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PPDM EDUCATION ADVISORY COMMITTEE (PEAC)

CHARTER

PRESENTED BY: MEMBERS OF THE PPDM ASSOCIATION

PROFESSIONAL PETROLEUM DATA MANAGEMENT
ASSOCIATION
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PPDM Education Advisory Committee (PEAC)

PROJECT BACKGROUND AND PURPOSE

This charter recommends the creation of a member-driven PPDM Education Advisory Committee that will coordinate and guide the effort to advance PPDM training and external training partnership opportunities.

This will be a standing committee of the PPDM Association, and will require participation of industry representatives, each of whom will commit to a two-year term of participation.

Since 1991, the PPDM Association has developed standards and best practices for data management. More recently, the PPDM membership expanded its remit to support the professionalization of data management as a recognized industry discipline.

To support data professionals, PPDM offers a range of training covering essential business, data management, standards and best practices. These offerings, available through public, private and

online options, provide petroleum data professionals with knowledge and skills they need to be effective in today's data driven petroleum industry. The PPDM Certified Petroleum Data Analyst (CPDA) certification program evaluates the competence and capability of data professionals and has achieved a significant level of recognition.

The PPDM Professional Development Committee (PDC) continues to advance the professional discipline as a career destination by embarking on a multi-year project that will define career elements, including a job family grid, the identification of job roles that fall under each area, competency frameworks for each job role, compensation frameworks for multi-level roles, and career maps for current professionals or future data managers.

A recognized professional discipline is created by a governed body of ethics-driven professionals who have an intentional and common purpose to develop, deploy and support a body of knowledge and professional development for the practice of data management as a professional discipline.

To further advance the emergence of practical education and training options, the PDC recently published an online web platform for external training providers to link their petroleum data management-specific content to. This repository will eventually provide a one-stop shop for data professionals to find courses they need to advance their knowledge and skill, filling gaps they need to move laterally or to higher-level positions in their careers. Much work is needed to advance the scope of the courses available worldwide, including raising external training provider awareness about the service, and active recruitment of those training providers.

Combined with the many programs underway at PPDM (e.g. PDC, PDMCC, CPDA, IPDS, etc.), the **PPDM Education Advisory Committee (PEAC)** will ensure PPDM is aligned with the everchanging and shifting

training needs of industry and individuals' knowledge and skill gaps to position themselves for career success. The PEAC will advise on the role of existing courses for professional development, identify and define new courses or curricula, methods to test and measure knowledge and work with other committees and work groups to recommend a full suite of credentials/certification programs. They will collaborate with external training providers and engage in other activity related to the advancement of our discipline.

Corporate and individual PPDM members will have an opportunity to impact the direction and content to determine how we approach, partner with, and promote professional data management education and training for our community. This in turn will provide access to a broad array of course content to augment professional knowledge and skill.

PEAC AND OUR STRATEGIC VISION

PPDMs strategic vision (Appendix A) is grounded in long-term strategies based on three pillars:

- 1. Community of Practice
- 2. Body of Knowledge and Best Practices
- 3. Professional Development

The PEAC will support these pillars through:

- 1. Community of practice participating in local and regional events to engage the community. This may involve hosting focus groups or interviews to solicit opinion, presenting at conferences or other PPDM events, submitting articles related to professional development, focusing on education, and collaborating with Leadership Teams to gain further traction for mutual benefit.
- 2. Body of Knowledge and Best Practices recommend methods of integrating standards and best practices, into education and training programs.
- 3. Professional Development Perhaps the most critical pillar, tying in with the work of PEAC, professional development consists of Education and Training, Certification Maintenance and HR Support, Careers and Salaries.
 - a. PEAC will assess existing training programs to identify those aligned with current professional expectations and identify gaps to stay abreast of emerging technologies. Work with external training providers (independent, academic institutions and industry programs) to ensure curricula meets professional needs.
 - b. In addition, PEAC will promote and advance certification and certification maintenance to support continuous professional development.
 - c. PEAC will collaborate with the Professional Development Committee (PDC), examining outputs that support HR foundational artifacts. This includes the promotion of job descriptions, annual salary surveys, career ladders and competency frameworks that provide baseline metrices that support a competitive environment.

HIGH LEVEL GOALS AND OBJECTIVES

The Committee will develop materials that support the education and training necessary to support each of the stakeholder communities listed below:

1. **Data professionals** who currently work in the oil and gas industry in need of training to augment their existing knowledge, and present opportunities for career advancement.

