CULTURAL CHANGE THROUGH RAPID IMPROVEMENT EVENTS:
Five Successful Project Case Studies

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Culture Change through Rapid Improvement Events: Five Successful Project Case Studies

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Abstract:

Purpose: Rapid culture change within an organization is possible and inevitable through the implementation of Lean Rapid Improvement Event methods. Case studies will be used to demonstrate the process and results in a university environment.

Design/methodology/approach: The Lean team led five Lean Management projects for process improvement. Each Lean Project centered on improving the student or employee experience. The efforts provided improvements *and* a culture change that led participants to embrace lean techniques in every day thinking. The Lean system selected was the Rapid Improvement Event methodology designed at St Andrews University in Edinburgh Scotland.

Each process involved a multi-day event that began with a scoping exercise involving various levels of individuals in the related organizations. The redesign stage of the Rapid Improvement Event (RIE) lasted two to three days. During this time, the team mapped out the Current State, generated ideas for improvement, identified and removed waste from the process, and mapped out the Ideal Future and Interim Future States. At the end of the RIE, each team established an action plan and scheduled a regular meeting to assure completion of action items.

Findings: Each of the five RIE case studies included multiple successes and opportunities for change. The case studies accomplished the following:

- Increased students in the College of Business's MBA program.
- Refined the undergraduate admissions process to a minimum number of steps.
- Automated the Teacher Education application process within the College of Education.
- Created a concise, consistent process for curriculum changes.
- Enhanced the effectiveness of communication with admitted students in order to increase enrollment.

Practical implications: Improving processes in the student experience is essential for a university's success in an increasingly competitive environment.

Originality/value: These case studies demonstrate that a cross-section of university employees can learn lean techniques and then quickly implement changes that benefit the university.

5 Keywords: Rapid Improvement Event, culture change, Admissions Office, Academic Programs, empowered staff and faculty

1. Introduction

Rapid culture change within an organization is inevitable through the implementation of Lean Rapid Improvement Event methods. The University of North Alabama has applied the Lean Rapid Improvement Event process to areas centered on improving the student or employee experience within Academic Affairs. The results of the Rapid Improvement Events include increased efficiency in the area analyzed, consistent improvements in paperwork reduction or management, *and* a culture change that has led participants to employ Lean techniques in every day thinking. This paper provides an overview of the Lean Rapid Improvement Process and provides case studies that demonstrate the process and results in a university environment.

