningful conversation about costs and responsibility.

Cost transparency is not just an issue for central administration and service providers. Schools and other revenue producing units also need to demonstrate efficient revenue and cost structures to other unit heads. This is particularly true if the new model is going to require a significant amount of subvention that will be funded through higher taxes on the larger revenue producing units. As one school administrator noted:

Now what we need to understand is a better feel for the draw of resources that each school really takes. Just as we need to understand what is the total cost of operating the college of arts and sciences? What is the total cost of operating the school of law, the school of medicine, the school of nursing?

Understanding the cost structure for the various units will help inform the conversations around subvention, and what it really takes to run some of these programs. The simple fact of the matter is that there are a number of programs that cost too much to simply be offset by the revenue generated by that unit and will require some help from the center or other units to operate. One participant noted:

We are a university that has a school of medicine, so you may be contributing part of your tax rate into going back to supporting the fact that we're going to have a school of medicine or a school of nursing. Those are two both very high-cost schools. I mean, it's \$130,000 per year by the state's calculation, and that's not even our calculation, to educate a medical student for one year. We can't charge tuition of \$130,000 so we are going to have that offset that cost with other funds.

Based on the cost of educating a medical student, the school of medicine is obviously a unit that needs some form of revenue from other areas of the school. However, the cost structures of other schools and programs might come as a surprise for some of the university community and a lack of transparency around this crucial point is a concern. One administrative dean confided, "I am not even sure some of the schools ... can actually tell you what it costs them to educate a student. That's some pretty basic information we are going to need to move this process forward." Shedding light on the true resource flows of the university is critical for the success of the project. Conventional wisdom often proves to be incorrect, or at least not supported by actual data. In the UVa example, many of the budget task force members were surprised to learn that the College of Arts and Sciences actually funds many of the programs in other

schools that cannot generate enough revenue to meet their costs. As one central administrator pointed out:

You know the deans...this is where I think there is not a good understanding. The deans get very excited when they hear that they're going to get to keep all their tuition. But for the nursing school, I hope the dean knows that isn't enough to support our school. For the Curry school, that dean is going to need other allocations. Frankly, it is out-of-state students in the college that subsidize engineering students, nursing students, where the cost of education is far in excess of what is charged.

In addition to the generalized pros and cons of RCM and decentralized models, members of the UVa community have to grapple with what the new model will mean for them in the current environment. Acknowledging the existing cultural issues and the difficulty in navigating the competing interests are key considerations for any organization undergoing such a significant change process. Lueddeke explains that this cultural understanding is a key component of the Strategy and Formation phase of his organizational change model. It is important to understand what the real reasons are for resistance to change (Lueddeke, 1999). Many of the study participants pointed to risk mitigation strategies that needed to be considered while planning for the change.

The new model could change the dynamic of the institution. Placing more resource responsibility at the school or unit level means these unit leaders must place more emphasis on managing the environment from a business mindset. Deans in effect, become the CEOs of their school, responsible for generating revenue and managing to the bottom line (Strauss & Curry, 2002). But it is not enough to simply give them these responsibilities. The executive leadership at the university must plan for the possibility that the people running these units now may not have the proper skill set to be effective in the new system. One dean confided, "As I talk to my fellow deans, they have very

little grasp of what their finances may look like in a downside scenario. They live year to year in my sense. And they don't know how close to edge of failure they skate."

Leaders in these units need to do some self-appraisals and identify what skill sets are missing and either address them through training and education or with new staff where appropriate. As Strauss and Curry point out, simply giving a dean the responsibility of generating revenue and managing a school like a business does not necessary mean they will be entrepreneurial (Strauss & Curry, 2002). The president acknowledges that:

This is a model, if we get it adopted properly that encourages entrepreneurship. And so...one way that deans can improve their revenue flow is to look for something exciting that can be done outside the silo. And Deans will eventually figure that out. Or, we may have to get some new Deans. You know, that happens too.

Finding ways to encourage this new entrepreneurial outlook and the skill set necessary to execute is a necessity for reaping the benefits of the new model.

Strategy formation is another key component that Lueddeke points to in his research. This is a process of debating the change initiative by all who may be impacted (Lueddeke, 1999). The goal is not necessarily to reach consensus, but to create an environment where even critics feel they have a voice in how the change should be implemented or whether or not it should be pursued at all. The competing viewpoints you encounter in an organization, particularly one based on intellectual debate and study, needs to be embraced. This helps create a deeper understanding of the issues and hopefully eventual acceptance by those members of the organization who do not initially embrace the change (Bolman & Deal, 2008; Lueddeke, 1999; Schein, 2010). The university is attempting to use arenas such as the Budget Task Force to discuss these

contentious issues. As one dean pointed out, "We have a forum (the Steering Committee). Ideally it will be fact based so that we are looking at data, not just listening to opinions."

For example, in the current UVa model, there are clearly interested parties who are happy with the status quo. The university has built a solid reputation and a number of the schools are highly ranked illustrating that it is possible to excel in the current environment. Schools such as Darden and Law as well as some of the auxiliary units already operate in a decentralized environment that grants them a degree of autonomy and access to revenue streams that are consistent for facilities planning and the operation of their schools. Management in these units know with a fair degree of certainty what there revenue streams will be, and the taxes they pay on their revenue to central administration are set making budgeting and strategic planning much more straightforward for them than for other units. Leaders from these units look at the new model with some natural trepidation, as one stated:

I think the current model is wonderful and I would like to see it totally preserved. And the reason I like it is first it has brought great internal discipline to the school it's given me the foundation to go to donors and partners and even students and explain why we do what we do and why our tuition rates are what they are. It has internally sharpened our priorities around spending. It has freed us from the caprice of state support and university administrators so we are able to devote ourselves both an operating and financial strategy that will help us reach our medium and long term goals.

Another administrative dean in on the self-sufficient schools voiced a concern about the potential changes in their tax rate under the new model, "I worry about the tax being increased because presently as I said we've been able to adapt, operate and compete effectively within the university's constraints of the existing definition of financial self-

sufficiency". The leaders in these units want to see a model where their self-sufficiency arrangement is preserved, because it works for their particular unit.

