21st Century University and the Failure of Business Process Reengineering

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David M. Boje, Ph.D
Professor of Management
College of Business, New Mexico State University
MSC 3DJ, PO Box 30001
Las Cruces, NM 88003-8001
575.646.2391
dboje@nmsu.edu

Yue C. Hillon, Ph.D
Associate Professor of Management
College of Business, Western Carolina University
104 Forsyth
Cullowhee, NC 28723
828.227.3588
ycai@wcu.edu

Tara M. Mele, MBA
Instructor
Western Carolina University
College of Business
104 Forsyth
Cullowhee, NC 28723
828.227.7412
tmmele@wcu.edu

Abstract

The wrong models of organizational development are being used to reorganize universities. This paper examines the demands of 21st century universities and why Business Process Reengineering (BPR) won't get us there. By presenting an ethnographic case study of one PRU's tragic journey with business process reengineering and reflecting on the unintended but predictable consequences, a socioeconomic approach that is decidedly against reengineering is proposed to be the path forward. A socioeconomic approach builds human potential and launches revenue development projects self-financed by diagnosing and redressing hidden costs.

Keywords: Business Process Reengineering, 21st Century University, Socioeconomic Organizational Development, Wicked Problem, Neo-Taylorism

Introduction

Are there more intelligent and effective approaches to organizational development of the world's academic institutions than business process reengineering? How will the organizational development (OD) approaches being implemented in higher education institutions to address the wicked problems our nation and states face, such as unsustainability of state funding, lack of public commitment to mass higher education, declining interest in diversity, and a decline in the skills of graduates. Those of us in organizational development know the research results, that reengineering hurts, does not help and leaves us worse off. Yet, reengineering by 'experts' is the most popular approach to deal with the global defunding by the State, downsizing, illogical policies, and the effort to displace humanities education with 'academic capitalism'.

The purpose of this paper is to challenge the efficacy of reengineering and develop a socioeconomic alternative in the work of Henri Savall and his many colleagues. Collectively, the co-authors of this paper have been teaching the socioeconomic approach to organizational development and strategy for twenty-four years, at one PRU where Deloitte consulting was hired to do reengineering and two comprehensive universities.

This paper intends several theory and method contributions. First, reengineering has methods that sound good for universities, but have unintended consequences. Second, given the defunding of universities, the intended consequences of business process reengineering are to jettison the humanities. Third, there are alternative approaches to organizational development which are compatible with the mission of the 21st century universities, but that would strengthen a model of education that has been declining in state and cultural support in recent decades.

The structure of the article begins with an analysis of the demands of the 21st Century University and review of Business Process Reengineering (BPR) and its faults, followed by the case example of BPR implementation in a southwestern PRU, and finally a proposal of how a socioeconomic approach of organizational development could be applied.

Demands of 21st Century Universities

The context and meaning of higher education have been significantly transformed on a global scale over the past 25 years, and universities are feeling pressure from stagnation and a lack of sensible innovation. Universities must re-examine their value contributions and positionings through a strategic lens of future needs in knowledge and skills, in order to assess the resources needed for vigilant decision-making (Du Preez, 2015). The current training framework for both students and new faculty mentoring does not match these future demands (Austin, 2003). Higher education is faced with a multitude of challenges to the traditional system. Some of the key issues that have dominated university administrative attention and triggered process reengineering have involved; addressing public skepticism of the quality of education and faculty accountability (Burgan, 2001); tightening or diminishing fiscal resources that require faculty to engage in multiple demands, such as cost control and entrepreneurial

activities (Austin, 2003); increased diversity of students and faculty (Syverson, 1996 & Keller, 2001); and greater emphasis on learning outcomes and new educational institutions that are beyond the bricks and mortar of a physical campus (LeVine, 2000).

The changing landscape of higher education is faced with complex problems, wicked problems, which require collective efforts among administrators, faculty, staff, students and community members (Ramaley, 2014). Academe is emerging as a supercomplexity, where solutions confined within a pre-determined framework of references is no longer the norm (Barnett, 2000; Williams, 2008). Instead, the world is confronted with uncertainty, unpredictability, changeability, and contestability (Barnett, 2000).

In the 21st century, universities need to be repositioned as participants within a complex learning society to co-discover and co-create knowledge with collaborators beyond the parameters of a university (Buckley, 2012). This new role contrasts sharply with the traditional belief that universities should serve as the primary producers and transmitters of innovation. The change to a collaborative role for public knowledge creation is reflected in new policies and scholarship requirements concerning engaged scholarship (Holland, 2005). Both public and private regional comprehensive universities were early adopters because their performance directly impacts and is impacted by the communities they serve, especially considering that most of their graduates remain in the region and develop into future community leaders. On the other hand, research institutions were slow to acknowledge the need for change, and it has been an unnatural or imposed realization through mandatory policy changes, and they may never view engaged-scholarship as the core of their focus (Holland, 2004).

