International Journal of Academe and Industry Research
Volume 6 Issue 3 September 2025
DOI: https://doi.org/10.53378/ijair.353247

Project management in US faculty hiring: A decade-long content analysis of 1,200 job ads

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Abstract

This study analyzes 1,200 US faculty job advertisements from 2015 to 2024 using a systematic content analysis informed by a targeted literature review. Job postings were collected from major academic hiring platforms and coded according to established project management (PM) frameworks. Explicit PM references were defined as direct mentions of "project management" or equivalent formal terminology. Implicit references denoted descriptions of project-related tasks (e.g., leading initiatives, managing timelines, coordinating deliverables) without naming PM directly. Results show explicit mentions remained rare (under 10%), while implicit references increased from 15% to 25%. When mapped to PM competency domains, postings emphasized soft skills and leadership (~50%) over technical methods (~30%) and strategic alignment (~20%). Business and engineering disciplines were more likely than humanities to articulate PM requirements. The findings indicate an articulation gap that may undervalue structured PM as a scholarly competency, underscoring the need for more intentional PM language in faculty recruitment to reflect the project-intensive nature of academic work.

Keywords: *project management, higher education, faculty recruitment,, content analysis*

Article History:

***Received**: May 18, 2025*
***Revised**: August 17, 2025*
***Accepted**: August 19, 2025*
***Published online**: August 29, 2025*

Suggested Citation:
Herzing, I. (2025). Project management in US faculty hiring: A decade-long content analysis of 1,200 job ads. *International Journal of Academe and Industry Research*, 6(3), 1-21. https://doi.org/10.53378/ijair.353247

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1. Introduction

Universities increasingly task faculty with managing complex grant-funded initiatives, curriculum redesigns, accreditation reporting cycles, and cross-departmental partnerships. These activities mirror classic project lifecycles that require clear objectives, defined timelines, budget oversight, and coordinated teamwork. For example, a faculty member might lead a multi-year STEM education grant involving multiple institutions, oversee the implementation of a new general education curriculum, or coordinate a university's strategic diversity plan across several academic units. Studies of university research offices show that structured project methods raise grant success rates and improve compliance quality, highlighting an institutional appetite for project management (PM) capability among academics (Wedekind & Philbin, 2018; Yaun et al., 2020).

Across disciplines, PM scholarship defines a core skillset that includes communication, scheduling, risk control, and stakeholder engagement. Researchers consistently show these competencies predict project outcomes in both industry and the public sector. Recent meta-analyses distinguish "hard" planning techniques from "soft" leadership behaviors, concluding that both domains drive success (Koi et al., 2024; Ochoa Pacheco et al., 2023). Yet higher-education research seldom maps these competencies to faculty careers. One exception in educational technology programs found PM skills essential for managing continuous course-build cycles, but evidence remains scattered (Gardner & Allen, 2021).

Job boards advertise hundreds of management and discipline-specific faculty roles each week, yet posting language rarely specifies PM proficiency. This suggests a disconnect between institutional need and recruitment signals (Porter, 2019). The lack of explicit signaling can lead to missed opportunities for institutions to attract candidates with proven capabilities in project execution, potentially reducing the efficiency and effectiveness of academic initiatives. Without clear articulation, candidates may understate or omit PM competencies in application materials, leaving hiring committees unaware of transferable skills that could improve institutional project outcomes.

This study contributes to understanding labor market signaling by examining whether faculty job announcements communicate the value of PM skills and how such signaling aligns with evidence-based competency frameworks. Stronger alignment could better inform both job seekers and hiring committees, enabling more precise matches between institutional needs and candidate skillsets. By framing PM as part of academic professionalism, the analysis also

supports the development of training pathways and professional standards that recognize faculty as project leaders, not only as educators and researchers. Finally, the findings have implications for skills-matching frameworks that bridge higher education and workforce planning, ensuring that institutional expectations are transparent and aligned with the competencies required to deliver complex academic projects successfully. Expanding explicit PM recognition in hiring practices could foster a culture where structured project execution is valued equally alongside teaching and scholarship, benefiting institutional performance and faculty career development.

2. Literature Review

2.1 Core Definitions and Competency Frameworks

The PM literature consistently identifies a dual portfolio of "hard" and "soft" competencies that underpin delivery outcomes. Hard skills include work breakdown structuring, scheduling, budgeting, cost estimation, procurement management, earned value analysis, and risk control. These are often codified in established frameworks such as the Project Management Institute's (PMI) Project Management Body of Knowledge (PMBOK® Guide) or the International Project Management Association (IPMA) Competence Baseline. Soft skills encompass communication, negotiation, conflict resolution, stakeholder engagement, leadership, and emotional intelligence. Research increasingly recognizes these as equal determinants of project success, particularly in environments with high interdependence, diverse stakeholder interests, and limited direct authority, where influence and facilitation become as critical as technical planning discipline.

