Project Management

GOALS are dreams with deadlines

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Higher education leaders have a BIG VISION … But can struggle with EXECUTION of major change strategies/projects.
### Overview:

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WHAT IS A PROJECT?

A temporary endeavor with a start and finish undertaken to create a unique product, service, or result.
“If you pit a good employee against a bad system, the system will win almost every time.”

- Geary Rummler
PEOPLE + PROCESS = SUCCESS
PROJECT MANAGEMENT FRAMEWORK

ENTER INITIATE PLAN EXECUTE CLOSE EXIT

MONITOR & CONTROL
Create a project charter
Initiate:

• We ensure that everyone is clear on how project success will be measured.

• We clarify expectations and make sure everyone is on the same page to create a clear measure of success.
Create a plan with tasks, dates, and owners
PLAN

• How do you manage risks?
• How do you break a project down into manageable pieces?
• How do you schedule project deliverables and their associated components?
• How do you identify necessary resources?
• How do you determine communication channels?
Schedule checkpoint meetings
Engage people through consistent and shared accountability.
EXECUTE

- How do you keep people engaged throughout the project?
- How do you create team accountability?
- How do you give effective performance feedback?
Communicate communicate communicate!
Drive progress through transparent communication.
MONITOR & CONTROL

• How do you keep key stakeholders informed about project status?
• How do you effectively manage scope change?
Document lessons learned
Close:

• We ensure everyone is clear about whether the project met expectations.
• We document lessons learned so we can keep getting better.
“Celebrate what you’ve accomplished, but raise the bar a little higher each time you succeed.”

—Mia Hamm
Accomplish Organizational Change with Quality:

1. Establish Project Facilitation Office(s) and Hire Certified Project Managers
2. Deploy Project Management Methodology
3. Train all employees to talk the same language

PROJECT MANAGEMENT CHECKLIST

INITIATE
☐ Identify all stakeholders.
☐ Interview key stakeholders.
☐ Document project scope.

PLAN
☐ Plan a risk-management strategy.
☐ Create a project schedule.
☐ Develop a communication plan.

EXECUTE
☐ Create a cadence of accountability.
☐ Hold performance conversations.

MONITOR & CONTROL
☐ Report project status.
☐ Manage scope change.

CLOSE
☐ Document lessons learned.
☐ Close the project.
Research study results:
Project Management Process Maturity at Large U.S. Community Colleges
Purpose of study (Oct./Nov. 2016)

Seeking to determine how widespread and mature the adoption of project management (PM) is at large, complex U.S. community colleges/districts (population of interest = 55). Response rate 80% (44 colleges/districts).

- Complexity defined as:
  - Urban/suburban
  - Multi-campus
  - Student headcount > 19,999 for Fall Term

- Planned outcome of the study: application of PM maturity model (PMMM) to survey/benchmark institutions’ PM process against a standard set of attributes of mature PM organizations.
Institution Profile

Respondents by U.S. Region

44 Districts by Institution Size
Profile of PM Employee Respondents
(86 PME from 44 responding institutions)

The overall project management maturity score was unaffected by:
• Gender (t-test p>0.05)
• Age of respondents *
• Years PM experience *

* Pierson chi-square tests, p>0.05
Profile of PME Respondents
(86 PME from 44 responding institutions)

PME respondents came from a variety of departments and involved in various types of projects.

Note. PMO = Project Management Office, FC = Facilities Construction, IT = Information Technology, SP = Strategic Planning
### Table 3.2