There are some challenges around preserving self-sufficiency in its current form for schools like Darden and Law. For example, one central administrator points out that in the current arrangement, budget cuts to state general funds are not spread out to the various units, but rather concentrated in the areas that actually receive state appropriations. "Law and Darden aren't negatively impacted by the state reducing, in general, its share of funds to the university". This administrator would like to see a new model that would spread the effects of a state reduction to a broader swath of the University community making it easier for departments to absorb. Of course the reverse side of that argument could be made as well, as another central administrator pointed out:

During the budget turndowns that we have had, the ability . . . Law and Darden has never asked us to provide them any relief from the budget cuts. They simply bellied up the bar and said, "Okay, we understand—that's our problem." They don't have that much state money to lose, but they have private monies that go down if the endowment does, and for two years it did, but they knew they had to adjust to it.

Indeed, one dean pointed out, "as a self-sufficient unit our source of funds will vary with economic conditions. It drives the performance of our endowment, the attendance of our programs, and our tuition numbers." The current system allows these units to actively plan and respond to these economic conditions. So for the leaders at these schools, crafting a new budget model that protects at least the spirit of the current self-sufficiency models is important. They are looking for ways to convey the point to the executive leadership at the University that their current model works, and could perhaps be utilized by other units. So a logical question is what allows the current self-sufficiency models to

thrive and what can be applied to rest of the university and serve as a basis for the decentralized approach for the rest of the units?

The short answer appears to be tuition. These two schools receive very little state funds and have the ability to charge market rates for tuition. When Darden and Law negotiated their self-sufficiency arrangement with the University, they agreed to subsidize in-state students \$5,000 of the tuition rate. Central administration funds \$2,500 of that amount and the schools assume the rest. The bulk of the schools revenue streams come from tuition revenue, and unlike other schools, Darden and Law can charge a market rate for their tuition to both in-state and out of state students. The tuition rate is a critical component of the strategy both schools are using to compete with their peers. However, the ability to set tuitions at a market rate does not exist at the in-state level for undergraduates. As one administrator points out, "people in Richmond, governors are worried about undergraduate Virginians." What a school charges a graduate student for a MBA or an out of state student is not high on their list of priorities.

Tuition is a sensitive issue that many leaders within the university are looking at under the new model. In a RCM model where revenue flows to the unit generating the funds, tuition is often the largest resource stream that deans can now use to fund their operations. At UVa, the university negotiated the right to allow its Board of Visitors to set tuition rates, theoretically removing it from the political whims of the state legislature. However there is a difference between having the right to set tuition at the institutional level and having the political will to do so. As one administrator pointed out:

Whatever you want to do on these lines is going to have to be justified. Raising prices just because you can is not going to be a successful strategy because there will be too much, there'll be at least too much political blowback.

Another administrator also highlighted the political realities around the ability to set tuition:

It would be very hard to do that at the undergraduate level where out-of-state is now over three times as much as in-state, and to think that you could increase instate tuition to the same \$5,000 differential that we have for Law and Darden is not realistic politically. Now that in-state tuition of \$11,576 is as parents are fond of telling me, less than they are spending now for daycare for their younger children. And considerably less than many of them pay for tuition for high school. Nevertheless, it is politically a very sensitive number and certainly our Board of Visitors gets plenty of political pressure about keeping that number as low as possible.

Nearly all the participants pointed out that in-state undergraduate tuition had to rise. As figure 3 illustrates, UVa tuition is well below the overall average of its peer institutions. However, those peers include both private and public institutions, and UVa is slightly above the public peer tuition average. Most participants still felt that in-state tuition is simply too low right now considering the continuing decline of state support.

The problem we have with tuition right now is that the state gives us \$8,400 per in-state student. At Michigan it's \$17,000. At North Carolina it is \$24,000. Our tuition has to be higher. Our tuition is not as high as Michigan, [and] they get twice as much state money. They have a much larger portion of their student body that's state supported, and they have higher tuition, so they have a lot of resources to deal with.

Another school administrator pointed out:

We have a revenue problem. Our tuition rate is simply too low. We can argue all day about costs, getting more efficient, and saving money but we are beating each other up over a small amount of money. Say facilities are a \$70 million operation. If we agree or demonstrate it is 10% fat, we save \$7 million spread out amongst a \$2 billion operation, that's a rounding error. At the end of the day we have a revenue problem and tuition has to go up. That is the conversation we need to be having.

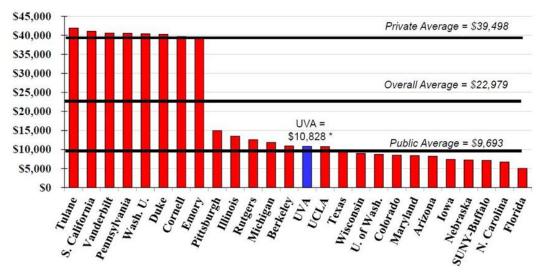


Figure 3. 2010-11 Undergraduate In-State Tuition and Fees, SCHEV Peer Group - Public and Private, UVa Budget Office (2011)

Tuition increases and the resulting repercussions are not just focused in the political arena of the state legislature. School leaders are also looking at things like differential tuition among the various schools as another potential avenue to capture additional revenue. Differential tuition discussions usually center on the idea that it costs more to educate students in certain schools versus others. For example, an engineering student often uses labs and equipment that are expensive for the Engineering school to maintain, thus driving up the cost of educating that student. Business faculty often command higher salaries than their liberal arts counterparts making an undergraduate business student more expensive to educate. Or, upper division students (third and fourth years in UVa parlance) often have classes with much smaller student to faculty ratios which also drives up the cost of educating those students.

The university began a pilot program with the undergraduate business school for the upcoming year allowing it to charge incoming third year students a \$3,000 differential tuition fee, largely on the basis of the increased costs of educating these students and the marketability of those students in the workforce. This pilot program is not directly tied to the new budget model, but other schools see it as a potential opportunity to explore as the new model is designed and point to it as an example of a specific arrangement for one school. One administrator described the opportunity like this:

So, take the example of differential tuition, its one thing to roll that out for the School of Commerce. Politically, logistically, otherwise [it is much easier for one small school] than to roll it out for the larger undergraduate [population] within the university. One thing this budget redesign does is put all of those kinds of considerations, we hope, on the table at the same time, and not as a negotiated deal for one school.