A synthesis of fifty empirical studies confirmed that projects succeed more often when both categories are present, with performance gains highest when technical scheduling and budgeting disciplines are paired with strong interpersonal and leadership capabilities (Koi-Akrofi et al., 2024; Ochoa Pacheco et al., 2023). This dual competency model positions PM not merely as a set of technical processes but as a socio-technical discipline requiring integration of process rigor with relational adaptability. Framework syntheses describe these competencies as a transferable meta-profession, adaptable to any setting where teams organize work as projects (Rezende & Blackwell, 2019). Herzing's (2024) case study of a U.S. marketing agency supports this view, mapping each PM tool, such as Gantt charts, stakeholder registers, and risk logs, to strategic intent and demonstrating how alignment between tools and

organizational strategy functions as a competitive capability. For example, the study found that Kanban boards were not simply used for task visualization but were deliberately configured to support strategic objectives like rapid campaign iteration and client responsiveness.

Universities have increasingly experienced projectification, a shift from primarily ongoing operations to portfolios of time-bound initiatives such as major research grants, curriculum redesigns, accreditation bids, digital learning rollouts, and capital construction projects. Projectification in higher education mirrors trends in corporate and public sectors, where structured project approaches are applied to achieve strategic objectives under conditions of limited resources and heightened accountability.

Studies show that embedding PM training into academic programs improves completion rates for complex instructional design projects and large multi-institution consortia (Even, 2024; Nijhuis, 2012). Yet many faculty acquire these skills informally during grant administration, often without exposure to standardized frameworks. Evidence from grant-funded research indicates that applying structured project methods improves proposal quality, compliance reliability, stakeholder satisfaction, and cost control. However, uptake of formal frameworks remains inconsistent, influenced by institutional culture, resource availability, and disciplinary norms.

Interest in academic PM is not limited to the United States. Nijhuis (2012) identified ten key competency areas applicable across international academic contexts, including scope definition, stakeholder communication, and change control. Mandona and Muya (2020) examined Zambian universities, finding that while PM techniques were applied, weaknesses in research management systems and monitoring processes limited performance. Yesica et al. (2023) demonstrated that in cross-cultural academic collaborations, relational competencies such as stakeholder engagement, cultural intelligence, and negotiation become critical, especially in virtual team contexts. These perspectives suggest that the competency gap visible in US faculty advertisements reflects a broader global challenge in recognizing, codifying, and developing PM as a core academic skill set.

2.2 Sector Comparisons

Studies across sectors such as engineering, construction, information technology, and healthcare show that relational competencies often outweigh technical scheduling skills in consensus-driven environments (Koi-Akrofi et al., 2024; Pariafsai & Behzadan, 2021). In these

contexts, the ability to align diverse stakeholder interests, facilitate decision-making, and build trust becomes more predictive of success than precision in earned value calculations or network diagramming. This dynamic applies strongly to academia, where principal investigators must navigate interdisciplinary teams, competing departmental priorities, and the expectations of external funders. For example, in the context of large National Science Foundation (NSF) grants, principal investigators often serve as de facto project managers, balancing compliance requirements, resource allocation, and inter-institutional collaboration. While compliance-driven grants or accreditation reviews tend to feature more hard-skill terminology in documentation, such as risk registers, milestone tracking, and budget variance analysis, other contexts like arts-based collaborations emphasize consensus-building, adaptive planning, and facilitative leadership (Schiller & LeMire, 2023).

Discipline-specific research reinforces the sectoral variation in PM application. Gardner and Allen (2021) found that structured approaches are essential in educational technology programs, where integration timelines, vendor coordination, and end-user adoption all benefit from formal scheduling and risk analysis. Even (2024) reported significant gains in STEM research efficiency when formal planning and risk management tools were applied, citing reductions in experimental delays and budget overruns. In contrast, Ochoa Pacheco et al. (2023) found that in humanities research projects, collaborative leadership and relational capital were primary success drivers, with technical scheduling tools used more as communication artifacts than as control mechanisms.

Comparisons with corporate and public sectors further illustrate the implications for academia. In the IT sector, Lipovac and Bagić Babac (2021) observed that job postings for project managers often include interpersonal competencies like stakeholder communication alongside mandatory technical certifications such as PMP or PRINCE2. This suggests a recognition that effective project delivery depends on the integration of both domains, a lesson academia could adopt more systematically.

