



SPIN IT – CYCLING OVERRIDES INTO AUTOMATION

Business Process Automation (BPA) in higher education using Define, Measure, Analyze, Improve, and Control (DMAIC) methods at Michigan State University

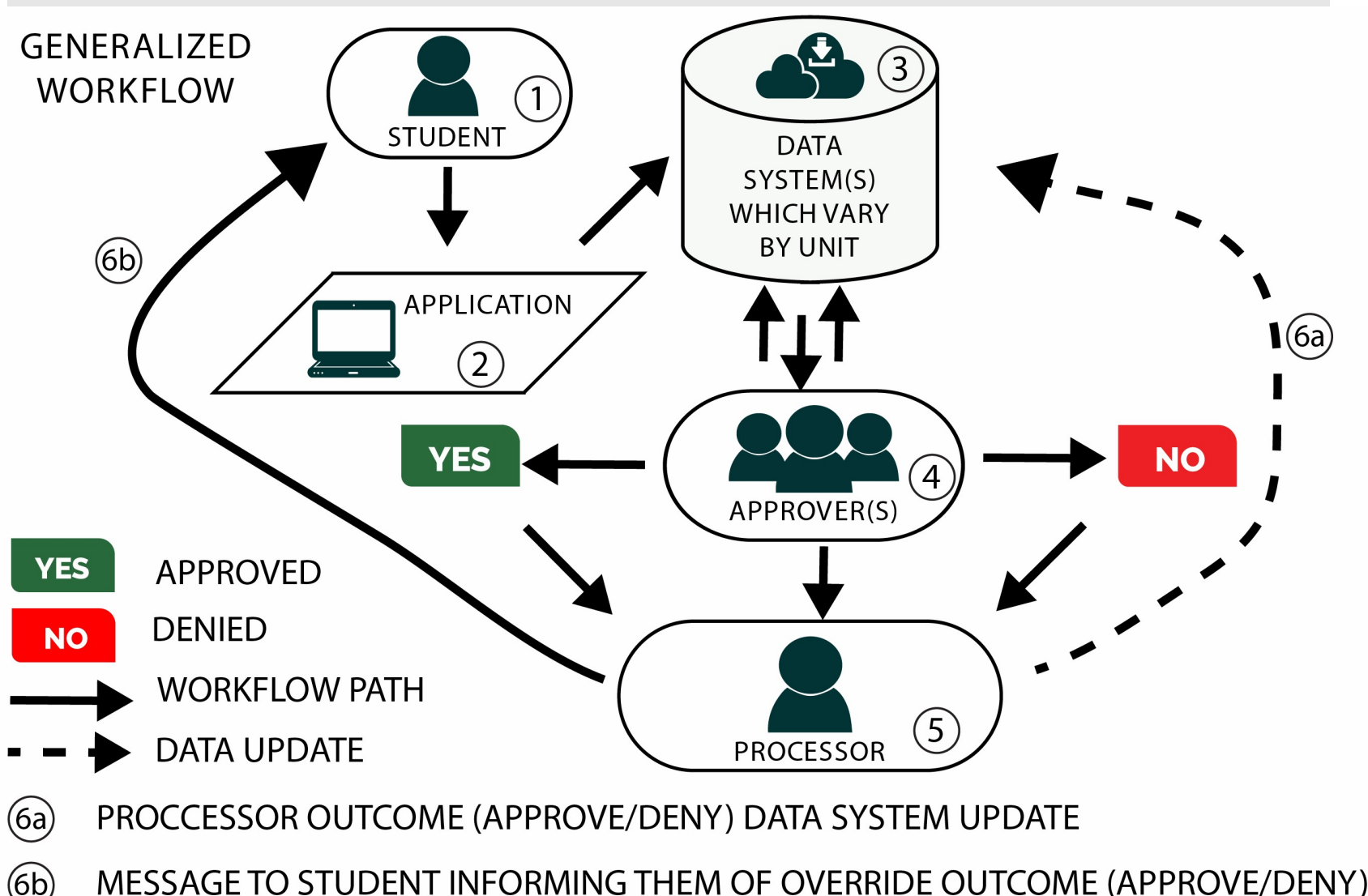


Define

- **Michigan State University** has 50k+ students, 16 colleges, and 400+ academic units with varying class requirements
- Many units have classes that show a seat demand that often **exceeds number of open seats**, and require **overrides**
- **Overrides** are how students get a seat in the class and are **essential to enrollment, and earning of chosen degrees**
- Without a **university wide centralized override system**, campuses face **inconsistent approvals and limited visibility**