Another important element to assure the success of the project is strong executive leadership and project management. A number of participants expressed frustration with some of the lack of direction on the UVa project. One stated, "My concern is that there is no leadership. And for better or worse the provost is leaving and the COO is leaving. So the two executive sponsors of how the new budget model will work are both leaving...so there is no one driving the bus." Another unit administrator pointed out, "it doesn't bode well for us right now that there's no real direction, leadership, sense of urgency from central administration or anyone else to get this thing rolling. So I'm not feeling very enthusiastic about it." Another dean explained, "one of the problems we have had so far with this process is the lack of a strategic vision about what the university is trying to accomplish. We need executive leadership to step in and lead the discussion on that vision." And this leadership is crucial for the eventual acceptance of the model by the community. One administrator pointed out, "where the leadership piece comes in is getting people to agree that this is an important thing that the university needs to support. And that leadership needs to come from the president and her executive team."

One final risk mitigation strategy is to design the system in such a way to create some flexibility to change model if it creates some unintended consequences. Most of the study participants were quick to point out that a budget model is all about incentives, either by design or by accident as people adapt to the system in place. Indeed one administrator pointed out, "I think one of the reasons UVa has been so successful at fund raising is that under the current financial model, that is the really the only lever [deans] can control to increase revenues." It is hard to say that this is a main driver for UVa's fundraising success, but it does illustrate how a budget model can incentivize behavior. Trying to design a model that incorporates some agreed upon incentives is challenging, but adding enough flexibility to the model so it can be adjusted is essential. One of the observations that becomes quickly apparent if one spends anytime looking at RCM implementations across higher education is how often the models are re-visited and changed to address new strategic priorities or unforeseen consequences. One dean pointed out:

They really need to worry about unintended consequences, and I believe that you will have more unintended consequences with a complex model because you won't understand the repercussions and implications. So, I recommend a relatively simple, straightforward model initially, see how it works, and then refine the model over time.

Plans to Move the Unit or University Forward

My second research focus explored how leaders within the university planned to leverage the new budget model to move their unit forward. Part of the process of planning for change is trying to decide where you want to be once the change is implemented. Many of the leaders in the various units were quick to point out weaknesses in the current budget model and how they would hope to design the new one,

but most have not spent a great deal of time thinking about how they would leverage the new model. However, there were a few common themes or goals that surfaced during the course of the study. Using the new budget model as a tool to help strengthen strategic planning was one such goal for leaders across the university. One central administrator stated:

I always think that the budget model is just a tool. So you do the planning, you figure out where you want to go, and then the budget model is the way you get there. It might impact decisions on subvention, it may impact decisions on tuition, on the tax...it can be a tool to help you implement a strategic plan. I mean, if you're going to have a strategic planning effort, which we really don't have a very good one here, but if you're going to have one, you need a good budget in order to be able to do it. Maybe that's why we don't have an effective strategic plan now.

Strategic planning needs financial resources to be successful. As Peterson (1997) points out, "unless money follows the new ideas, the strategic priorities will not get adequate support and the planning exercise will be perceived as a sham" (p. 168). One school administrator is looking at the new budget model as a way to link strategic directions with the necessary financial planning to bring it to fruition. He pointed out:

If you've got a strategic plan and you do not have a 5-10 year financial plan married right there with it, I'm not sure what you have, but it's not a strategic plan. And as part of that, if you have an aggressive strategic plan of the millions and millions of dollars that tend to attach themselves to such plans, and you don't have a capital plan that goes beyond being a wish list of the facilities that you want to have...I'm not sure where you are.

Just adding clear, straightforward resource and cost allocations to the budgeting process will help units provide better strategic planning and planning in general. As one school administrator pointed out:

A top win would be the ability to plan...not in one year reactive chunks, but in 3-5 year chunks. So, if we know the assumptions about the way tuition revenues are going to flow through the institution and an understanding of how the

enrollment is going to change between now and then, then we can do some real planning.

Yet another administrative dean pointed to the need for a model that would allow, "[me] to be able to see at least 3 to 5 years out." It is unclear at this stage that the new model will be able to deliver resources linked to strategic planning, but there are healthy conversations about the need for this linkage going forward. The decentralized model should lend itself more readily to school or unit strategic initiatives, but linking them back to central or university wide plans will be a challenge. As one central administrator pointed out, "that is the kind of conversation from the center to the schools that has to be improved. I don't think it's very strong right now." One dean also felt the new model should surface some of the competing missions of the units and the university:

I submit that the right way to parse through all those thorny tradeoffs in the budget model and the choices among the different [approaches] is by thinking very earnestly about the mission and vision of the respective schools and the overarching university."

The challenge of addressing these various missions is not in insignificant. One dean explained, "This is one of the great problems facing a university, [which is] all of these different goals pulling them in different directions." The dean went on to explain a hope that the new model would allow for some frank discussions about where the university invests its resources:

In times of great austerity what's your strategy. At [my school] we will protect the core and suspend the nice the haves but not vital activities. So we are going through an exercise right now to determine [just] what those nice to haves are. It is not going to be pleasant. People are not going to be happy to be put in that latter camp. We are talking about the sustainability of the institution. It would be crazy to implement across the board cuts or taxes to all the units. At times like this, an organization has to decide its identity. The ancient Greeks having a saying that in times of crisis you actually identify what you stand for. I think there may be departments within schools that are less important. There may be some schools that serve wonderful social needs but are ancillary to the core

identity of the institution. And it will be very painful but it will be at that point the leadership needs to take a stand. Just kicking the can down the road isn't going to sustain us much longer.

Central strategic priorities will obviously need a funding mechanism under the new model. With all revenue flowing to the schools or units that generate it, central administration will need a funding source to execute it objectives. The obvious option is including some sort of tax on the units that will fund these strategic goals. These strategic plans could also be funded through some portion of state appropriations or endowment income. It is clear that the president wants some way to fund her priorities with the new model. As one central administrator pointed out:

When the president and the Board have a strategic plan, and everybody says you got to put money into your strategic plan or else it's just something that gets written and put on the shelf. Well, how do we pay for that? Do we pay for it through a tax? Do we pay for it through asking each school [to pay] an extra tax? Maybe you've got your cost allocation that's this percentage, and then we put on, for a couple of years, this extra two percent, so we can create a pool of funds... that is one of the questions we have to answer because I can guarantee you that the president is going to be interested in the method that allows her to have strategic priorities and fund them.