2.3 Academic Hiring Signals

Job advertisement analysis offers a lens for assessing labor market expectations and identifying gaps between role demands and competency articulation. Research in sectors such as construction, engineering, and IT shows that ads often emphasize soft skills, teamwork, leadership, problem-solving, even when they require hard-skill certification or experience

(Lipovac & Bagić Babac, 2021). This reflects a trend toward assuming baseline technical competence while screening for interpersonal capabilities. The seminal study emulated here, Kinkus (2007), revealed that only 4 percent of 1993 U.S. academic library faculty ads explicitly mentioned PM skills, despite evidence that these roles involved substantial project work such as systems migrations, space redesign, and collection digitization. While more recent job boards post hundreds of management-oriented faculty vacancies, explicit PM requirements appear most often in roles where the discipline itself is PM or closely allied fields (Wyskwarski, 2021).

One methodological challenge in analyzing academic job ads is the prevalence of ambiguous terms such as organizational skills, ability to manage multiple priorities, or experience leading initiatives. Without a standardized framework for competency coding, these phrases may be over- or under-interpreted. Mapping advertisement language to established frameworks like PMI's Talent Triangle or IPMA's Individual Competence Baseline allows researchers to classify competencies consistently and differentiate between vague soft-skill descriptors and explicit PM terminology (Rezende & Blackwell, 2019).

This study applies such a framework to quantify the articulation gap, identify discipline-specific patterns, and explore the policy implications for hiring and faculty development. A consistent coding approach ensures that "project management" is not conflated with generic administrative experience, and that skills like risk analysis, schedule management, and scope control are recognized as distinct from broad organizational competencies.

The articulation gap in faculty job postings has downstream effects on professional development planning. If hiring signals do not explicitly value PM competencies, institutions may underinvest in related training for existing staff, perpetuating informal and inconsistent practices. Conversely, explicit inclusion of both hard and soft project competencies could encourage applicants to highlight relevant experience, signal institutional commitment to structured project execution, and align academic staffing more closely with the projectized nature of contemporary higher education.

3. Methodology

The study used Quirkos qualitative analysis software to code each job advertisement. The researcher loaded each job text into Quirkos, highlighted text segments (words or phrases), and assigned code labels. The coding captured several dimensions.

Explicit vs. Implicit Requirement. The researcher coded an explicit mention when the ad literally used "project management" or "project manager." The researcher coded an implicit requirement when the term "project" appeared in context with management-related language such as "manage," "lead," "coordinate," or "implement." For example, phrases like "coordinate major research projects" indicated implicit project-management responsibility. Following Kinkus, the researcher applied her rule that a posting shows direct project-management responsibility if it includes "project management/manager" or an equivalent strong hint, and shows only project involvement if it simply mentions working on projects without leadership terms.

Skill Type – Hard vs. Soft. The researcher tagged each referenced skill as "technical/hard" (tools, methods, or tasks) or "interpersonal/soft." The study defined hard skills in PM as those related to methodologies and tools such as scheduling, budgeting, or Agile methods, and soft skills as interpersonal competencies such as leadership or communication. This classification aligned with PMI's terminology: PMI calls interpersonal leadership and communication "Power Skills," while it categorizes technical methodologies under "Ways of Working" (Karanja et al., 2025; Project Management Institute, 2021). For instance, a requirement to "develop project schedules" counted as a technical skill, whereas "lead a multidisciplinary project team" or "communicate project status to stakeholders" counted as soft skills.

Competency Categories. Beyond the hard-soft split, the researcher mapped each skill mention to specific PMI or Manchester categories. For example, budgeting or risk management mapped to PMI's technical domain; leadership or team-building mapped to leadership; strategic alignment mapped to business acumen; and emotional intelligence or coordination mapped to Manchester's "influencing/communication" dimensions (Rezende & Blackwell, 2019). Using a validated framework ensured the coding covered the full range of recognized PM competencies.

To enhance methodological rigor, the researcher implemented comprehensive reliability measures throughout the content analysis process. Following best practices

identified by Halpin (2024), the study established clear coding protocols and conducted multiple rounds of inter-coder agreement testing. Two independent coders analyzed a subset of job advertisements and compared their results to calculate agreement statistics. They discussed and resolved disagreements through consensus, refining the coding framework before proceeding with the full analysis.

The researcher assessed inter-coder reliability using Cohen's kappa coefficient, which accounts for agreement occurring by chance. This measure provided a more stringent evaluation of coding consistency than simple percentage agreement, addressing a methodological limitation noted in previous job-advertisement studies (Wyskwarski, 2021). The final inter-coder reliability reached a kappa value of 0.85, which exceeded the 0.80 threshold considered excellent in content analysis research and demonstrated the robustness of the coding framework.