Defined Challenge

Campus override processes are fragmented and inefficient



Measure, Analyze, & Results

- **19 survey responses, 11 unique respondents** from 7 **Michigan State University colleges** were received
- Participants completed discussion with PI, discussed and learned how to use proposed models, and completed surveys on their current system, and the models presented by the PI
- Survey found that override processes varied widely, but fall into two categories:
 - **Email workflows** that require manual messaging between reviewers and approvers
 - **Web databases** that require repeated copying and pasting between forms and systems to document.
- Staff **manually notify students** regarding their override outcome
- Working with a fragmented system with no automation creates **extra work, inconsistency, delays, and increased chance for human error**

Survey Results for Current System

Rated “About the Same” (3.32/5) when comparing to other systems
Rated “Neutral” (3.55/5) when considering the Unit Process Index*

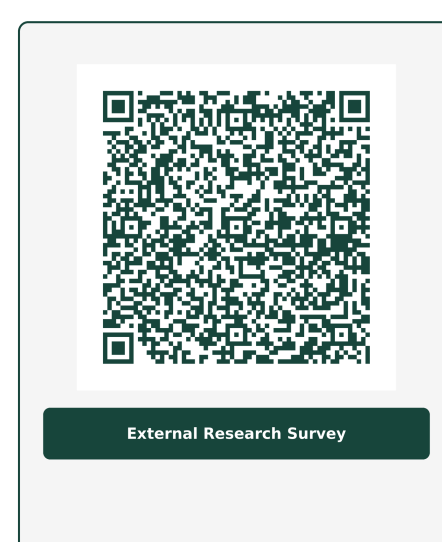
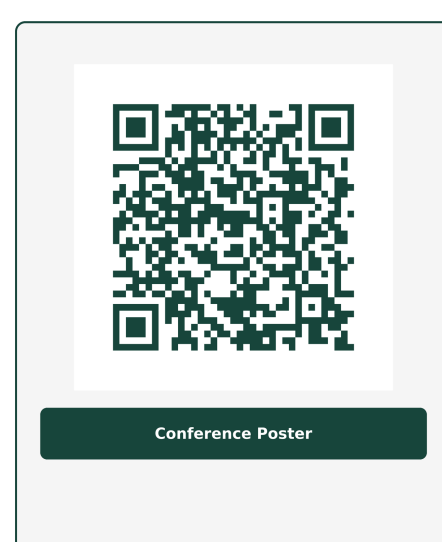
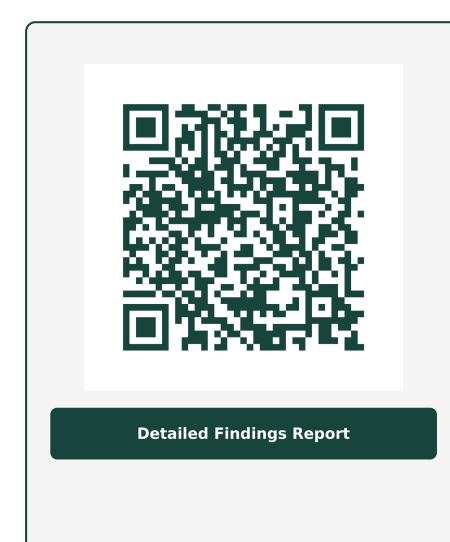
Survey Comments

Feedback indicated that the following aspects of the current system could be enhanced:

1. “Have an automatic email sent after filling out form.”
2. “My form doesn't ask students for their student number (PID) and that would be convenient to not have to copy and paste every PID for large classes.”
3. “Less lengthy form and only asking questions that are relevant to providing the override.”

* The Unit Process Index represents the average score across all evaluated categories. A detailed report containing this information can be accessed by scanning the QR code below.

