

Case Study: Transformational Organizational Structure how restructuring IT led to breakthrough performance and value

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As a computer science professor at North Georgia College & State University, I wasn't happy with the IT support I was getting. I certainly wasn't alone. The IT department had a reputation for saying "no" to requests; help was sometimes slow to arrive; commitments fell through the cracks; and IT did not always seem aligned with the real needs of the University, academically or administratively.

I was foolish enough to complain, so the University's president challenged me to fix it. I took the job of CIO in 2006.

After working with the individuals in IT, I knew the problem wasn't laziness or a lack of caring about the University. Our 20 team members were good people, technically capable, and eager to help customers.

Maybe they just didn't know what to do, I speculated. As an academic, I ought to be able to come up with some really great, strategic projects for IT in education. But I was quickly confronted with a tough reality.

The IT department was severely under-funded and under-resourced; staff were stretched way too thin to meet clients' needs. And I couldn't cut back on low-payoff projects to make room for new strategic projects, since everything was essential to keeping the University running. Even if I could find a really strategic opportunity, we just didn't have the capacity to do more.

Well, I thought, I'll just make a case for more budget. Wrong again! My predecessors had a reputation for demanding more money, but not delivering results to match. Requesting a bigger budget was *not* an option.

And I'm not naïve enough to think that commanding my staff to "do more with less" would magically make them more productive. I was certain they'd been hearing that for years, and it was obvious that they were not wasting time and money such that I could simply stop the waste and, presto, we could now do more.

I was caught in a Catch-22: I had to deliver strategic value to get more funding. But I needed more funding to do anything more than stay afloat.

In Search of a Breakthrough

I realized that my only way out of this predicament was to make the IT department *significantly* more efficient and effective. We needed a quantum leap.

I had to admit that my computer science training didn't prepare me for this. It was "back to school" for this professor. I began studying how CIOs were improving their IT organizations.

Many were fine tuning their processes (e.g., ITIL), but I knew this would only lead to marginal improvements. Some were tuning their priorities (e.g., steering committees), but there was nothing in our portfolio that could have been de-prioritized. Some were enhancing productivity with new technologies, but where was I going to get the money for that? And even if I could, it wouldn't lead to that quantum leap.

In early 2008, J.L. Albert, the CIO at Georgia State University (GSU), introduced me to their transformation process. It was based on the work of N. Dean Meyer and Associates, Inc. (NDMA). Dean was helping them implement what he calls "the business-within-a-business paradigm" – the concept that every group in an organization is an entrepreneurship, funded to produce products and services (not just to cover costs).

Dean didn't just preach and teach. He systematically designed their structure, culture, and resource-governance processes. As a scientist and a systems thinker, I was attracted to Dean's ability to treat these "soft" topics with "hard" principles.

I also liked the way the process engaged the IT leadership team. Dean didn't study them and prescribe answers, as so many consultants do. He taught the leadership team the science of organizational design, and guided them through a step-by-step process. This brought their deep understanding of their own organization's needs into the design, and also built tremendous commitment. Their enthusiasm was quite evident.

GSU worked with Dean on their catalog, rates, an investment-based budget (what they proposed to sell, not just what they wanted to spend), and their structure, all based on the business-within-a-business paradigm.

This appeared to be the breakthrough I was seeking. We had all the same challenges as GSU, even though we had a fifth as many students and a tenth the IT budget. I became convinced that we needed to apply the same principles, and operate IT as a business within the University's "business."

And I wanted to do this *with* my team, not *to* them. GSU had over 200 IT staff. Dean's ability to engage that many people in the process was impressive. I wanted to do the same with my little team.

After talking with Dean and reading his book on organizational structure, I realized our organization chart had both gaps and overlaps.

As far as gaps, when it came to new services – from digital signage to mobile applications development – no one knew who was accountable. There was no clear home for innovation.

As an example of overlaps, we had seven groups, and all seven were running their own servers! In addition, most of them were performing their own customer service and doing their own programming, all with varying degrees of effectiveness. They were all trying to be independent of one another.

In one particularly egregious example, I found that our help desk was running our work-ticketing system on a PC sitting on the floor under a technician's desk. When a custodian accidentally hit the power button while cleaning the floor, the database was corrupted. It would have been unfortunate to lose a single day's worth of tickets; but because the server team wasn't administering this system, there was no nightly backup. We lost over a week's worth of trouble tickets, and we were down for over a day.

How could this have happened? The support team wanted a new ticketing system, but the operations team at that time was slow or unwilling to respond. So a capable support technician set up a simple open-source ticketing system. It was just another result of organic growth, without an organizational vision or plan.

And with the "stovepipe" structure of independent groups, staff were going a dozen directions at once. That didn't permit them to focus and become really good at any one thing.

It became clear that, in our case, structure needed to be sorted out before we tackled a service catalog and an investment-based budget.

The Process

My IT leaders and I were very impressed with the process NDMA proposed. First, full participation from all IT leaders was not just requested; it was required. To make this safe, Dean encouraged me to promise no loss of employment or salary as a result of the reorganization.

Second, Dean offered a scientific, time-tested approach. The theory, practical principles, and every step in the process were well documented. *Structural Cybernetics*® was a ready-to-go toolkit.

But how could our tiny organization afford the help of a well-known organizational consultant? Fortunately, Dean was flexible, and worked with me to design a trimmed-down process that would fit within our budget. Also, he offered to work with us through webinars, which saved money on both consulting fees and travel costs. Somehow, we were able to acquire an industry-leading transformation process within the exceptionally tight budget of a small institution.

The steps in the process are listed in Figure 1. At each webinar, Dean reviewed our work to date, answered questions, and then taught us the next phase of the process, leaving us with “homework” before we next met with him.