**HEI PMMM Survey Instrument Domains**

<table>
<thead>
<tr>
<th>Domain/Area of Questioning</th>
<th># Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment of respondent's involvement in projects</td>
<td>5</td>
</tr>
<tr>
<td><strong>Culture</strong> of project management within organization</td>
<td>9</td>
</tr>
<tr>
<td>Project management-driven organizational leadership</td>
<td>4</td>
</tr>
<tr>
<td>Project management capability/<strong>staffing</strong></td>
<td>9</td>
</tr>
<tr>
<td>Project management structure methods and systems (<strong>PMSMS</strong>)</td>
<td>13</td>
</tr>
<tr>
<td>Existence of/facilities offered by a PM office</td>
<td>6</td>
</tr>
<tr>
<td>Project <strong>partnerships</strong></td>
<td>10</td>
</tr>
<tr>
<td>Objective measures of project and project management performance (<strong>KPI</strong>)</td>
<td>8</td>
</tr>
<tr>
<td>Overall maturity assessment</td>
<td>1</td>
</tr>
<tr>
<td>Demographic information</td>
<td>9</td>
</tr>
<tr>
<td><strong># of Questions (excludes optional comment Q21)</strong></td>
<td>20</td>
</tr>
<tr>
<td><strong>Total Items</strong></td>
<td>74</td>
</tr>
<tr>
<td><strong>Total Items without Project Involvement, and Demographic items</strong></td>
<td>60</td>
</tr>
</tbody>
</table>

**Notes:** Domain names are shown in **bold**.

Question 11 Overall PM Maturity: 5-step progression

Level

1. Initial/Adhoc
   - Adhoc chaotic activities, few processes are defined

2. Managed
   - Disciplined processes are understood and followed

3. Defined
   - Standard processes are defined and followed

4. Quant. Managed
   - Processes are measured, have predictable results

5. Optimizing
   - Ability to alter processes to achieve improved results

SEI (Software Engineering Institute), CMMI (Capability Maturity Model Integrated), 2006
Operational Characteristics of Maturity Levels

Level

1. Initial/Adhoc
   - Often resulting in delays, cost overruns, or project failure; success by heroic staff efforts

2. Managed
   - Hires PM Staff, adopts policies and procedures, processes can differ by project/department
   - CC 2.72

3. Defined
   - Institution-wide defined PM processes, organization (central or decentralized PMO), staff training/competency

4. Quant. Managed
   - Organizations produce consistent, predictable project success by measuring PM process metrics

5. Optimizing
   - Institution culture where strategic priorities accomplished via project portfolios; focused on PM process continuous improvement
Discussion of Findings

44 of 55 largest U.S. Community Colleges

- **PM practices:**
  - Less mature than other industries
  - Often isolated to IT and Construction departments

- PM maturity ratings higher with mature PMO, knowledge and risk management practices

- PM maturity evolved over last 10 years @ department level:
  - Higher maturity in leadership, culture, and PMSMS (systems/tools)

- However, scores unchanged on staffing and PMO level that are necessary for institutional level adoption of PM fully aligned to institutional strategies.

- HEI culture may hinder maturity progression to a project-based organization (Levels 4 and 5). Creating an institutional PM focus that fits the unique HEI culture will be the challenge.
PME Ratings Differ by Dept.

- 100% Institutions had PME in IT and Construction
- 5 of the 44 institutions had institutional PMO strategic groups, however only 1 of these 5 institutions rated their college’s overall PM maturity higher than Levels 1 or 2 (“adhoc” to “managed”)
- Not all projects are equal
  - PME in Construction rated all domains higher than IT or other departments, but statistically higher in staff (1-way ANOVA, p<0.05) and overall maturity rating (1-way ANOVA, p<0.01).
  - Consistent with other industry studies
  - Not surprising as construction departments implemented projects utilizing external contractors and subcontractors increasing the need for PME to utilize standard PM systems (a higher level of PM maturity).
Insights from Qualitative Comments

Leadership, Culture and PMSMS scores between 3 and 4 indicating practices are systematic and embraced; however depth of understanding of what PM means appears to be limited at large community colleges.

“While change is important in order to achieve our strategic goals, leadership doesn’t recognize the importance of project management methodologies and discipline in successful strategic execution.”

“… acceptance of formal PM methodologies and governance is still difficult for most Sr. Management to conceptualize.”
Insights from Qualitative Comments

Little indication of Colleges embracing staff competency/capability (only 11.6% certified) or formal infrastructure like PMO.