SCAN TO ACCESS PROJECT RESOURCES



Improve, Control, & Results

M365 Power Platform Override System

- Includes **SharePoint Forms** (data capture), **Microsoft Lists** (record keeping), and **Power Automate** (department-specific routing automation). **Outlook** and/or **Teams** (messaging)

M365 Approval Systems

- **Approval Model:** Requests sent to approver(s) and processor, approval process based on messaging (**Teams** and/or **Outlook**), message response
- **List Model:** Data entry into List triggers approval process flow(s)

Automated Communication

- Confirmations, approval alerts, and decision emails are automated

Centralized Record Keeping

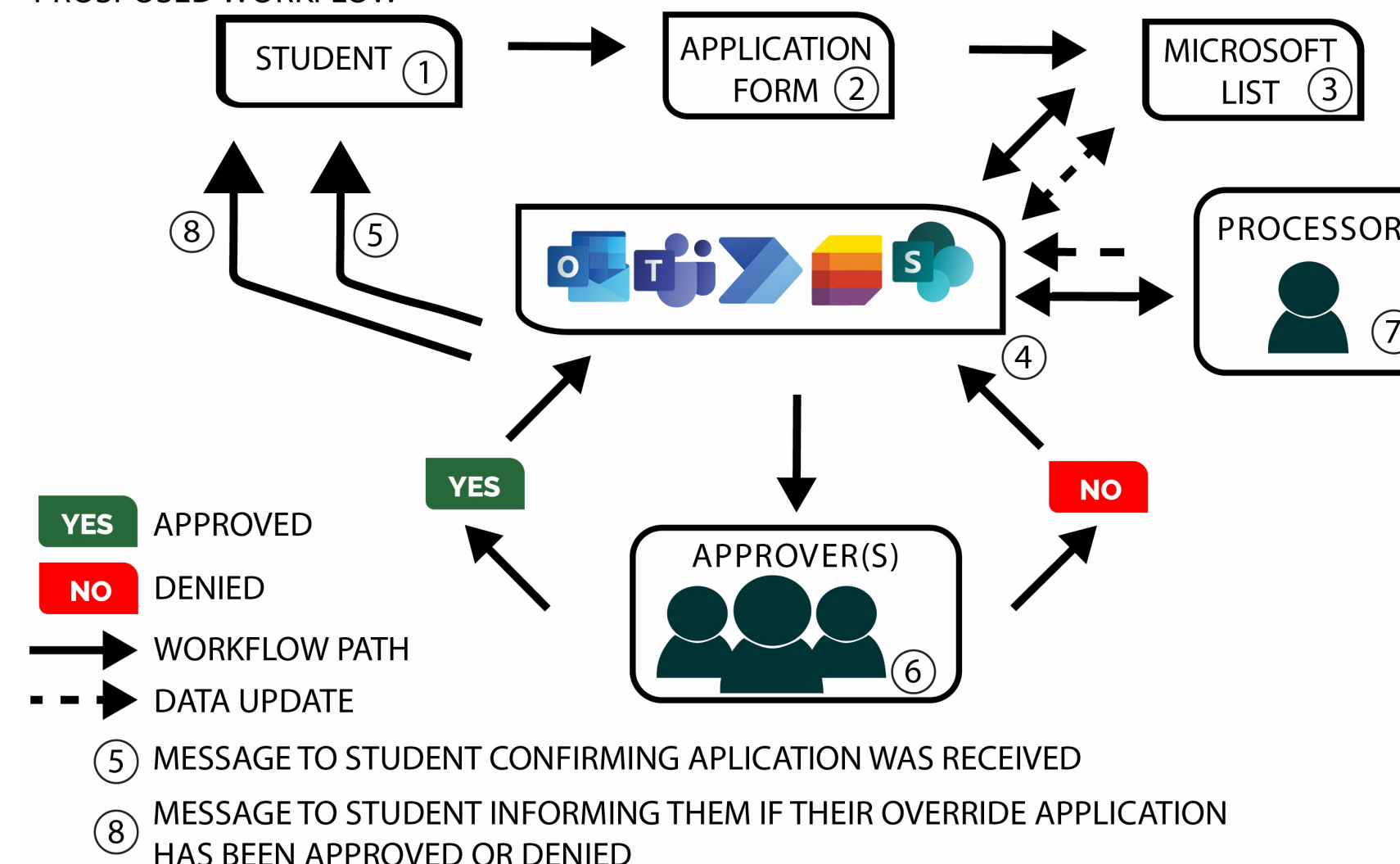
- Applications and outcomes update in the **Microsoft List**, which provides audit and decision detail

Survey Comments

Respondents identified the following areas as having the greatest potential for enhancement:

1. “If granted, having it directly submitted in SIS. Not sure how this would be possible, but we can dream!”
2. “Consistent location where students could find links to all override requests”