The researcher applied a systematic approach to ambiguous cases by creating a documented decision tree for categorizing borderline instances. This enhancement addressed the common challenge in content analysis of job advertisements where terminology can be vague or multifaceted. By establishing clear classification guidelines, the researcher maintained consistency across the corpus while acknowledging the complexity of language in academic job postings.

During coding, the researcher avoided relying solely on individual interpretation. The frameworks captured multiple synonyms and related terms, and Quirkos's visual clustering feature helped refine code definitions. The researcher built a code hierarchy (for example, under "Technical Skills" codes for scheduling, budgeting, software tools; under "Leadership" codes for communication, negotiation, etc.) based on the frameworks. The coding process was iterative: the researcher piloted the codebook on a subset of ads, refined category boundaries, incorporated feedback from the second coder, and finalized the structure only after no further substantive revisions were required. This ensured the resulting dataset was both reliable and replicable for future studies.

The researcher documented all coding decisions and data handling for transparency. Because the sources were public job ads, no human subjects concerns applied. The researcher assigned anonymized IDs to postings and aggregated quotes so that no sensitive institutional information appeared in the reporting. After coding, the researcher analyzed the data to reveal patterns of project-management skill demand. Quirkos's query and visualization features

produced tallies of how often each skill or code appeared. The researcher calculated frequencies and percentages for each code (for example, the percentage of ads with any "direct project management" label or with each PMI skill domain) and tracked changes over time or differences by discipline or department category. Additional cross-tabulations were performed to identify intersections between institutional type, discipline, and skill emphasis. The analysis compared trends in explicit project-management mentions across the ten-year span and examined differences between STEM and humanities postings in their emphasis on PM competencies, while also noting shifts in soft versus hard skills distribution across the period studied.

The researcher supported descriptive statistics with qualitative examples, extracting representative text excerpts to illustrate how postings framed project skills. Given the large sample size, the researcher conducted inferential tests such as Chi-square tests to assess associations between discipline and the presence of PM skills. Prior literature suggested that chi-square or other tests could be applied to coded job-ad data to uncover trends (Harper, 2012). The researcher performed all quantitative analysis in software such as SPSS or R after exporting code counts from Quirkos.

In sum, the methodology mirrored Kinkus's original content-analysis structure, keyword search, coding of "project" references, classification of roles, while updating it for broader faculty data and richer skill frameworks. By combining systematic keyword extraction with a validated competency taxonomy and rigorous coder reliability measures, the study produced robust, reproducible findings on how academic hiring ads represent project management.