2. Lean Thinking and the Rapid Improvement Process

The University of North Alabama specifically uses an Eight-Step Rapid Improvement Event (RIE) to redesign processes in order to enhance effectiveness (Figure 1). Each RIE is a multi-day event that begins with a scoping exercise which involves various levels of individuals in the related organizations. The redesign stage of the RIE lasts two to three days. During this time, the team maps the Current State, generates ideas for improvement, identifies and removes waste from the process, and maps the Ideal Future and Interim Future States, including a comprehensive list of Action Items that must be accomplished for the Interim State to be implemented. At the end of the RIE, each team schedules regular meetings to assure completion of the Action Items.
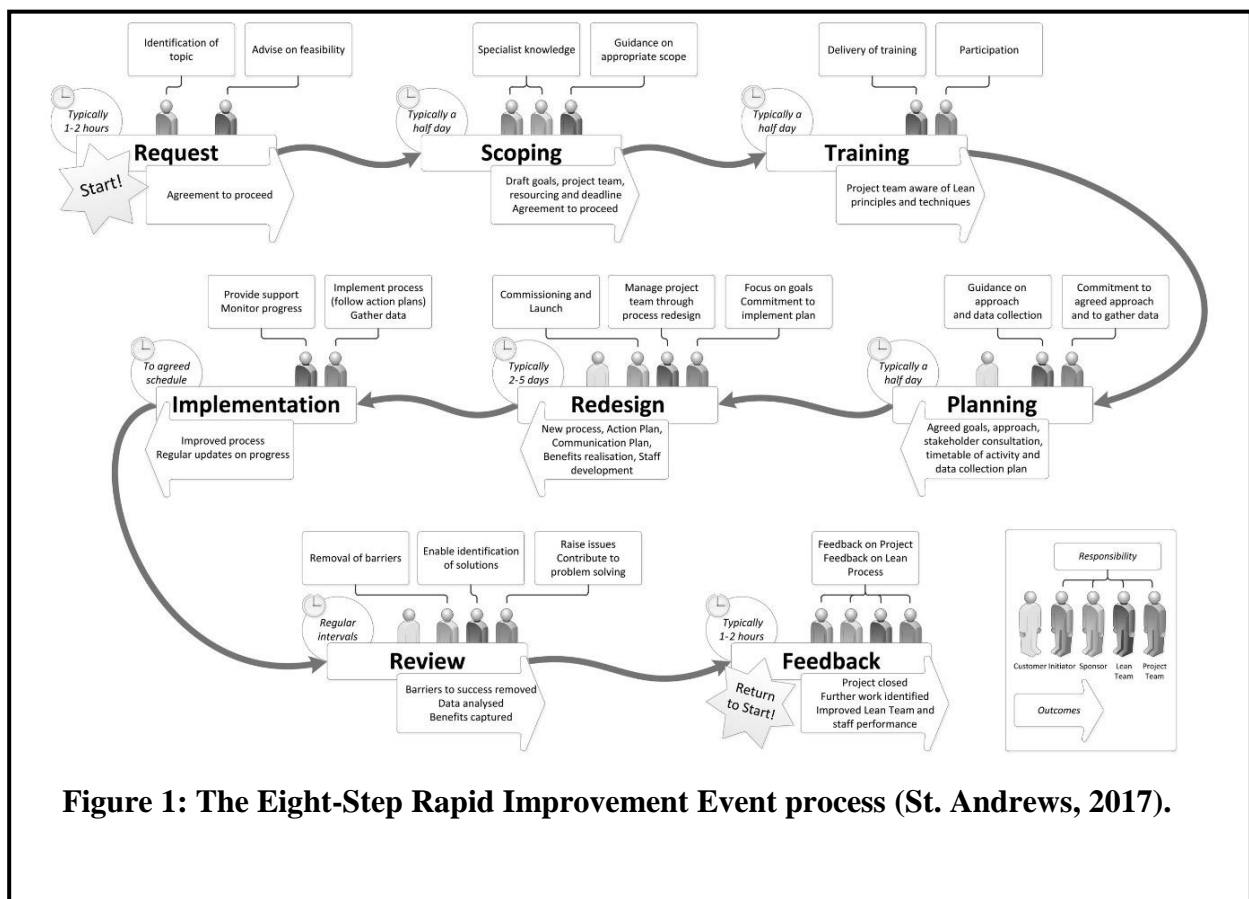
Figure 1: The Eight-Step Rapid Improvement Event process (St. Andrews, 2017).

3. Relevant Literature: Why Lean?

Lean Management principles have been applied manufacturing for decades (Singh, S. K., et al., 2014; Womack, et al., 1990). The use of Lean principles in service organizations in general (Smith, et al., 2012) and higher education specifically is increasing with great proportions (Balzer, et al., 2016). The misconception that Lean Management in not appropriate for high education has been debunked many times through theory application and more importantly, practice (Dragomir and Surugiu, 2013; Hensley, 2018; Riezebos, 2017).

The need for transformed practices in higher education has long been established (Emiliani, 2012; Harvey and Knight, 1996), and Lean principles have shown great value in many aspects of higher education including the admissions processes (Jin and Kachroo, 2010), curricula management (Lopez-Molina and Reyes-Guerra (2008), credit hour production and faculty work load (Hayden and Peters, 2017), and administrative functions (Robinson and Yorkstone, 2014).

Yorkstone (2017) notes that there are at least three approaches for the implementation of Lean in higher education. The three most common approaches are event-drive, advocate-led, and tool-led. All three of these approaches are represented in the case studies presented here; most often there is a combination of at least two of the approaches used. Thus, the value of Lean Management to higher education has been demonstrated so often that these techniques are no longer "new to higher education" and universities should embed these processes without question across all departments and divisions in order to enhance the student experience, the employee experience, and to eliminate waste.