I have to admit that the seven webinars we could afford were the bare minimum; had I been able to afford more of Dean’s time, I absolutely would have. But we made up for our constraints by carefully studying the extensive documentation that NDMA provided as part of the license for the *Structural Cybernetics* process.

In the first workshop, with 90% of the IT staff in attendance, my employees learned some of the reasons they were stretched so thin, a phenomenon Dean called “rainbows.” Each team colored-coded their boxes on the organization chart with the IT lines of business they represented. This graphic exercise showed us how scattered positions had become, with employees wearing as many as six or seven hats. We also saw how each IT line of business was scattered around our organization chart. This confirmed our decision that structure was the right place to start.

As another unique aspect of *Structural Cybernetics*, after we designed the structure, we put it to work on paper before we announced it. Dean taught us the process of “walk-throughs.” For every project or service, there’s only one group that sells it (thanks to our new organization chart). That group we call the “prime contractor.” In a walk-through, the prime contractor forms a team by “buying” products and services from other groups. This way, we learned how real work would get done in the new organization *before* we tried to go live.

Steve McLeod, Associate CIO, explained the value of walk-throughs. “The process helped us define the resources needed for each deliverable. Walk-throughs minimized ‘rainbows,’ and eliminated the ‘stove-pipes’ that were common before. Many staff now automatically use this process in their projects, since it allows them to build a skeleton project plan and ensure all the right resources are assigned.”

Results: The Inside View

As CIO, I see the impact this process has had on people. By eliminating the “rainbows” and focusing each group on a single domain, former generalists and jacks-of-all-trades have become highly trained specialists.

Steve recalled the initial resistance among some staff to the idea of specialization – what some saw as pigeon-holing or limiting their scope of influence. “This resistance was primarily due to the fear that their skill sets were being minimized. But as time passed, staff members began to flourish. Now, all staff are being trained in IT Service Management best practices, and many now hold multiple certifications.”

Just three years after completing the reorganization, IT staff now hold over 80 professional certifications, up from fewer than 10 just six years ago. In fact, we now hold more professional qualifications than any other

Figure 1: NDMA Teleconferenced Workshop Schedule

Workshop 1: Education on lines of business; diagnose current structure; education on principles of design; instructions for homework assignment.

Homework: Individually draft proposed organization chart(s).

Workshop 2: Review proposed designs (pros, cons); build consensus on a shared organization chart.

Homework: Finalize the organization chart; appoint managers.

Workshop 3: Revisit final organization chart in terms of lines of business; education on how to write domain statements (definitions of each manager’s lines of business and boundaries).

Homework: Individually draft domains.

Workshop 4: Review all domain statements, ensuring no gaps or overlaps.

Homework: Finalize domains.

Workshop 5: Final domains review; education on how to do “walk-throughs” (forming teams across the structure with a prime contractor “buying” from peers as subcontractors).

Homework: Various walk-throughs.

Workshop 6: Q&A from walk-throughs; education on how to do rostering (assigning the rest of the staff to managers’ groups).

Homework: More walk-throughs; roster of all staff; prepare for announcement day.

Workshop 7: Plan announcement and migration process.

Homework: Communicate to staff and clients; administrative changes; staff education; and a meticulous migration process.

department on campus, and our team members have developed into trusted experts and valued consultants across the University.

This is good for the University and good for staff. Turnover has been low and motivation high, even through the exceptionally competitive technology job market of the past couple of years.

As a side benefit, in interacting with Dean, we also learned about an entrepreneurial culture. We realized we'd been "auditing" customers' requests – telling them "no, we can't afford that" or "no, we can't do that" – instead of enlisting their help to secure funding to accomplish new things.

The *Structural Cybernetics* process also taught us that we "sell" (even though we don't do chargebacks) our products and services to clients throughout the University and to one another. This made us focus on results, not just processes. And it made us more customer focused.

Results: Our Clients' View

Both my team and I have seen a dramatic increase in customer satisfaction on our campus. We've become known for transparency and a "can do" attitude and abilities. And we're aligned with the needs of our clients. Steve McLeod notes "the many thank-you's and 'kudos' that IT leadership and staff receive on a daily basis."

We've worked with academic and administrative units as well as student groups to bring significant innovation to the University despite severe budget constraints by accessing alternative funding sources. While other organizations were cutting back services and staff, my team secured grants and shared funding to invest in innovative technologies by collaborating openly with campus counterparts.

One bit of evidence of our progress is that I'm now a frequent and welcomed participant in the Faculty Senate and Student Government Association meetings.

Perhaps the most powerful evidence is this: The University has chosen to grow IT investments through four of the tightest budget years in recent history. We're now 35 full-time IT staff in 2012, up from 21 in 2006; and total IT budget is \$4 million, up from \$1.7 million in 2006. This growth is not due to increased costs. It's the result of our increased credibility and the value we've delivered to the University.

The Bottom Line

We've achieved exactly the outcomes I'd hoped from implementing the business-within-a-business paradigm, and specifically from reorganizing IT using the principles of *Structural Cybernetics*. Developing a team of highly-trained, deep-subject-matter experts has paid off within IT and throughout the University.

Thanks to the participative process, systematic principles, and our leadership team's commitment, our IT organization is stronger and more responsive than ever, and I only see it getting better from here.

Dr. Bryson Payne is the Chief Information Officer at North Georgia College & State University. In addition to serving the campus, he's now overseeing the consolidation of the IT departments in two institutions to form a new 15,000-student regional university with four campuses in the north Georgia mountains. Bryson has served as CIO for the past six years and is a tenured associate professor at the University with fourteen years of experience teaching computer science, information systems, and information technology.