Decentralized budget models are often only decentralized to the school or unit leadership level. But when I asked unit leaders during the interview process just how deeply the decentralization would penetrate in their organizations, I got a variety of answers.

One dean was very blunt, "That responsibility will stay at the senior leadership or dean level. I doubt that my faculty will have the time or interest to deal with it." Another administrative dean also said he also would not expect the responsibility to push down in through the organization, saying "I would resist that probably. And it's probably the opposite of every tub on its own bottom. [But] you can only carry that over so much."

Another administrative dean highlighted the challenges with involving department heads in the process, "the challenge with that [is] pushing it out to the departments. Actually, you can educate them how to do it, but you need to provide the financial skills within the departments to help them manage it." However, a faculty member felt like the new model should allow his colleagues to become empowered in the revenue generation process, stating, "I expect the academic units to sit there and say I'm the dean. But, I've got to drive that [revenue creation] down to my associate and regular dean, and assistant deans, and the faculty." A senior leader at the Engineering school agreed, "We need to figure out how the model will scale to the department level. Those are the people generating the research and the costs, so they need that responsibility." It appears that the level of planned decentralization within the various schools is dependent on how complex and extensive the revenue generating opportunities are for the faculty members in the various departments. The higher the complexity and the greater the opportunities for grants and revenue generation, the more likely it is for deans and administrators to embrace the idea of moving greater budget management responsibility to the faculty level.

Another way leaders expected to use the new model once it was in place was to get a greater sense of control on the costs within the various units. As the president is quick to point out, "we need to make sure that everybody is looking for ways to save costs. And one of the ways to do that is to ensure that if you achieve a cost savings, you get the benefit of it." Another administrator pointed out one of the fundamental cost issues that will be prevalent in any model, which is the fixed cost structure of employee salaries.

So you have a highly variable revenue model which is driven by student enrollment demand [for a particular field of study] built upon a highly fixed cost structure [faculty to teach the program]. You got to fix the cost problem. Once you hire these faculty members, you've basically built capacity. I mean it's a long term issue to fix if we're talking about 10-12 faculty. So, one challenge to think about is how do you minimize as much fixed cost as possible? Make it more variable. So, for example, when you have a department in a hot program, and you have a classified staff person in that department, that classified staff person should know if his [department or program] gets cold and another gets hot, they are moving. Maybe RCM will help issues like that.

One faculty member pointed to a cultural shift that is going to be defined by a value proposition for almost any activity. The questions of, "what's it going to cost? Is it worth it? That becomes the new mentality." The model should add some transparency to allocation decisions that were unknown or ignored before. For example, an administrative dean pointed out:

Certainly when you look at those things that we're [going to] expense to the schools on a per unit basis, whether that's utilities, or space, etc., we have the ability now to leverage a change in behavior within the unit that wasn't paramount or wasn't as critical, wasn't as in front of us in the current environment as it will be in the future.

Finally leaders within the university expect to have the flexibility necessary to generate revenue in the new budget model. In the current model, there is an undercurrent of resentment that revenue opportunities are only afforded to those who can negotiate special deals with the university. It is true that schools have been able to negotiate deals with central administration over the years that have applied to their specific school or program such as differential tuition, self-sufficiency, or new program launches with different tuition allocations. However, there are varying opinions about whether or not those negotiated opportunities are available to any unit that can put forth a compelling argument. Regardless, everyone expects the new model to be structured in a way that

incentivizes revenue generation in the future. As one administrator pointed out, "we expect to have the ability to shape our own resource base moving forward."

One common theme that kept surfacing during the research was that the new model was not going to bring any additional revenue to the University on its own, merely opportunities to grow revenue that are not fully realized in the current model. As one central administrator pointed out:

So the new budget model does not bring us an extra dollar and it's really important to understand that. It doesn't mean that suddenly every dean will have all the money they need. But what we will do is work towards changing the transparency of the system and also the presumption of where the money goes to start with... we're going to manage the tax and the subvention so that it generates a result that's approximately equal to what they're getting now. But by giving departments their resources and costs they understand what it takes to operate, and if you want to grow, you need to find the revenue to do that.

Another administrator thought the new budget model would allow deans to focus on new revenue opportunities that had been ignored in the old system because it only incentivized certain types of revenue opportunities. He said:

In the current model, deans only seem to focus on fundraising because they know if successful they will get more resources. Teaching more students, getting more research grants these will be revenue drivers in the new model and seem to be better goals for a university than your ability to fundraise.

One interesting component that the president would like to see in the new model is an annual conversation with the provost about what is working and not working in the various schools. The president would actually like to see a model that encourages self-reflection by design that forces deans to defend programs or investments that are underperforming. One administrator described the process like this:

She wants to see a . . . constant attention to reducing what you spent the year before in order to generate funds to reinvest, so that you're not reliant on always increasing tuition or other revenue sources in order to fund new initiatives. You

need to look at what you're doing, stop doing some things that aren't working and reinvest [those funds into new opportunities].

This annual conversation with the provost does not generate new revenue for a unit, but perhaps it will allow the dean the opportunity to refocus her efforts and perhaps free up funds to pursue other opportunities.

The president often points out that this new model and the resulting conversations with the provost will mean that the position will need to be strengthened over its current incarnation. Ultimately what this means for most of the interview participants is that the provost office will have significantly increased control over resources for the academic units. One faculty member described his take on what it means to strengthen the provost:

Currently the financial system does not adequately match costs and benefits. As such, it does not always reward increased output and superior performance. The money comes to the university. It goes to the [COO]. The [COO] takes care of all the non-academic services (e.g., building and grounds, ITC, etc.). What remains, the (COO) ships down to the schools to fund academic programs. The new model is yet to be finalized. However it will be based on matching costs and benefits. It will be designed to reward increased output and superior performance. Most funds will flow through the Provost to the schools based on productivity.