4. Case Studies

4.1 College of Business MBA program

Goal: Increase enrollment in the Masters of Business Administration program and enhance the satisfaction of recruited students.

Process: This RIE mapped the MBA enrollment process and, after the cross-functional team implemented Lean tools, focused on improving prospective student engagement. The multi-day planning and subsequent implementation process included regular meetings to assess results. There were 7 out of 26 Actions Items that came out of the first RIE that were CRM Recruit function related, then 25 out of 52 for the second RIE, and 34 out of 64 from the third RIE were CRM Recruit utilization and training items. The RIE allowed the Team to evaluate the total student enrollment experience and see it from the student perspective. The culmination of Lean Management and CRM Recruit revolutionized the enrollment process.

Results: Enrollment grew 218% enrollment. Beginning with an online, part-time enrollment of new students at 133 for the 2014-15 academic year, the team's efforts and the implementation of CRM Recruit have resulted in new student enrollment at 339 for the 2016-17 academic year and 423 for the 2017-18 academic year. Student MBA recruitment satisfaction is at 97% for agreeing or highly agreeing on an annual survey.

Practical implications: Lean led to a student-centered process that meets the adult online student's needs within a traditional on-campus system. This study demonstrates that universities can implement changes that positively affect student recruitment satisfaction and enrollment results.

4.2 College of Education and Human Sciences Teacher Education Application Process

Goal: Convert a paper-based process into an electronic process, streamline the information requirements, and address underlying faculty, staff, and student discontent with the outdated process.

Process: The Teacher Education Preparation application process has been internally problematic for faculty, staff, and students. The RIE started with the scoping which led to a complete redesign including conversion from paper to electronic submissions and processing. The team spent the first day mapping the Current State and developed Idea Cards for improving the results. This mapping had never been done so the team often stopped and discussed "what should be done" versus "what is actually done" at various steps in the process. The mapping of the Current State showed 24 steps and the team created 20 Idea Cards during the mapping which were statements about ways the process could be improved. On the second day the team evaluated the Idea Cards and developed the interim state which has 14 steps with 14 Idea Cards. While mapping the Interim State the team initiated an Action Items list. The team reviewed each Idea Card and added to the Action Item list resulting in 27 actions. All actions were assigned to the people attending the session. The Dean remained through the whole event demonstrating the value of this work.

Results: The Certification Officer's role changed from "paper chaser" to process manager and facilitator. The students now have the responsibility for the complete application upload process including all required documentation. The Team met every two weeks following the RIE and completely digitized the process in less than one semester; the RIE was held in October and the new process was implemented in January.

Practical implications: The newly-design application process allows students to enter the Teacher certification process faster. The students have a better experience because of the online process and experience value-added time with faculty and staff who, instead of helping students with paperwork, now have more time to assist students in preparing for entry tests to meet state requirements**.**

4.3 University Undergraduate Admissions Process

Goal: To understand the existing recruitment process in order to increase the number of enrolled freshman and transfer students.

Process: The group met for a 3-day RIE. After a brief training, the team split into two Current State maps: freshman admissions and transfer student admissions. The team spent the first day mapping the Current State and developed idea cards for improving the results. The Current State mapping showed 144 steps. The team identified waste and gained a further awareness of improvement areas. The team created over 308 Idea Cards related to ways the process could be improved. On the second day the team evaluated the Idea Cards and discussed why they would or would not work. The team then determined a five-step Ideal Future State that would be based on a comprehensive, transparent, connected system that automatically advanced the applicant as stages were completed. The team then developed the Interim State which had 40 steps with 19 idea cards. While mapping the Interim State the team initiated an Action Items list which resulted in 109 actions. All actions were assigned to the people attending the session.

Findings: This process was completed in the Spring 2018 with implementation in the Fall 2019 recruitment class. Since final registration numbers are not available until October 2019, housing registration and summer orientation registration are used a proxies to project student attendance numbers. March 2019 housing deposits for freshmen are up 9.26% and freshmen Summer Orientation registrations are up over 16%, both compared to March 2018.

Practical implications: Increasing enrollments is a core task for the university to achieve its mission and this process has the University on track to increase the size of the freshman class in 2019 by between 10-15%.