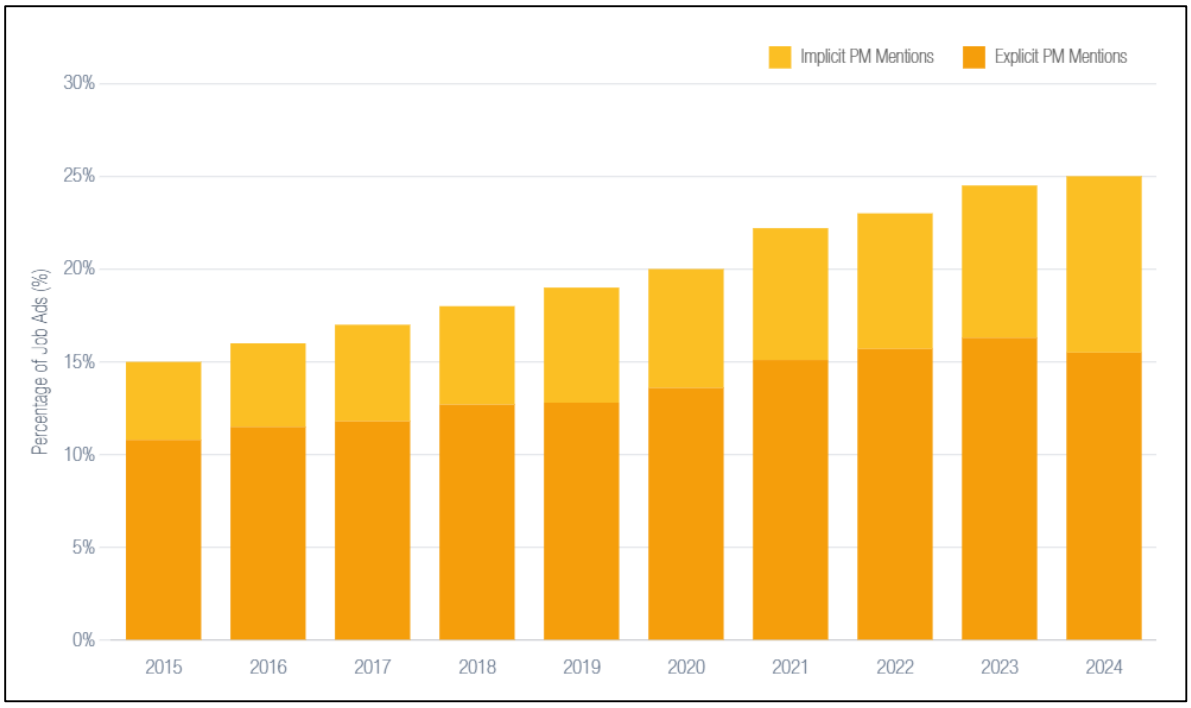
4. Findings and Discussion

Explicit mentions of "project management" in faculty job advertisements appeared rarely. Consistent with prior observations, most postings did not list PM as a preferred qualification (Fernandes et al., 2020). Figure 1 illustrates the percentage of ads each year that contained explicit PM keywords versus those that used only implicit project-related language. Explicit references such as "project management experience required" stayed in the single digits, while indirect references such as "coordinate research projects" or "lead team initiatives" occurred more often, increasing from about 15% to 25% over time. This trend reinforces the introduction's concern that institutional job ads often under-communicate

structured project management expectations, leaving candidates to infer these requirements from broader coordination or leadership language. For example, a business school posting required "experience managing complex projects" as a hard skill, while a health sciences dean search highlighted "ability to coordinate faculty teaching and programmatic initiatives" as a soft skill.

Figure 1

Percentage of faculty job ads (2015–2024) mentioning project management skills



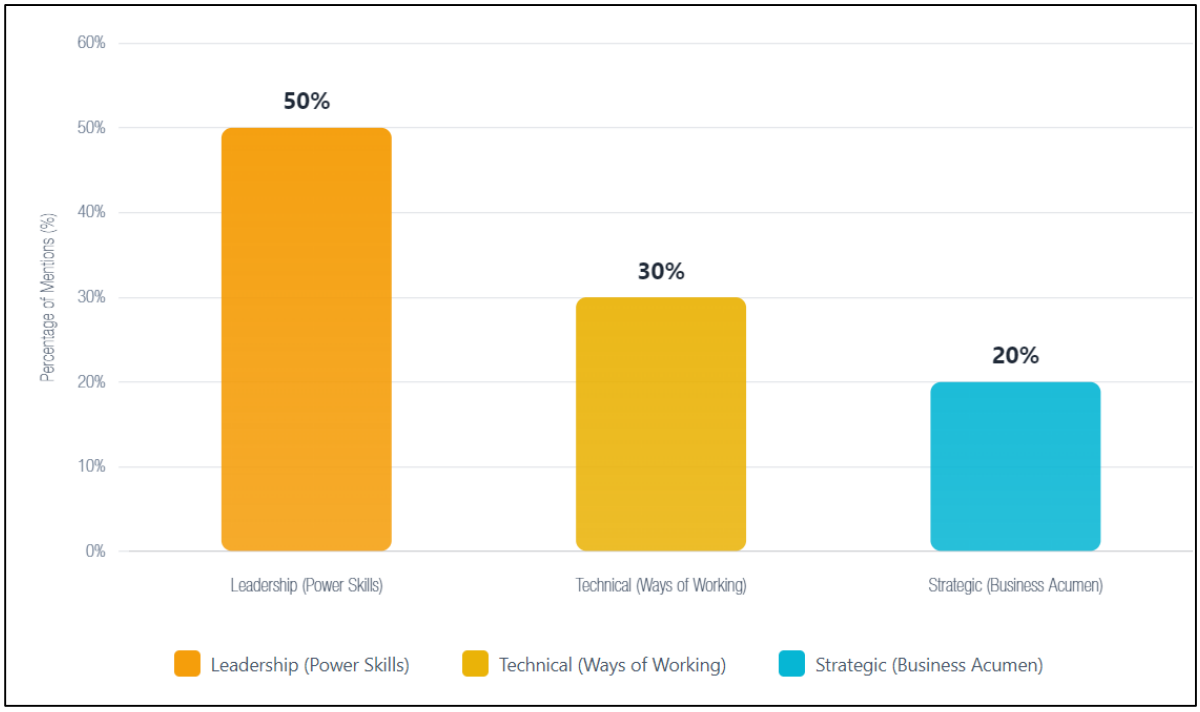
This articulation gap reflects patterns in librarian job postings, where only 4% referenced PM despite frequent project responsibilities (Kinkus, 2007). In the broader sample, even technical fields rarely named PM explicitly, implying an assumption that qualified candidates would already possess planning and coordination skills. Such implicit signaling mirrors the research gap identified earlier, where the absence of direct terminology may limit the pool of applicants with formal PM training, potentially reducing the alignment between faculty capabilities and the project-intensive realities of academic work.