PROPOSED WORKFLOW



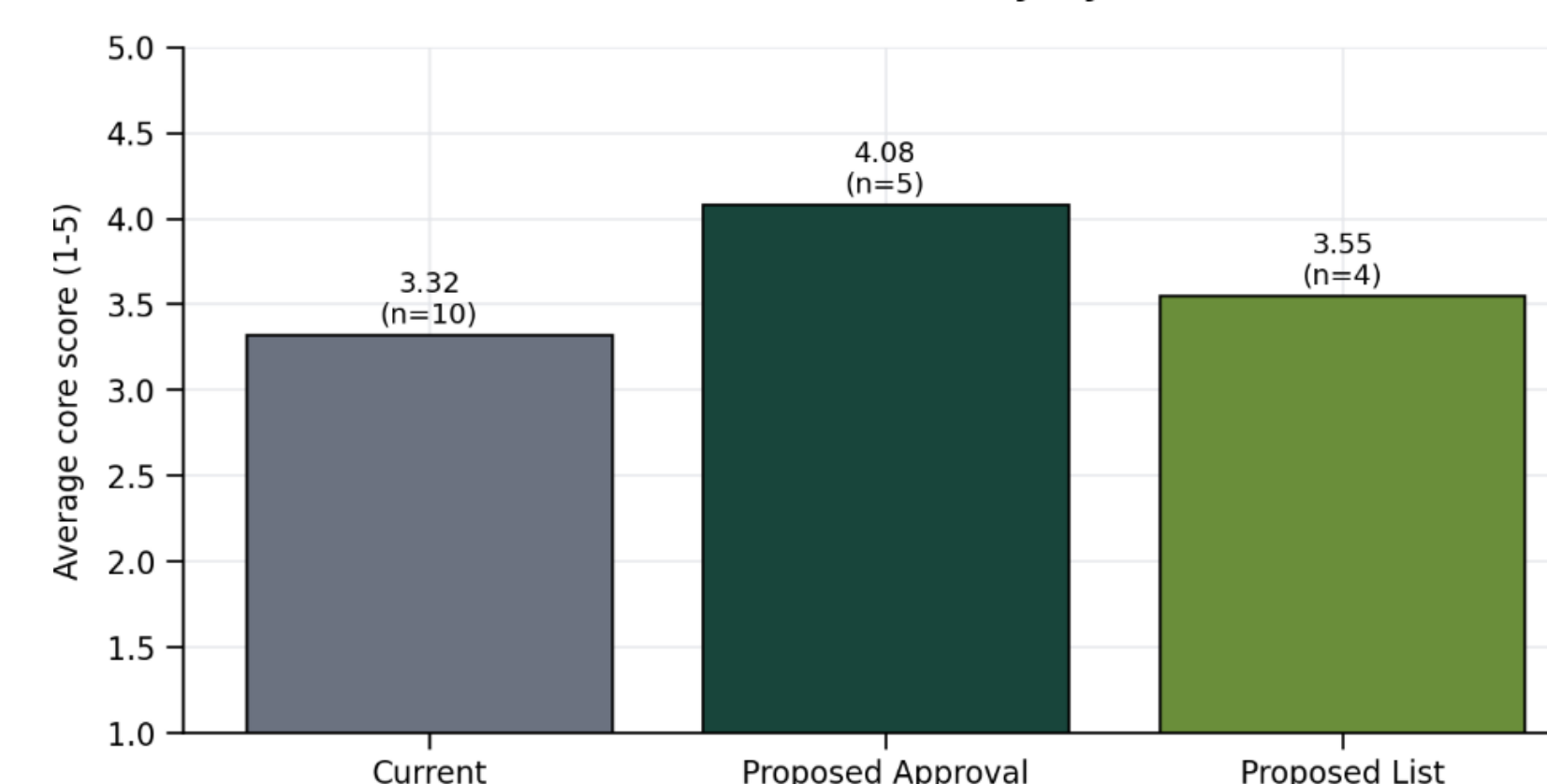
Results and Future

Survey Results for Model Systems

Approval Model: “Somewhat better” (4.08/5) when comparing to other systems

List Model: “About the Same” (3.55/5) when comparing to other systems

Overall Core Process Score by System Version



Key Benefit

A shared, flexible platform standardizes processing, cuts manual work, improves consistency for students with universal process, and reduces retraining requirements for position changes

Future Research

1. Create Application Programming Interface that integrates with Student Information Systems, for reduced steps for processors, students and system admin
2. Study course override BPA across a variety of higher education institutions, with refined qualitative and quantitative techniques

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