4.4 University Curriculum Change Process

Goal: To convert from the existing curriculum change process which is error-prone, speed the time to implementation of changes, and determine an Interim State that will be used to build workflows for an online course catalog.

Process: This cross-functional team which had every college represented, spent the first day mapping the Current State and developed Idea Cards for improving the results. The Current State mapping identified multiple steps that were redundant and unnecessary. The team created over 20 Idea Cards during the mapping which are statements about ways the process could be improved. On the second day the team evaluated the Idea Cards and determined an Ideal Future State with no constraints. Finally, the team developed the Interim State Map which would be used to structure the curriculum change workflows within the newly purchased course catalog software. The Interim State Map contained 7 different workflows that encompass all changes that could occur within the course catalog, including the addition to new programs.   After mapping, the team reviewed each Idea Card and added to the Action Items list which resulted in 35 actions. All actions were assigned to the people attending the session.

Results: The process is now outlined and transparent; new process curriculum changes will be accurate and consistent. Programs will be implemented quicker and without a large margin for error. External approvals are included in the workflow; thus, programs and departments understand when a curriculum change approval is needed by an external accreditation body.

Practical implications: Due to the process implemented, all curriculum changes are documented accurately. The team identified waste in many places and gained awareness of improvement areas. The implementation for the online system has stayed on track and is meeting all deadlines for design, testing, and implementation. Seeing how well such a diverse team came together and made mutual decisions proved that the process is an excellent guide for improvement.

4.5 Undergraduate Admitted Student Communication Process.

Goal: To transform our outreach and communication with admitted "first-time, full-time freshmen" toward more personal communication in order to increase our registered freshman enrollment.

Process: The Team created a Current State Mapping of the communication process from the point in the process where a student is admitted to the University through their attendance at the Student Orientation, Advisement, and Registration (SOAR). There were 81 steps outlined in the process. The Ideal State was mapped with 16 steps and finally the Interim

Future State process was mapped. The Team identified 60 action items and assigned each to a member of the group. All Action Items were organized into three transformative concepts.

- Each student applicant needs their own personalized "Concierge Recruiter" who pulls them through the Admitted-to-Registration process.
- Enrollment Management must use data to make all decisions and to track the Admitted-to-Registration process so that changes can be made immediately if noted by the data.
- The newly designed communications must help "pull" students through the Admitted-to-Registration process.

Results:

- **Transfer Student Initiative**: All students who were accepted for Fall 2017 but chose to attend a community college have been added into the CRM and are being contacted by the Transfer Admissions Counselor for face-to-face or phone conversations about Fall 2019.
- **Admitted Student Personal Contact:** Personalized phone calls, emails, and texts from academic departments, faculty, and deans' offices are being made to students who have been admitted and have listed a major**.**
- **Lean Management Pull Process for Admitted Students for Fall 2019**: Admitted students are being called by Summer Orientation Counselors if they have not registered and are being called by Housing Resident Advisors if they have not paid their deposit. Special attention is being given to those students who have signed up for either Housing or Summer Orientation but not the other.
- **Communications Rewrite**: Admissions has rewritten all admitted student communication (texts and emails) in the CRM, as well as letters and promotional brochures.

Practical Implications: Research shows that Generation Z students expect more personalized attention and communication and that attention goes into their decision of where they attend college. The communication process mapping and subsequent implementation of the three transformative ideas addresses the needs and expectations of these students and their parents.

5. Limitations of the RIE Process

Limitations to the RIE process include a focus on immediate problem-solving at the expense of Continuous Improvement. In addition, implementation in various departments without a long-term, overarching Continuous Improvement plan for the University may make the process disjointed. Knowledge of these limitations helps increase awareness of the need for overall Continuous Improvement.

6. Overall RIE Practical Implications

Improving processes and the student experience is essential for a university's success in an increasingly competitive environment. Senior leadership now seeks opportunities for implementing Lean thinking as they value the cultural change within the organization. With support from the University administration and open communication, team members are encouraged and motivated to continuously seek new ideas for improvements. Conversations between leadership and administrative staff have enhanced the student-centered focus using

Lean thinking. Students are experiencing more value added time in their interchanges with the university staff.

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