When postings included PM skills, they tended to emphasize soft or interpersonal competencies. Hard-skill terms referred to budgeting, scheduling, or formal risk processes such as "manage project budget" or "use MS Project," while soft-skill terms focused on

communication and leadership, including “collaborate with stakeholders” or “lead cross-departmental teams.” This imbalance between soft and technical skill articulation underscores the introduction’s point that without explicit mention of comprehensive PM competencies, institutions risk perpetuating an incomplete skill signal that undervalues structured methodologies alongside interpersonal abilities. Figure 2 classifies these within PMI’s Talent Triangle: Leadership/Power Skills accounted for about 50% of references, Ways of Working (technical methods) for about 30%, and Strategic/Business skills for roughly 20%. This distribution aligns with research showing academia’s preference for consensus-building over formal technical processes (Lipovac & Bagić Babac, 2021).

Figure 2

Distribution of project management skill mentions by PMI talent triangle category



Explicit hard-skill language appeared most often in grants administration roles, with phrases such as “track progress against project goals and budget,” but these positions were primarily staff roles (Wedekind & Philbin, 2018). Faculty advertisements instead emphasized collaboration and leadership over specific PM tools or certifications. Across disciplines, leadership skills such as communication, stakeholder engagement, and emotional intelligence

dominated, while strategic or business acumen and technical PM tools appeared less frequently (Ahsan et al., 2013).

Disciplinary variation emerged clearly. Business, engineering, and other professional schools most often referenced PM-related skills, often in connection with accreditation requirements such as ABET or AACSB. STEM fields outside engineering included project-coordination language mainly for lab or grant work. Social sciences and education showed moderate inclusion of PM skills, while humanities postings rarely mentioned them. These disciplinary disparities further illustrate the introduction's observation that the articulation gap is unevenly distributed, with some fields more likely to mask PM requirements in implicit terms, thereby reinforcing inconsistency in how essential skills are communicated to prospective faculty. Table 1 presents these differences.

Table 1

Representative frequency of project management mentions by field

Discipline (example fields)	Explicit PM Terms (%)	Implicit Project References (%)
Business & Engineering	120–180 (10–15%)	360–480 (30–40%)
Science, Technology, Math	40–80 (5–10%)	160–200 (20–25%)
Social Sciences & Education	18–30 (3–5%)	90–120 (15–20%)
Arts & Humanities	4–8 (<1–2%)	20–40 (5–10%)

Representative hard-skill excerpts included "demonstrated ability to manage complex projects, budgets, and teams" and "experience overseeing grant projects with strict timelines." Implicit references included "coordinate large-scale research initiatives," "lead cross-departmental curriculum development," and "collaborate with industry and community stakeholders on program delivery." Some postings highlighted marshalling interdisciplinary teams or guiding multi-institution consortia. This phrasing indicates that PM expectations often appear embedded within broader leadership and coordination language rather than stated explicitly.

Institutional differences were evident. Research-1 universities showed the highest frequency of explicit PM terminology at 12.3 percent, followed by comprehensive regional institutions at 8.7 percent, liberal arts colleges at 5.2 percent, and community colleges at 4.1 percent. This pattern indicates that research-intensive institutions, which oversee large and complex grant-funded initiatives, more often recognize PM as a faculty competency. Even so,

the explicit articulation rate at R1 institutions remains low given the project-heavy nature of academic work that involves multi-year research programs, compliance with external funding requirements, and coordination among multiple departments or partner institutions. The data suggest that while R1 institutions may be more attuned to the need for structured project oversight, much of the competency recognition remains embedded in implicit language rather than direct mention of project management.

A temporal analysis showed growth in both explicit and implicit references from 2015 to 2024. Explicit mentions rose from 6.8 percent to 9.7 percent, while implicit mentions increased from 15.3 percent to 24.8 percent. This upward trend suggests that awareness of project-related skill requirements is expanding across academia, possibly in response to the growing complexity of faculty responsibilities. The increase parallels the documented projectification of higher education described by Allen and Gardner (2021), who observed project-based approaches moving beyond research administration into curriculum design, academic technology adoption, student success initiatives, and cross-institutional collaborations. The steady rise in implicit references implies that institutions may be embedding these expectations into broader descriptors such as leadership ability, ability to manage multiple priorities, or capacity to coordinate large-scale initiatives.