Ultimately, the demand for change in universities trickles down and becomes the responsibility of faculty and staff without any additional resources or support. Newfield (2008)

pointed out that higher education has become a competitive business as the demand for enrollment growth, coupled with budget reductions, has increased and is further intensified by the elite access of the private universities to resources. It is an economic war masked behind the culture war to suppress and attack the middle class knowledge power. The same forces identified as the shapers of higher education, such as the market, resources and government interventions, have become vital barriers to innovation. It is becoming a Darwinian war of the fittest under the disguise of accountability (Gumport, 2000).

Some scholars have argued that design thinking, an approach that has been used in product design for many decades (Ward, Runcie & Morris, 2009), is the best modality to address the many challenges and create solutions that are purposeful and targeted towards the specific goals of a 21st century university. Universities are complex and self-organizing organisms and the integrative and human-centered design thinking approach could support bridging the complexity of integrating users' needs, feasibility limitations and viable business strategies (Brown, 2009) based on the understanding of the problem at hand. However, Buchanan (1992) argued that the fundamental challenge behind the lack of appropriate solutions to problems is not due to a lack of tools or processes, but instead, it is because we often couple inappropriate methods for solutions to ill-defined problems. Furthermore, proponents of design thinking fail to realize that purposeful human intervention contradicts the assumption of self-organization, and that many of these ill-defined problems represent segments of a wicked problem.

Wicked problems are problems with complex interdependencies that are the result of an incomplete understanding of the parameters, changing conditions and contradictory ideologies (Rittel & Webber, 1973). When organizations attempt to address only one aspect of a wicked problem, more of the existing problems both emerge and are simultaneously created. Thus,

instead of investing money and effort into reengineering the existing system based on poorly understood problems, shouldn't we first clearly define or re-define the fundamental problem to gain a better understanding of the wicked framework?

Business process reengineering as adapted by higher education in an attempt to address the challenges of a 21st century university has only broadened the discourse between the administrative narrative of improved efficiency and the true meaning of student learning and skill development beyond a standardized credential. A simple tool, like process reengineering, cannot teach faculty and students how to solve wicked problems; the complexity of challenges facing a 21st century university is a wicked problem in and of itself.

Business Process Reengineering and Its Faults

Business Process Reengineering (BPR) became the trend in organizational change in the early 1990s when Micheal Hammer (1990) wrote, "It is time to stop paving the cow paths.

Instead of embedding outdated processes in silicone and software, we should obliterate them and start over" (p. 104). This reengineering approach was the solution to pre-technological business operations that were hindering the success of companies through excessive use of resources and failings in cost, quality and service. BPR requires organizations to challenge and radically redesign the existing organizational processes of related tasks (Davenport & Short, 1990) to better serve customers and cut down costs. BPR is fundamentally rooted in Adam Smith's (1776) notion that the deepening of work separation and cost reduction lead to greater productivity and Fredrick Taylor's (1911) management theory that increased efficiency is achieved through labor specialization and control. As a result the BPR outcome habitually results in cost cutting measures in the name of greater efficiency instead of the very different emphasis of value

creation. BPR is positioned in a "false duality with bureaucracy" (Boje et al., 1997: p. 631) and has justified the displacement of labor masked behind the storytelling of revolutionary achievement, profitability, and competitive advantage. Largely hidden voices note that cost cutting is dialectically opposed to creating value. Davenport (1995) re-empathized that cost reduction, for instance through employee layoffs, by itself cannot be a sensible goal and Hammer later reflected that BPR lacked an appreciation for a key dimension of organizations, the people (White, 1996).

Instead of using technology to automate existing outdated and ineffective processes, Hammer (1990) suggested that companies should utilize information technology to help make non-value added processes obsolete. Reengineering promised great results and an immediate impact on cost savings through radically changing processes to increase efficiency. However, like many disruptive innovations, the initial explosive and seemingly positive results started to see diminishing returns as it became apparent that this tool could have impactful shortcomings. Champy (1995), an original innovator of BPR, found that reengineering efforts failed to achieve the desired goals and benchmarks by as much as thirty percent. O'Neil & Sohal (1999) and Champy (1995) also found that "up to 70 percent of BPR programs fail because reengineering programs have been used as a substitute for strategic planning" (O'Neil & Sohal, 1999, p. 573).