- 10 comments explain low maturity rating of PMO domain, themes:
  - In initial stages of forming a PMO
  - PM is just “other related duties as assigned” to an employee
  - PM not systematized
Insights from Qualitative Comments

- Institutions at early stage of PM Maturity
  - 7 comments provide context on PM maturity overall; themes:
    - PM isolated to Facilities, Construction or IT
    - Department established years ago but facing obstacles to gaining PM maturity
    - In initial stages of PM deployment
    - “acceptance of formal PM methodologies and governance is still difficult for most Sr. Management to conceptualize”
Recommendations:

1. Hire PM skillset and implement PM Framework for organizational change outside of IT and Construction

2. Establish PMO governance structure:
   - Sets priorities, aligns to strategies, and promotes accountability
   - Supports subject-matter experts on projects and promote communications
Diane E. Snyder, PhD
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Appendix
Process or Project Mgmt. Maturity* in Higher Educ.; < 3% Research 1990 – 2016 (26 of the 895)

* Key words: “project management maturity” or “process maturity” or “project maturity” or (“project management” and “maturity”) or (“project management" and "capability") or (“project management" and "performance") in abstracts of journals in the Business Source Complete, ERIC, and Education Source databases.

**Figure 1** Growth rate of maturity-related publications

**Figure 2**: Cumulative # of peer-reviewed journal articles
Research questions

Research Question: What is the maturity of the PM process at large, complex community college systems in the U.S. as compared with private sector industries?

Hypotheses:

1. Compared with private sector industry, PM maturity is less established in large U.S. community college systems.
2. PM maturity will exhibit a statistically significant relationship with the existence of a project management office.
3. The application of formal processes for knowledge management/learnings derived from projects exists and is significantly related to areas in which greater PM maturity exists.
4. PM maturity will exhibit a statistically significant relationship with the management of risk.
Population of Interest (55 Colleges/Districts)
80% (44) Response Rate

- Large (> 19,999 Fall Headcount)
- Complex
  - Multi-campus
  - Urban/Suburban
- 8 community colleges offer Bachelor degrees which IPEDS codes as “4 year primarily Associate’s”

RESULT: 55 Colleges/Districts

Note: 40 indiv. accredited colleges within 7 regional District included as Total District > 19,999

<table>
<thead>
<tr>
<th>Institution Accreditation Type</th>
<th># Accred. Colleges</th>
<th># Districts/Districts</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Districts with individually accredited colleges</td>
<td>40</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Indiv. Accred. Colleges within Univ./CC city system</td>
<td>6</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Institutions &gt; 19,999 Students within State System</td>
<td>14</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>Accredited at Regional District Level</td>
<td>28</td>
<td>28</td>
<td>23</td>
</tr>
<tr>
<td>Grand Total</td>
<td>88</td>
<td>55</td>
<td>44</td>
</tr>
</tbody>
</table>

10 districts declined to give site permission to contact their PM employees, citing high employee workload; no PME volunteers at 1 institution.

Source: U. S. Department of Education Integrated Postsecondary Education Data System (IPEDS)
Adapted Survey with permission: 21 questions & 74 items covering 7 domains (primarily 6-point scale, closed questions; one open-ended comment question)

Leighton’s (2006) HEI PMMM based on consolidating and mapping 138 questions from 5 maturity models utilized in other industry studies (Barber, 2005; Bryde, 2003; Cooke-Davies & Arzymanow, 2003; Dai & Wells, 2004; Hillson, 2003)
Overall PM Maturity Assessment

- Higher education institutions 10 years ago were at “adhoc” levels, just starting to adopt PM (similar maturity to late adopters of PM). (Austin, Browne, Haas, Kenyatta, & Zulueta, 2013; Bryde & Leighton, 2009; Wierschem & Johnston, 2005)

- Similar to these prior studies, this dissertation’s study of community colleges found that PM is practiced primarily in IT and Construction; with only limited standardization of PM processes at an institutional level, consistent with the 2.72 overall maturity rating.

- Comparable with the lowest scoring industry in the Ibbs and Kwak (2000a) study, information systems (3.09 out of 5), and provides some evidence that U.S. large community colleges, are immature with respect to project management compared to other industries.

Finding supports hypothesis H1
Domain Level (5 of 7 map to Benchmark)

- Staff (2.9) and PM Office (3.0) mirror that of PM late adopter
- Culture, Leadership, and PM systems/tools (PMSMS) domain scores indicate higher level of PM process maturity over level 3, but not as mature as early PM adopters in other industries.
- Excludes KPI and Partnerships domains

Compared with Cooke-Davies and Arzymanow (2003) survey: petrochemical (early adopter of PM) and large pharmaceutical (a late adopter).