A central administrator described the current model and the changes he felt were necessary to strengthen the provost position:

My impression of Virginia's budget model is that implicit in it is the assumption that you need to run the university as a business. And you run it as efficiently as possible. And you spin off the excess of that to run the academic programs. Now that is way too harsh, but it feels to me we figure out what we are going to spend on sidewalks before we figure out what we are going to spend on assistant professors. [With a strong provost] every time you go out and decide you are going to invest in a new piece of infrastructure, and we have to do it, I want you to do a calculation in your head about how many assistant professors we are not going to hire...the provost needs to be included. A strong provost is joined at the hip on every question about how resources are spent. Instead of asking how do we run as efficiently as we can so we can put more money program, I want the academic programs to be included in the decisions about how many sidewalks are going to be built.

An academic dean also highlighted this shift in responsibility from the COO to the provost:

On balance, [if] the academic side of the institution has a stronger voice, and we have someone who is working with the deans, listening to the deans, and has good ideas, then that's good for us. If the position has authority and budget responsibility beyond the current situation to work with the schools, then that is good. Clearly, the president indicated that the provost will be the number two position and will have significantly more authority and responsibility than provosts have had historically. The COO position will give up some of that responsibility and authority to the provost.

Another dean pointed out the important of resources under the discretion of the provost as a critical component to strengthening the position:

It means a strong provost is someone has financial resources maybe 10s of millions of dollars a year to put toward strategic initiatives of the university. So UVA is not known for its strength in science technology and engineering and a strong provost might declare a 5 year strategic push. I am going to take this kitty of money and spread it out to improve the sciences. I don't think the current provost has much in terms of financial resources.

Summary of Research Data

Organizational change in higher education is a difficult, complex undertaking that requires buy-in and cooperation from a number of different parties throughout the university. The diverse make-up of the community, the often competing goals and missions, and the constant strain on resources makes gaining such an agreement on a change initiative challenging. The goal of my study was to look at how leaders in at the University of Virginia approached the pending change of a university budget model, to understand what steps they undertake to prepare themselves and their units for the change, and how they hoped to leverage the new environment in the future. I used George Lueddeke's Adaptive-Generative Model for change in higher education as a framework to guide my interview questions, particularly in the planning and research portions of the effort. The new budget model effort is an ongoing project, so the goal of

the study was not to show the ultimate outcome, but rather how individuals operationalize the change process around a new budget model and plan for its impact on the organization.

The research identified the importance of research and development activities of individuals within UVa as they sought to gain a better understanding of the pros and cons of RCM efforts. This process consisted of informal education activities such as reviewing the available literature on RCM and speaking with peers at other institutions that work in similar budget environments. The university also formalized these research activities through the creation of the Budget Task Force and its Core Work Group that was tasked with researching a variety of RCM institutions and reporting the findings to the Steering Committee. The research findings served as the basis for educating the rest of the university community about the new budget model and identified issues such as reporting system inadequacies that needed to be addressed.

Many participants expressed a desire to improve transparency around resource and cost allocations through the new model. The lack of transparency in the current model was an issue many felt needed to be addressed. Costs transparencies for central services and for the operations of the individual schools is also an important element that drive many of the decisions around tax rates and the need for subvention when costs exceed revenues at the unit level.

The findings also discussed the risks and mitigation strategies many of the leaders were considering as the budget redesign moves forward. Ensuring that deans and department heads were prepared for the new responsibilities and taking steps to protect working arrangements such as the self-sufficiency arrangements of Law and Darden were

discussed. Also, study participants expressed a concern that undergraduate tuition needs to increase, but there were political realities that must be considered. Programs such as differential tuition, while not directly tied to the new budget model, illustrate the disparate costs of educating students across schools and serves as an example of the different revenue arrangements some schools enjoy within the current UVa system.

Many participants acknowledged that they have not spent a significant amount of time thinking about how the new model will impact their unit going forward, but some common considerations did emerge. Administrators felt the new model would facilitate strategic planning, both to fund unit priorities and central initiatives. A few leaders felt the new model would allow them to push revenue and cost responsibilities throughout their units, while others felt those responsibilities would stay at the dean or school administration level. Most felt the new model would provide unit leaders with an increased incentive and ability to generate revenue and control costs, and that the new model would require a stronger provost in order to operate as intended.

The next chapter includes an analysis of findings for the study, some recommendations that participants provided that could strengthen the process going forward, some lessons learned that other higher education institutions looking at a similar change could find helpful, and some suggestions on future research.

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

Findings and Conclusions

As a member of the UVa community during a time of significant organizational change, I have a first-person view of some of the enthusiasm, trepidation, and the unknowns that are natural byproducts of any change process. This study broadened my understanding of the organization and the complexity associated with the change in a university budget model. When it comes to how resources flow through the organization, it quickly becomes apparent that everybody is interested and has opinions on what the changes should be and the potential impact it can have on their area of the university.

There was a clear consensus that the existing budget model needed to change.

There was nearly unanimous agreement that a lack of transparency in the budget process makes it difficult to adequately plan and discourages innovation in the organization.

Indeed the current budget model was even difficult to describe, as it consisted of a number of different negotiated agreements between a particular school or unit and central administration. These issues contributed to a climate characterized by a general frustration with the lack of proper incentives at the unit levels to control costs and generate revenue as well as the consensus that the current model was unsustainable. The transition in leadership to the new president, Teresa Sullivan, afforded the university with the opportunity to institute a change that many leaders within the various units had been discussing for some time. The president has made the shift to a new budget model a

cornerstone of her first term, and publically comments on the reasons behind the need for the change.

Research has shown that communication is a key component of success for any major organizational change (Kotter, 1996), and stakeholders have to buy into the need for change and understand the vision of where the change will take the organization. Effective communication helps members of the organization embrace the cultural shifts necessary to implement meaningful change and understand what its implications are on a personal level (Bolman & Deal, 2008; Kezar, 2001). Many of the study participants stressed the importance of a steady stream of communication on the need for the budget model change, delivered through a myriad of avenues from the president's office, the faculty senate, budget task force progress reports, and day to day interactions among all members of the university community.