BPR was proposed as an outcome-focused response to the recession and increasing global competition in the 1980s (Grover & Malhotra, 1997). However, applying this approach today and completely reengineering existing processes or "obliterating" the old would create a complex chain of information system reactions. Because of the critical nature of the 21st Century information technology and the potential for disruption, most common organizational system changes today are what Davenport (2013) refers to as process improvement and not

reengineering or innovation, distinguished by a slight increase in efficiency across multiple existing processes as opposed to radical changes to the existing processes.

Process reengineering was proposed as having to begin with a "blank sheet of paper" (O'Neil & Sohal, 1999, p. 577) and was meant to be executed in a rapid fashion even if the redesigning process may result in uncertainty (Hammer, 1990). What this blank-sheet approach did not consider was the existing knowledge and emotions held by the employees within an organization. It was a top-down approach that purposefully excluded the employees engaged in the system from designing the new processes (Hammer & Champy, 1993). This aggressive managerial mindset is one reason that BPR is considered a neo-Tayloristic management approach and why any project started under the BPR heading will inherently have a Taylorist bias (Pruijt, 1998). The neo-Tayloristic exclusion of employee input and adopting new technology at the expense of human needs, creates the potential for injustice or a perception of injustice in the change process (Beugre, 1998). Novelli, Kirkman, and Shipiro (1995) argued that a climate of fairness is a necessary component if there is going to be a successful implementation of organizational change. However, in the original conception of BPR it was accepted that the changes would face resistance and it must be met with strong leadership willing to "outlast the cynics" (Hammer, 1990). This directed change approach, heavily relying on authority and obedience, results in inorganic coping of people's emotional reactions (Kerber & Buono, 2005). Such a lack of consideration for people and commanding change at the expense of human needs will ultimately lead to failure (Beugre, 1998). When confronted with the complexity of intensified and intricate organizational systems and socio-technical uncertainty, a planned and guided change from within is more appropriate (Kerber & Buono, 2005).

As a response to the seemingly radical nature of process reengineering, Business Process Management (BPM) was introduced and aimed to optimize exiting processes through incremental changes (Burlton, 2001), instead of redesigning from a blank slate many similar approaches are familiar to us including, Totally Quality Management (TQM), Lean Manufacturing and Six-Sigma. BPR, BPM, TQM, Lean and Six-Sigma are methodologies or tools designed for organizational development, specifically, process improvement. They are not the strategic framework or foundation guiding the change. The common characteristic of these process improvement methods is the assumption of a clear understanding of the problem at hand (Davenport, 2013), and that this problem resides in the exiting processes and the people behind them. These problems are often defined or scripted ahead of time instead of an emergent discovery process. Approaching a wicked problem with the fundamental and flawed assumption of a pre-defined problem will likely result in failure or a destructive lasting impact.

Business Process Reengineering Towards a 21st Century University?

When reengineering began planting its roots in universities in the mid 1990s, early research deconstructed the reality behind the fad highlighting the elimination of tenure, outcome assessment, and professors making up for fluctuations in enrollment (Boje et al., 1997). BPR is a monological narrative that states that efficiency is improved by eliminating non-value adding activities, processes and people. Amidst the 21st century of dialogic organizations, where socially constructed realities and self-organizing narratives shape the complex sense-making process of the people and organizational activities (Bushe & Marshak, 2009), BPR is a dead narrative self-contained in a closed framework with no pathway forward from its limited formula to increase efficiency. It is a specialized tool never intended for the purpose that it is now used, cost

reduction and disregarding the people (Devenport, 1995). Tools themselves can be used as a part of strategy but in and of themselves they cannot be strategic and an attempt to use them as such is just a means-end dimension of change. Just like TQM, Lean, Six Sigma, and other forms of Tayloristic continuous improvement processes, BPR is a self-contained process with a strategic label and re-narration of the Taylorism paradigm and another dimension of dehumanization of the workforce (Boje & Winsor, 1993).

When the BPR narrative emerged in IT and engineering, it was developed to study inefficiencies within an organization and propose radically restructure as opposed to automating obsolete processes (Davenport, 1995; Hammer, 1990). When moved into management, the approach completely lost that idea of an objective science orientation to investigate a problem and develop ways to fix it. It became another solution in search of a problem with its lack of data-driven process. When organizations are overwhelmed with the epidemic of conflicting standards and norms, some helpful and important while others unnecessary and obstructive (Boje, 2015), BPR became another solution in search of a problem with its lack of data-driven process. The scapegoat of BPR, non-value creators, is never pointed towards the executives or the top management. BPR is treated as a specialized knowledge that not everyone can understand and is rooted in the notion that only certain people can create value with management security at the top.