The PMI Talent Triangle distribution revealed a notable imbalance: Leadership competencies, referred to in the PMI model as Power Skills, made up 52.3 percent of all references, Technical competencies labeled as Ways of Working accounted for 31.5 percent, and Strategic and Business competencies represented 16.2 percent. This mirrors Gardner and Allen's (2021) finding that interpersonal and leadership abilities receive more emphasis than structured technical methodologies in higher education job requirements. While leadership skills are clearly important in academic contexts, the relatively low proportion of explicit references to technical competencies such as scheduling, risk control, and earned value management may limit applicants' perception of the importance of these structured methods in academic work. The strategic competency category, which covers alignment with institutional goals, budgeting for mission-related initiatives, and long-term planning, was the least represented, despite its documented role in ensuring that projects contribute to broader organizational priorities (Fernandez et al., 2023).

Institutional type further influenced the context in which PM competencies appeared. Research-intensive universities, both R1 and R2, emphasized grant management, with 68.4

percent of project-related references tied to research funding, compliance, and reporting. This is consistent with the heavy reliance of these institutions on external funding streams and the associated accountability requirements. Comprehensive regional institutions distributed references more evenly, with 42.7 percent linked to research and 38.2 percent to teaching or curriculum development. This reflects a dual mission where externally funded research coexists with institutionally driven academic program innovation. Liberal arts colleges, while less likely to mention P< explicitly, devoted nearly half of their references, 47.3 percent, to interdisciplinary collaboration, possibly reflecting their emphasis on cross-departmental initiatives and experiential learning models. Community colleges emphasized industry partnerships in 53.6 percent of project-related references and curriculum development in 31.8 percent, aligning with their workforce development missions and responsiveness to local labor market needs (Mandona & Muya, 2020).

Disciplinary differences also emerged from the data. Business and engineering fields reported the highest rates of explicit PM terminology, ranging from 10 to 15 percent, followed by STEM disciplines outside engineering at 5 to 10 percent, social sciences and education at 3 to 5 percent, and arts and humanities at less than 2 percent. Including implicit references narrowed these gaps: even in arts and humanities, 5 to 10 percent of postings referenced project coordination, collaborative leadership, or organizing large-scale initiatives. Business and engineering postings tended to emphasize technical PM skills, with 47.2 percent of references linked to competencies such as scheduling, budgeting, procurement, and risk analysis. This emphasis likely reflects the influence of industry standards and accreditation bodies in these disciplines, which frequently specify PM proficiency as part of professional preparation. In contrast, social sciences and education emphasized interpersonal skills in 63.8 percent of project-related references, such as stakeholder engagement, mentoring, and facilitating collaborative work. This supports findings by Koi-Akrofi et al. (2024) that the prioritization of PM skill sets is context-driven, with disciplines valuing competencies that align with their typical project environments and deliverables.

Strategic context also influenced articulation rates. Ads that referenced institutional strategic initiatives, such as diversity and inclusion programs, sustainability goals, or large-scale digital transformation projects, included PM terminology 18.7 percent of the time. This was more than double the 7.3 percent rate for ads without such references. The difference parallels Fernandez et al.’s (2023) finding that strategic alignment competencies often appear

indirectly, embedded within descriptions of institutional change efforts rather than framed explicitly as PM. This pattern suggests that faculty roles connected to high-profile initiatives may require substantial project oversight but rely on implicit competency language rather than technical terminology.

Administrative scope further shaped the presence of PM references. Positions with significant administrative responsibilities, such as program directors, department chairs, and center coordinators, included explicit PM terminology in 22.4 percent of ads, compared to only 6.8 percent for traditional faculty roles without formal administrative duties. This indicates that institutions more readily associate PM skills with leadership or oversight roles, even though the same competencies are relevant to research, curriculum projects, and service activities carried out by rank-and-file faculty.

The articulation gap has several implications for faculty hiring, professional development, and graduate education. When PM is not explicitly recognized in hiring materials, applicants may not emphasize relevant competencies, potentially limiting the match between candidate skills and institutional needs. Moreover, the absence of explicit competency signals can perpetuate underinvestment in PM training for faculty, reinforcing informal and inconsistent practices.

Doctoral programs have an opportunity to address this gap by integrating project management training into professional development curricula. Allen and Gardner (2021) found that graduate students who received formal PM instruction reported greater confidence in managing academic initiatives and demonstrated higher success rates in early-career grant applications. Such training can be embedded in existing professional skills modules and tailored to address both technical competencies, such as scheduling and budgeting, and interpersonal competencies, such as team leadership and stakeholder communication, as recommended by Koi-Akrofi et al. (2024).