Another key finding from the study was the amount of research and development leaders within the organization dedicated to the budget model redesign. In Lueddeke's model, a development "team", "attempts to discover how others (within and outside the institution...) have addressed the problem" (Lueddeke, 1999, p. 248). This research process was formalized through the creation of the Core Work Group for the Budget Task Force, whose duties included detailed research on peer organizations, analysis of UVa's sources and uses, and modeling various scenarios to help educate the Steering Committee on the impact of different approaches. Aside from this formal research process, every participant alluded to personal education efforts they had undertaken, often over long periods of time to prepare themselves for life in a decentralized budget environment.

These research efforts are important for a variety of reasons. First, it allows the

participants to inform themselves about the issues associated with RCM. This prepares the leadership to make decisions that are informed by peer experiences and lessons learned in the wider higher education community. Second, the research phase of the project allowed participants to gain a more thorough understanding of how the university works. Leaders gained greater insight, not only in their own unit, but also in the operations of other units. Finally, the research phase of the project surfaced issues such as inadequate reporting systems that need to be addressed if the new budget model is going to effective.

Another key component of Lueddeke's framework for change in higher education is strategy formation and development. This stage consists of members of the community debating the various pros and cons of the organizational change initiative and airing positions and disagreements about the proposal. This study identified a number of competing interests and elements within the university that would naturally see the new budget model as a potential threat to current operations within their unit or department. Whether it is a school with a self-sufficiency agreement, a school that receives a large subvention through the current opaque budgeting process, or a central unit that has never been forced to justify service levels or prices; large portions of the organization could potentially lose resources they currently enjoy through enacting a new, more transparent budget model. To help address these concerns, the Budget Task Force is made up of members of the community who have some vested interest in the status quo and can voice the positions of these interested parties during the budget redesign process. The Steering Committee, Core Work Group, and various sub-committees provide forums for open debate around concerns and the future direction of the project.

I found no expectation in my study that any of the participants expected to create a model that made everyone happy. Indeed, on more than one occasion, participants half joked that they knew they would be done, "when no one is happy with the model." The expectation going in was that the model would evolve through a transparent process of vigorous debate and if agreement could not be reached on a particular element, the committee leaders would make sure the counter positions were presented along with the majority opinion. The myriad existing budget models create some deep cultural divides in the process. Multiple study participants pointed to an existing culture marked by strong central control, where nearly every idea with financial repercussions had to be vetted by central administration. As one central administrator observed, "Virginia is a permissioned culture. People seek permission to do all kinds of things. There is really a history of centrally controlling a whole bunch of things." But some units have succeeded in breaking away from some of this central control through self-sufficiency or other arrangements that granted them a degree of autonomy. It's possible that a new budget model will preserve, or strengthen this autonomy, but it is also possible that new model could be used to exert more central control or divert resources to other less successful units. Units that do not generate enough revenue to stand on their own also feel threatened. The current model allows central administration to funnel the resources they need to maintain, if not cultivate, current operations. A transparent budget model shines light on these resource flows and could make for uncomfortable conversations as the redesign moves forward.

Balancing these competing positions, and providing forums for individuals to argue their positions is a necessary, if sometimes contentious, step to foster change in

higher education. The goal is the create "arenas in which disagreements can be hammered into workable pacts" (Bolman & Deal, 2008, p. 387). The president created the budget task force to serve as one of these arenas. It allows representatives from the various camps to confront their disagreements and work toward solutions.

The study also highlights the challenges associated with raising tuition at UVa. The current self-sufficient schools are able to use market based tuition as a significant revenue source for their particular unit. However, that model is difficult to apply across the organization due to the political pressures around raising undergraduate tuition levels. The majority of the study participants acknowledged that undergraduate tuition needed to rise, but that it did not appear to be politically feasible to expect it to rise to a level where it could support the full cost of educating the undergraduate population. This political reality means that leaders within the organization must pursue multiple revenue sources such as fundraising and market driven executive programs to increase total revenues. The limits on undergraduate tuition places added pressure on deans to ensure resources are being adequately applied in the various units. The president also expects to have a yearly conversation with each dean to see if funds should be re-directed to other strategic priorities within the school. This points to a potential increase in the amount of influence the president will have on how deans operate their schools, and it provides a level of accountability at the dean level and forces them to evaluate resource allocations on a yearly basis.

Another potential change in the new system will be the strengthening of the provost position at UVa. Traditionally, the provost had very few resources at his disposal to guide academic investments at the university. This will likely change under the new

model as the provost will control a significant amount of resources that can be allocated to the academic divisions, which is typical under most RCM implementations. The funding will most likely come from taxes on the academic unit to support institutional priorities or some portion of the state appropriation. The early discussions around the new provost role envision scenarios where deans can request resource investments from the provost to start new programs or strengthen current initiatives. These investments would be considered startup costs or one-time investments for the schools. This creates a new relationship between the deans and the provost, who now becomes an advocate, with resources, for new initiatives at the school level.

Recommendations for UVa

During the course of the study, participants voiced their personal opinions about what changes they would recommend to the budget model initiative to improve the experience and increase the likelihood of community acceptance. These recommendations included:

• The senior leadership of the university needs to take an active leadership role in the process from the outset of the project. While the president is clearly engaged, and served as the catalyst to get the initiative started, the demands on her time are such that she cannot be expected to be involved in the near day to day stewardship such a major change initiative entails. While the University's turnover in senior executive leadership afforded an opportunity to institute change, the absence of a strong provost and the retirement of the COO meant that the project had no executive level champion in the early stages. Study participants felt that the absence of a strong executive sponsor for the project led to directionless efforts and inefficient use of participants' time. These executive

- positions have recently been filled, and they appear to be taking a more active role in the project going forward.
- Budget Task Force is an important tool in the organizational change process.

 Members of the community at large see this group as instrumental in the design of the eventual budget model the president presents to the Board of Visitors. These members become advocates for the proposed change, and it is only natural that those who are not invited to participate will be worried that their positions are not being considered. For example, the dean from each of the schools should be invited to participate on the steering committee. The budget model will ultimately grant them new responsibilities and increased accountabilities. If there is a reason some are not invited to the steering committee, that reason should be clearly articulated and every effort should be made to educate them on the debates occurring outside the public eye.
- Provide a clear project plan with meaningful deliverables. A number of participants felt their early efforts were directionless and did not inform or move the project forward. This can lead to disengagement or apathy among the participants and the eventual collapse of a meaningful change project. This may very well be a natural byproduct of early change efforts which can be chaotic, especially significant projects like a budget redesign. Kotter (1995) recommends one way to combat these early hurdles is by focusing on creating small wins early in the process that can be trumpeted to the organization and used to build enthusiasm around the ongoing effort.