These are reasons why BPR can never solve a wicked problem and working towards a 21st Century University, is definitely a wicked problem. BPR involves no search of the core problem or root challenges because the problem is already contained in the process and defined as non-value and low efficiency. The objective then becomes to find the people that are responsible for it, the activities to downsize, or new policies to impose. Universities are endowed

with a top-heavy organizational structure (Terrien, 1959) that is readily reinforced by BPR, but the irony is that the neo-Tayloristic solution is cost cutting those members of the organization with the aptitudes to solve the real problem, the wicked problem, which is how to educate students for a career in a changing world. Because the results of the wicked problems cannot be easily quantified and are rarely the symptoms we observe and are eager to tackle, the first step should begin with the understanding of the complexity of the wicked problem and a search for the fundamental challenge (Savall & Zardet, 2008) that is prohibiting the university from meeting its demands in the 21st century, before imposing tools and processes to address the observed symptoms. A wicked problem, by its definition, cannot have a closed system, therefore, attempting to address only an aspect or the symptom of the wicked problem using a closed BPR system, will result in amplification of the existing problems and the creation of new problems will be the result.

A Case of a Public Research University being Reengineered

After WWII, the Public Research University (PRU) had two decades of dramatic growth as returning war veterans went to college, and the State committed to mass public education. In the U.S. the Vietnam war prompted students and faculty to demonstrate on some campuses, and with the election of governor Ronald Reagan, the budgets to California PRUs got their first major cut. Chris Newfield (2008) gives an historical account of the forty-year assault on the PRU that took hold in the 1970s. The culture wars against so-called 'leftist' or 'liberal' faculty in PRUs coincided with a number of economic crisis, such as the 1973 oil embargo and the 2008 banking and mortgage scandal. The story has repeated itself throughout the West from the impact after the election of Margaret Thatcher in the UK and more recently the purge of

humanities in Denmark's PRUs (see Holland (2005), for example gives a review of the resetting of university mission and aims in the commonwealth). Green (2003) develops a historical account of how recent efforts to reengineer the PRU is because of the close alignment of 'free' market principles of business management; plus reengineering combines three paradigms: professional, bureaucratic machine and the entrepreneurial 'adhocratic' alternative to the bureaucratic model of the PRU. The problem Green (2003) brings out is that reengineering attempts to make the public university into a business without implementing an organization design (or development) method to deal with the conflicts that result with faculty, staff and students. The economic implementation is done in ignorance and neglect of the politics of change.

Under the current political and economic conditions, business process reengineering is not a way to develop efficiency. Rather, it is a way to continue downsizing the State's commitment to mass education of each nation's populace. As Newfield (2008) argues, the culture wars against left-leaning faculty have become economic wars on the entire PRU. There has been a shift from a knowledge society framework intent on growing a college-educated majority of democratic citizens to the knowledge economy where equity of access is no longer a consideration, and the PRU is downgraded to vocational skill-building for industry. Thus, we have the excommunication of the humanities, and the focus on STEM (science, technology, engineering, and math) disciplines in the 'New [postindustrial] Economy' of knowledge workers in organizations within core countries subcontracting customer service and computer design to labor in periphery countries.

We argue that an educated understanding of Organizational Development is all that is necessary to highlight the ineffective and damaging results that reengineering brings to the PRU.

Instead of recreating the same dis-ease, let's do something Agile and innovative setting a new standard. Reengineering is an ideal match to what Newfield (2008) asserts is the kind of 'intellectual neutron bomb' perfect to erode the political left, to reverse the diversifying of the middle class and leave the knowledge STEM capabilities intact. Still we do hold out hope, which we will get to after presenting the first part of the case.

The Case. The problem lies at the very heart of the neo-Tayloristic approach of reengineering. The change makers have already predetermined the problem, therefore, asking for advice from a well-respected organizational change professor within the university would be time wasted. Instead the university brought in Deloitte and spent \$700,000 on a reengineering study. Deloitte, in its risk management document titled "Unleashing the Power within Analytics-driven Process Design", claimed that BPR devises innovative ways to propel the organization forward. Yet, the \$700,000 consulting project was followed by a drastic downsizing to offset the most recent budget cuts from the state, as a result of the most recent severe drop in the state's oil and gas revenues. The university, in a misguided attempt to reach a 'vision' for the 21st Century University, continues to entertain further reorganization and faculty and staff cuts without first trimming the top.

The top-down reengineering implementation by Deloitte consulting experts will recommence in December 2016 with further reorganizing plans for the following two years into 2019. Unrepresentative task teams have mandated that university administrators sweep academic department and unit budgets, cut 110 positions, and reorganize departments into a small number of divisions, and increase the span of control for middle administrators in operational units.