- Companies and user communities who employ the services of data professionals in support of their business objectives (such as finding oil, selling consulting services, or developing data related products), in identifying training gaps and in-demand subject areas.
- 3. *Companies who provide services* that support data professionals, such as consulting, data and software services, in identifying training gaps and in-demand subject areas.
- 4. **Government agencies or bureaus** who serve as authorities for E&P operations within their regulatory scope, to identify knowledge/training gaps and in-demand subject areas.
- 5. **Academia and others who** develop and deliver credentialed programs of study, typically leading to a diploma, degree or higher education certificate.

These materials may include (but are not limited to):

- 1. Methods to map discipline competencies or capabilities and existing or planned training materials.
- 2. Recommendations to support the preparation needs of those seeking the CPDA credential.
- 3. Curriculum support materials for schools, colleges or universities seeking to develop programs for petroleum data disciplines.
- 4. Recommendations for practical examples that may be used by trainers or educators in their programs.
- 5. Methods to map existing or planned post-secondary programs to the competencies and capabilities associated with data disciplines.
- 6. Recommendations for (and possibly development of) new training material needed by data professionals.

ASSUMPTIONS

- Volunteer participants will be available to serve two-year terms
- PPDM will support logistical and organizational requirements, will ensure that the committee is well formed and adheres to PPDM Policies (including Code of Ethics and applicable Anti-trust law)
- It is hoped that some companies will donate existing work to the program
- Existing PPDM relationships external training providers will be leveraged to create new course content.

RISKS & CONSTRAINTS

- The scope and pace of program delivery is dependent on sufficient funding and resources.
- Volunteer availability may result in program delays or changes to the scope of deliverables.
- Existing programs with training providers or at postsecondary schools may choose not to work with the PEAC.

SCOPE

The focus will be on identifying or developing courses or programs of study that support petroleum data manager learning, and credential access.

IN SCOPE

 Deliverables as outlined, and additional outputs as recommended by the committee and (if necessary) approved by the PPDM Board of Directors.

OUT OF SCOPE

- A complete program of courses, fully developed
- A petroleum data body of knowledge (this is the remit of another PPDM committee)
- Development or maintenance of credential programs (this is the remit of another PPDM committee)

DELIVERABLES

The sequence of development is expected to be prioritized by the PEAC early in its formation, and will be influenced by industry feedback and priorities.

KEY DELIVERABLES	PRIORITY / ORDER	SPECIFIC RECOMMENDATIONS		
Method for competency and capability mappings to training class materials	High	Actual mapping will be dependent upon the PDC writing competencies. Course/training materials audit may be launched sooner.		
Support recommendations for CPDA candidates	High	Work closely with the PDMCC to make recommendations.		
KEY DELIVERABLES	PRIORITY / ORDER	SPECIFIC RECOMMENDATIONS		
Curriculum support for schools seeking to develop programs for petroleum data disciplines	Low	As available and as needed.		
Practical examples for incorporation into learning materials	Medium	Consult with industry advisors to access case studies, video, other supporting materials to demonstrate concepts and learnings.		
Methods for mapping competencies and capabilities to education programs	Medium	Course or program audit to compare alignment to competency frameworks.		

Recommend the development of new training materials	Medium	As identified by PEAC, PPDM membership, Leadership Teams, Work Groups and Committees (e.g. PDMCC)
Develop new training materials	Medium	As identified and as needed. Demand-driven.

FUNDING MECHANISMS

• The committee may be launched with basic PPDM funding, but ongoing work is contingent on industry funding.

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• A business plan will be developed to explore alternative funding support mechanisms

RISKS AND ISSUES MANAGEMENT

This section will be completed by the workgroup, initial risks listed below:

Date recorded	Risk description	Probability	Impact	Mitigation plan
	Volunteer time	High	High	PPDM Staff prioritize PEAC to position for success. Practical workplan and output schedule.
	Funding	High	Medium	Funding will accelerate the project - hire additional staff
	Industry participation	Medium	Medium	Avoid scope creep

IMPLEMENTATION APPROACH

This project will be managed with an iterative and incremental method to identify and execute the development of outputs that are most valuable to industry. This will be highly interactive and require participation from operator and vendor subject matter experts.