Tie the effort to the strategic priorities of the organization. The planning and design stages of the new budget model create an opportunity to focus the entire community on the strategic priorities of the institution. Arenas such as the Budget Task Force provide a forum for discussions about what measurements leaders will look at to judge the success or failure of the project. Transparency around resource flows should provide opportunities to discuss whether investments in particular programs or departments are furthering the mission of the university. Subvention and their impact on tax rates should lead to healthy discussions about the reasons behind the subvention. Moving resources from one area of the university to another should be done in a transparent fashion with clear strategic reasons behind the allocation decisions.

Observations for other Institutions of Higher Education

Due to the limitations inherent in a single case study, one must be cautious about drawing conclusions that can be applied to other institutions of higher education.

However, there are a number of observations administrators in other organizations could consider as they approach similar change efforts. While some of these observations pertain directly to RCM type budget model projects, some are broad enough that they could be applied to almost any change process in higher education. They include:

• RCM designs cannot be portrayed as a zero-sum game. If members of the community only view the new model as a way to shift existing resources from one unit to another, creating in effect winners and losers in the process, then the new model and the resulting change process will struggle to gain acceptance. Leaders must emphasize the opportunities the new model creates to grow the revenue pie and

stress the importance of leveraging the entrepreneurial opportunities afforded by RCM models.

- **RCM** is more than tuition revenue. Many deans in a new RCM implementation are excited about the prospect of gaining all their tuition revenue; however, it is important to understand that the new model is most likely not creating more net revenue for the units. Many institutions that move to RCM or other decentralized budget models create hold harmless policies that basically ensure the same net revenue scenarios for some number of years to allow units to adjust to the new model. In addition, public institutions will run into some of the same tuition limitations I found in the UVa case, which will hamper the ability of the school to set in-state undergraduate tuition at market levels or even at the cost of delivering the education. What a RCM model should do, and what should be stressed by the project champions, is create an environment that incentivizes deans to pursue new revenue sources, with the idea that they now will see the majority of that revenue flow back to their school. In other words, the model will not grow the revenue pie. That responsibility will reside with the deans and other leaders of the institution who should now be incentivized to pursue new opportunities since they will reap more of the return.
- Carefully consider who you include on the project team. When the goal of the project entails significant organizational change such as this budget redesign, you need to ensure competing views are debated and that an appropriate forum is provided to work through these differences. You may not necessarily reach consensus on the change, but excluding people from the process who have a vested interest in the status quo will make it difficult, if not impossible to enact the change.

- Strong leadership from the outset of the project will also help provide structure and direction to the effort. Strong leadership also demonstrates institutional commitment to the change effort. At UVa, there were ongoing discussions about the need for a different budgeting process but with no momentum until President Sullivan arrived. However, a change of this significance needs constant attention at the project level, which will be difficult for a college president to provide. One lesson learned during the UVa process was that the executive leadership needed to be in place from the outset of the project. If that executive leadership is not available at the expected launch of the project, consider postponing until it is in place. Providing strong, consistent leadership from the beginning to end is a critical success factor for any significant change effort.
- about the minutiae of a new budget model, but they will be concerned about the potential impact a new model could have on their resources or departments. At a minimum, communicate early and often with the faculty about the change and the process. Deans should also consider how involved their faculty should be in the process, especially if the leadership plans to push the decentralization and budget responsibilities throughout the school. Early involvement will help deans gain faculty buy-in and potentially identify individuals who can thrive in the new environment or those that might require additional training or a shift in administrative responsibilities.
- Take the time to research how other institutions have addressed a similar
 change. It's unlikely that the change effort you are considering is the first such effort
 in higher education, and your colleagues are often very willing to share their war

stories. The research and development portion of the change effort is extremely important for the eventual success. You can use it to inform decisions about who should be included in the change process, to identify potential obstacles, and to help shape the vision of where the change can take your organization. As one administrator pointed out, "I think one of the really nice things about higher education is that people are willing to share information...you can call somebody up [at another institution] and they will tell you anything." Once the change process is underway, encourage your participants to reach out to their colleagues in the higher education community to help inform their opinions and lay the groundwork for the success of the project.

- Use the change process to bring different groups of the organization together to discuss what the change will mean for them. Multiple participants pointed out that the new budget model provided opportunities for collaboration among units that rarely interacted with each other during the course of normal business operations. As one participant highlighted, "We are meeting on a weekly basis with our colleagues at the other schools and central administration. This has never happened in my 10 years at the university." Not only does this collaboration help build a sense of shared purpose around the change; it can serve as a platform to inform colleagues of some of the unique challenges facing other units.
- Leverage the change to highlight discussions about the strategic priorities of the organization. Strategic priorities for an organization can often be difficult to discern either because leadership does not communicate them on a regular basis or because members of the community are focused primarily on their day to day jobs. A

transparent budget process can quickly reveal what the executive leadership team considers to be important priorities for the organization. Multiple participants felt that decisions around subvention, tax rates, tuition levels, and financial aid should be guided by the strategic goals of the institution.

The change project can serve as a catalyst for related issues that need to be addressed. In the UVa study, the pursuit of a new budget model uncovered other issues, such as the lack of a robust reporting system. The associate deans used their needs analysis study to identify this shortcoming for all the units. This created an opportunity to devote resources to a project that may not have been addressed in the absence of new budget initiative.

Future Research

This study looked at a decentralized budgeting model in the early stages of its planning and development. The goal was to illustrate how leaders within the organization plan for and prepare for a pending change. I also looked at what, if anything, those leaders expected to do once the new model was in place to move their unit forward. An obvious future research goal would be to revisit the study at a later stage of the change project to investigate the perceptions about the success or failure of the new budget model and its acceptance by the university community. A post mortem of the project implementation could provide valuable insight into why decisions were made and if the model is generating the types of behaviors the designers intended.