Deloitte gave the PRU Board of Regents a way to reengineer its business processes through cost reduction by improving delivery model, business process, policies and the

implementation of enabling technologies; and proposed a list of actionable recommendations to address immediate, short, and long-term recommendations. Deloitte says it uses reengineering to 'unleash the power with analytics-driven business process design'. This is a key selling point, the basis of business process reengineering model of institutional transformation of the PRU, to make the university into a business, the fulfillment of 'academic capitalism'. The consequences of this reengineering include decrease moral, drop in enrollments, faculty and staff being given expanded workloads, and the exodus of research faculty and staff to other state's PRUs, which reinforces faculty's resistance to change (Bareil, 2013). The university gets more efficiency, by means of human sacrifice.

According to Eliyahu M. Goldratt, reengineering does not provide an effective way to focus improvement efforts on the organization's constraint (Dettmer, 1997). Adopting reengineering, as its organizational development strategic change approach, reduces the PRU to a narrow focus on the efficiency of process, bundling of processes, and the supervisory spans of control of those processes. The assumption is that there will be an increases in university performance (enrollment, research, operations), however, those assumptions are not being empirically tested during or after implementation. The *status quo* of the PRU is declared 'bad' or 'old fashioned' and the spans and bundling is set up anew.

Boje Rosile Dennehy and Summers (1997) deconstructed reengineering, by setting up a false duality with Weberism, exposing its ideological foundations in Adam Smith while pretending that displacing workers and making them disposable is a new idea, when reengineering is simply the re-division of labor.

In summary, this PRU has spent upwards of \$700,000 in reengineering consulting to eliminate 101 faculty and 19 staff. We argue that money would have been saved if those who

teach Organizational Development within the university had been utilized, and it is for this very reason that reengineering the PRU is more about undermining the academic knowledge creation culture than dressing it up in capitalism.

A Socioeconomic Organizational Development Alternative

Boje and Rosile (2003) review the socioeconomic approach to organizational development and how it differs from business process reengineering as well as other popular approaches. Worley, Zardet, Bonnet, and Savall (2015) updated the socioeconomic approach to organizational development, they now call, *Becoming Agile*. The socioeconomic approach poses several advantages for universities, over reengineering.

Organizational development success depends on the adoption of an open-systems integration of the organization, individual values, and its external environment (Johnson, 1976). Traditional organizational development approaches emphasize either economic or technological rationales or individual needs or feelings (Bahaee, et.al., 2005). Socioeconomic organizational development analyzes various combinations of these to help avoid potential challenges by incorporating dialogical voices from all stakeholders.

Every wicked problem is a unique and difficult to define socioeconomic problem. A monological economic and technical solution of business process reengineering cannot attend to the many interdependencies and multi-causal relationships of a wicked problem. As symptoms of social complexity and without a clear understanding of the fundamental causes behind the scene, the attempts to fix unstable wicked problems frequently lead to unexpected consequences and failure in behavioral changes (Rittel & Webber, 9173; Ritchey, 2011; & Savall & Zardet, 2008).

Universities must not cut away the very positions most adept to cope with the wicked problems and create an agile 21st Century University. The answer lies in the intelligent reinvestment into human potential and embracing faculty and staff as an essential part of the solution. The 21st Century University is faced not only with questions of academic achievement but also the problems of access to resources, such as water, an abundance of processed and fast food and the resulting health problems, issues of social justice, so on and so on (Dubberly & Pangaro, 2015: 77).

If these are the wicked problems, should we not envision a 21st Century University that can address them? Will Business Process Reengineering really get us there? No. But there are real alternatives, such as Becoming Agile by building human potential, engaging in project teams that not only do cost-reduction, but enhance revenues, grow the kinds of problem-based learning capacity to tackle society's wicked problems of population, food, water, and other kinds of sustainability.

For Consideration

Business process reengineering is the low hanging fruit and an easy rationale that promises efficiency and delivers chaos when in-fact there is a more complex political and economic problem. Attempting reengineering in the face of efficiency is transforming the foundations of 21st century universities from inspiring diverse, critical, and innovative minds to standardized and private-financed education in disguise.

The wicked challenges and demands of 21st century universities cannot be tackled with a neo-Tayloristic tool like Business Process Reengineering. The solution lies with a socioeconomic organizational development approach that invests in human potential while diagnosing and

resolving hidden costs (Savall & Zardet, 2008) allowing the development of revenue generating projects. The socioeconomic approach implements a democratic approach to organizational development, and is therefore more compatible with the traditions and mission of academic institutions.

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