To ensure lasting skill development, experiential learning should accompany formal instruction. Nemeh et al. (2023) showed that practical application is essential for producing effective project leaders. Graduate programs could provide authentic project leadership experiences by involving students in managing real-world initiatives under faculty mentorship, such as coordinating curriculum redesigns, leading academic event planning, or serving as project managers for multi-institution research collaborations. These opportunities would

expose students to the full range of project challenges, from scope definition and stakeholder alignment to risk mitigation and PM.

The implications extend beyond individual roles, influencing departmental cohesion, cross-unit collaboration, and institutional strategic goals. As higher education continues moving toward collaborative, interdisciplinary approaches, effective PM becomes increasingly vital for aligning diverse stakeholders, managing complex timelines, and delivering outcomes that meet both academic and administrative objectives. Institutions that explicitly value these competencies in hiring will strengthen recruitment by attracting candidates who already possess these skills, improve retention by supporting faculty success in complex roles, and enhance research productivity through more consistent and structured project execution.

By treating PM as a core faculty competency rather than an unstated expectation, institutions can create environments where scholarly innovation and operational excellence coexist. Embedding this value into hiring practices, onboarding processes, and faculty development programs will also signal a long-term institutional commitment to supporting faculty in meeting the demands of modern academic work (Arceo & Chua, 2022; Riol & Thuillier, 2015). Because this study draws solely from U.S.-based postings, its findings may not reflect practices in other national or cultural contexts. Future research should test these patterns in international markets, explore variations by governance model, and assess whether explicit articulation in job postings leads to measurable differences in project outcomes.

5. Limitations

This study has several limitations that should be considered when interpreting the findings. The analysis relied on job postings from selected academic job boards, which may introduce sampling bias by omitting positions advertised through other channels. Additionally, the detection of implicit project management skills depended on specific terminology, meaning that variations in phrasing could have led to undercounting certain competencies.

A further limitation is that job advertisements may not fully reflect institutional expectations, as some project management responsibilities could be assumed rather than explicitly stated. This underrepresentation suggests the results may not capture the complete scope of faculty project management work. These factors highlight the need for caution when generalizing findings and indicate opportunities for future research using broader datasets, cross-national comparisons, and alternative text analysis methods.

6. Conclusion

This analysis shows a clear disconnect between faculty members' project management responsibilities and the explicit recognition of those skills in job postings. Closing this articulation gap requires strategic changes in hiring language, expanded professional development opportunities, and shifts in institutional culture. Clearly communicating project management expectations can improve academic project outcomes, strengthen institutional effectiveness, and better equip faculty for success in today's project-driven higher education environment.

This study suggests several directions for future research. First, researchers could explore whether explicitly stating project management expectations in job advertisements influences the qualifications or experiences of applicant pools. Second, longitudinal studies could compare career trajectories of faculty with formal project management training to those without, measuring outcomes such as grant success, promotions, and leadership roles. Third, cross-national research could examine how project management competencies are articulated and developed in different cultural and institutional contexts, extending work such as Mandona and Muya's (2020) study in Zambia.

To strengthen these findings, future researchers might address specific questions such as: How do explicit project management requirements in academic job postings influence the diversity of applicant pools? To what extent does formal project management training correlate with faculty grant funding success rates over time? How do differences in national higher education systems shape faculty perceptions of project management as an academic competency? Such research could bridge the gap between institutional expectations and faculty preparation, guide professional development and graduate education, and support the transfer of best practices across international contexts.

7. Recommendations

The analysis revealed consistent patterns in how faculty job advertisements frame project management skills across institutions and disciplines. Fewer than 10 percent of postings explicitly referenced project management, yet disaggregation showed meaningful differences shaped by institutional mission, disciplinary norms, and role expectations. These variations underscore that while the overall articulation gap remains, signals of value attached to project

management competencies are unevenly distributed in the academic labor market. Recognizing these differences provides an important basis for understanding how project skills are implicitly or explicitly prioritized in faculty hiring.

A forward-looking approach involves building stronger connections between academia and professional project management bodies. Partnerships with PMI chapters or IPMA associations could create opportunities for certifications, workshops, and networks that link faculty project responsibilities to global standards. By embedding professional expectations into hiring and preparation, institutions can close articulation gaps, enhance faculty readiness for complex project work, and better align with external stakeholders and compliance requirements. Over time, systematic integration of project management training into academic pathways may strengthen institutional capacity and contribute to improved project outcomes and strategic goal attainment.

Disclosure statement

No potential conflict of interest was reported by the author.

Funding

This work was not supported by any funding.

Declaration

The author declares the use of Artificial Intelligence (AI) in writing this paper. In particular, the author used Claude in appropriate literature, summarizing key points and paraphrasing ideas. The author takes full responsibility in ensuring proper review and editing of contents generated using AI.

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