One issue that proves particularly difficult for many of the study participants is finding a way to adequately determining appropriate cost levels for central services and cost centers. Benchmarking was brought up a number of times by school leaders as one possible solution to determining if the service providers are running an efficient operation when compared to peers. However, there appears to be a dearth of good cost benchmarking data in higher education. Future studies could look at this issue in an attempt to determine a viable set of metrics that could be used to help set service levels and justify tax rates.

I think it would also be interesting to study the potential transition of the university from one described as having a high degree of central control to one that was more decentralized, with more autonomy in the units. Studying the changes in the units under the new model could also be informative. It would be interesting to see if a more decentralized model actually allowed units to be more entrepreneurial and contributed to new or greater revenue generation.

APPENDIX A: INFORMED CONSENT

Project Title: Planning for a Decentralized Budget Model: Anticipating Change in Higher Education
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Informed Consent Agreement

Please read this consent agreement carefully before you decide to participate in the study.

Purpose of the research study: The purpose of the study is to look at how members of the university community approach the pending decentralized budget model change. The study will look at what activities individuals have undertaken or plan to take in response to the new model and how are they preparing their areas of influence for the change. The goal is to interview 15 to 20 participants from various levels of the university including central administrators, deans within the various academic units, and faculty involved in the budgeting process.

What you will do in the study: The interviews, which might be audio taped with your consent, will consist of one 45 minute session per participant over the next 4 months. Participants may also be asked to complete a 30 minute follow-up interview to clarify information provided in the initial interview. I will take notes during the interview and digitally record it with your consent. You will be given the opportunity to review and amend any statements you make during the interview. Participants may skip any question that makes them uncomfortable and they can stop the interview at any time.

Time required: The study will require about 1.5 hours of your time. The initial interview may take 45 minutes to an hour and a follow up interview of 30 minutes may be requested to clarify points in the original interview.

Risks: There is a possibility of minimal professional risk associated with participating in the study. For example, negative comments about the budget process or fellow administrators at the university could be linked to your specific comments or position, and you may not be comfortable with that possibility. To offset this risk, you have the option to review all transcripts of the interview and modify or clarify any comments you made during the interview. You may also opt to not have your name associated with any of your comments by checking the appropriate box in the confidentiality section on page 2 of this document.

Benefits:

Participation in the study could help individuals identify gaps in their knowledge about the budget process and how they will function in the new model. The findings from this project will provide information on some of the serious challenges various schools are facing with the new budget model and the approaches taken by you and your colleagues in addressing these issues can help the University successfully implement the new budget process. The study will also help other institutions identify key concerns and approaches for dealing with them in the early stages of similar efforts.

Revision Date: 09/01/07

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Project Title: Planning for a Decentralized Budget Model: Anticipating Change in Higher Education
Page 2

Confidentiality:

The recordings will be destroyed within one year (2012) once the study is complete. Because of the nature of the data, I cannot guarantee your data will be confidential and it may be possible that others will know what you have reported. No references will be made in oral or written reports that could link you to the study without your permission, however due to the small number of participants and their responsibilities at the university; it is possible your comments could be linked to you. If you are not comfortable linking your name to specific comments or the project in general, please indicate this preference by checking the appropriate choice below.

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Voluntary participation: Your participation in the study is completely voluntary.

Right to withdraw from the study: You have the right to withdraw from the study at any time without penalty. If you withdraw from the study before data collection is completed your data will be returned to you or destroyed.

How to withdraw from the study

If you want to withdraw from the study, ask the interviewer to stop the interview during the interview process. If you would like to withdraw after your materials have been submitted, please contact Stuart Evans (sevans@virginia.edu or (434) 924-7975) that you no longer wish to participate. There is no penalty for withdrawing.

Payment: You will receive no payment for participating in the study.

If you have questions about the study, contact:

Researcher's Name: Stuart Evans.
McIntire School of Commerce
Rouss and Robertson Hall
University of Virginia, Charlottesville, VA 22903.
Ste2q@virginia.edu
Telephone: (434) 924-7975

Researcher's Name: Robert Toutkoushian Institute of Higher Education Meigs Hall University of Georgia Athens, GA 30602 (706) 542-0577

Revision Date: 09/01/07

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Signature: Date: Date: Date:
Agreement: I agree to participate in the research study described above.
If you have questions about your rights in the study, contact: Tonya R. Moon, Ph.D., Chair, Institutional Review Board for the Social and Behavioral Sciences One Morton Dr Suite 500 University of Virginia, P.O. Box 800392 Charlottesville, VA 22908-0392 Telephone: (434) 924-5999 Email: irbsbshelp@virginia.edu Website: www.virginia.edu/vprgs/irb
Page 3 Faculty Advisor's Name: Thomas Bateman McIntire School of Commerce Rouss and Robertson Hall University of Virginia, Charlottesville, VA 22903. Telephone: (434) 924-7060

Project Title: Planning for a Decentralized Budget Model: Anticipating Change in Higher

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APPENDIX B: INTERVIEW QUESTIONS

Using George Luddeke's Adaptive Generative Development model for change in higher education, I have a generated a list of interview questions that touch on elements of a change process that occurs prior to implementation. The responses to these questions will illustrate how individuals throughout the university community react to or plan to address the adoption of the new budget model.

Needs Analysis

- 1. How effective is the current centralized budgeting model is for the university?
 - a. What are some of the limitations?
 - b. What are some of the positives associated with the current model?
- 2. Do you think decentralized budget and management models are a better fit for the organization or your particular unit or department?

Research and Development

- 3. Have you done site visits to other institutions with similar models?
 - a. Have you looked at the literature on decentralized management and budgeting?
 - b. Do you have experience in a decentralized model?
- 4. Based on the findings of any of the research, how have you adjusted your approach to the implementation?

Strategy Formation and Development

- 5. How is the UVA community being included in the RCM change initiative? Do you think it will impact your area?
- 6. If you are responsible for a unit or department, what steps are you taking to prepare your area and other employees for the change?
- 7. Do you feel comfortable with the process and do you think your concerns and the unique perspectives of your area being considered?
- 8. Is the new budget model linked to the strategic plans of the University? Your unit?

Resource Support

- 9. What impact do you think the new budget and management model will have on institutional or departmental resources?
- 10. Are you doing anything to ensure your area of responsibility has adequate resources dedicated to the new budget model?

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