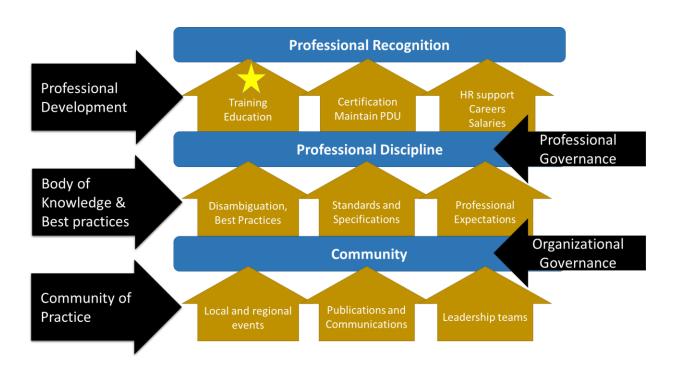
HIGH LEVEL TIMELINE/ SCHEDULE

Contingent on the scope of the charter, this committee is projected to launch before the end of 2019.

APPENDIX A

PPDM'S STRATEGIC VISION

Professional recognition is not achieved quickly. The illustration below shows the progressive development plan of the PPDM Association; our programs have been grounded in these strategies for a decade. The iterative PPDM approach is multifaceted, with each element in the strategy providing the framework within with the next elements are grounded. The IPDS committee formed under this charter will drive out level 2 of these objectives (International Petroleum Data Standards and Best Practices). The Professional Development framework builds on this platform to ensure that data professionals have a solid baseline of knowledge and skills. These, in turn, help employers ensure that they have access to a broad pool of data professionals who can be swiftly and effectively leveraged into their organization.



- 1. **Create the Community of Practice**: Every discipline starts with the growth of an intentional and purposeful community of data professionals who build personal, professional and technical relationships with each other.
 - a. *Communities* are built regionally, each with a strong and committed leadership team.
 - b. *Communications* are fostered through technical publications, social media and professional journals.
 - c. *Relationships* between service providers and service consumers are fostered in a neutral collaborative environment.
 - d. **Leadership** is developed through participation in Regional Leadership Teams and overseen by a strategic board of directors who guide the community toward success.

- 2. **Drive out the Body of Knowledge, Standards and Best Practices**: Subject Matter Experts (SME) in the community of practice are recruited to identify or create a family of products that support and sustain a foundation of practice for data management that is the core of a recognized professional discipline. The existence of a professional discipline is predicated on the existence and use of these materials as appropriate.
 - e. **Best Practices**: This is foundational knowledge for a data manager in the practice of their profession. "What is a Well", "What is a Completion" and the Business rules repository are good examples of foundational knowledge elements. Training courses that focus on these best practices must be available to PPDM members and our global data management community through public and private training options.
 - f. **Standard Specifications**: These specifications are useful tools that can be used by a data manager to fulfill certain functions to ensure that data is interoperable, accessible and available to all stakeholders. The PPDM Data Model is an example of a Standard Specification. PPDM currently delivers courses related to the PPDM data model.
 - g. **Professional Expectations**: In the practice of any profession, it is necessary to determine what constitutes appropriate expectations. These expectations support the necessary trusted relationship between data professionals and their stakeholder customers. A component of professional expectations relates to training. Questions surrounding learning development opportunities must be addressed to keep pace with the changing landscape of petroleum data management and emerging technologies.
- 3. **Professional Development; outward verification of the data manager's portable skill and knowledge**: Recognition of a trusted and useful professional discipline is grounded on a clear validation that practitioners understand and follow industry best practices; and that training, education and qualification opportunities are available to (and used by) practitioners.
 - h. **Training and Education**: Industry training programs, along with post-secondary programs, include data management elements that are aligned with industry expectations in their curricula. **This charter fits in this section of the PPDM Strategic Plan**.
 - i. **Certification and Professional Development**: Certification programs, including the PPDM CPDA program, validate the data managers' skills and knowledge and enforce the expectation for continuous professional development. This work is supported by the Petroleum Data Management Certification Committee (PDMCC).
 - j. HR Support: Standardized job descriptions, salary surveys, career ladders, standardized benchmarks, key performance indicators, and metrics and other support materials help Human Resources build and maintain a competitive environment for data managers. Recommended goals and objectives for data professionals should be supported by demonstrable proof points in a competency management framework. This work is supported by the PPDM Professional Development Committee (PDC).