

Professional PLM Industry Planning Forum

Summary Document

Version 1.0

30 October 2023

The *Professional PLM Initiative* held an on-line, workshop-style Forum on 18 October 2023 to discuss how the aims and principles set out in the recent Industry White Paper could be carried forward with further action.

This document summarises the issues that were discussed and the ideas that were developed at the Industry Planning Forum, and is for general dissemination.

Foreword

In 2017 an initiative was launched to establish a formally-recognised PLM Professional Body that would raise PLM to the same level as other established disciplines. Over the next 2 years it formed a Steering Group and a Working Group, and defined in full detail how a PLM Profession could be achieved.

With the onset of the pandemic everything went on the back burner, but in 2023 the subject has been revived and is now live again.

A two-month consultation across the industry resulted in the publication of a comprehensive White Paper, which acts as a definitive reference document for the aims and benefits of establishing a PLM Professional Body.

The White Paper and its accompanying narrative on LinkedIn have an extensive readership within the PLM community, but that latent support needs to be translated into positive action.

The Industry Planning Forum described in this document begins that process, weighing up the possible options and offering advice on the best short term approach for mobilisation.

The summary of the discussions is presented here simply to stimulate further thought, and to encourage more PLM organisations and practitioners to join in with the activity of the Initiative.

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Introduction

The reactivation of the *Professional PLM Initiative* in 2023 began with three 'Open Forum' half-day workshops in April. These covered three time zones and shared a common Agenda explaining the background to Professionalism in PLM and discussing its various possibilities and benefits.

The findings from these workshops were combined into a single Summary Document which led directly to the production of an Industry White Paper. After a two-month feedback and iteration period the White Paper was published on 08 August and is the definitive reference document for the aims and rationale of a recognised PLM Profession.

The White Paper has set out an agreed view of what should happen in the future, but there are several possible ways of moving forward. Participants in the Industry Planning Forum debated which is the best. In doing so they came up with several useful new ideas. This Summary Document describes the discussions and the conclusions that were drawn.

The Summary Document from the Open Forum workshop; the White Paper itself; and this document can all be obtained from the Professional PLM Initiative web site¹.

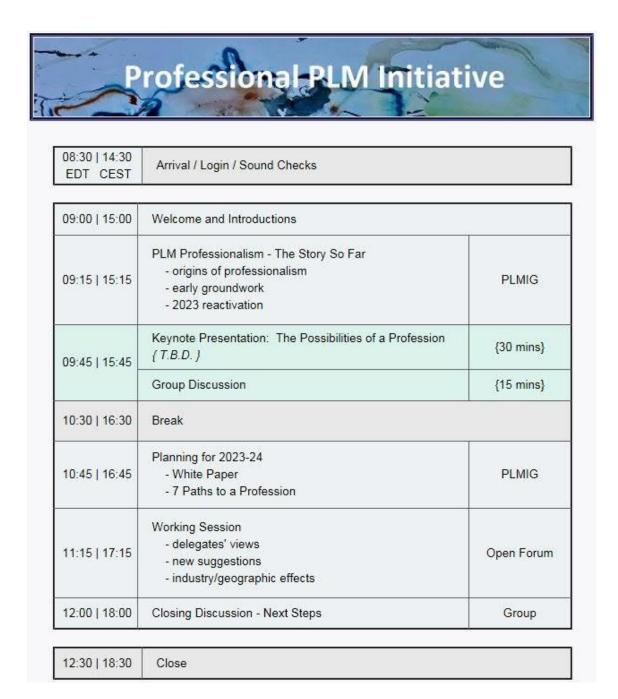
Further information about the Industry Planning Forum and about the Initiative itself can be requested via profession@profession@professionalplm.org.

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¹ www.professionalplm.org

Workshop Agenda

The Agenda for the Industry Planning Forum is shown below.



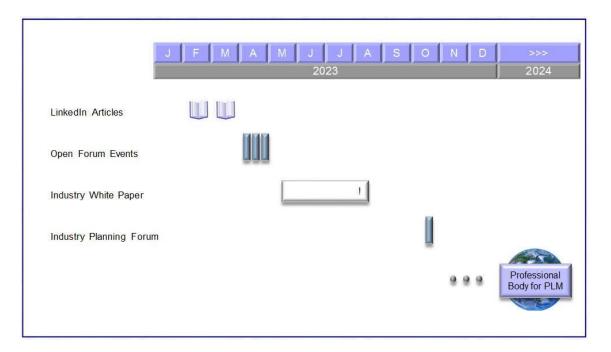
Timing for EDT and CEST was as above. Attendance ranged from Canada to India. There were no offers of Keynote presentations, so that time was absorbed for group discussion.

Background

2023 Timeline

The Industry Planning Forum was staged by the PLM Interest Group as the latest event in a 9-month programme of increasing awareness about Professional PLM.

The three 'Open Forum' workshops were held in April, and the White Paper was released on 08 August.



The Industry Planning Forum on 25 October took the White Paper as its starting point and debated the various possible ways of putting its aims into action, on the quest to establish a recognised Professional Body.

White Paper

The White Paper² is 24 pages long, but the essence is in the first 3 pages, which include a narrative-style Foreword, and the *Professional PLM Position Statement*.



The remainder of the White Paper is a detailed rationale that sets out the reasoning, justification and benefits of this collaborative position. It is deliberately comprehensive because it acts as a written reference document for everything that is to follow.

This is an important point. It means that:-

- (a) every organisation and practitioner that takes part in the Initiative has the same clear picture of where it is going, and what it aims to achieve; and,
- (b) when the same basic questions are asked again and again, which happens as new people encounter the issues and join the programme, those questions can be answered by: "Read the White Paper".

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² www.professionalplm.org/welcprofessionalwhitepapermain.shtml#wpmainayi

Professional PLM Position Statement

The agreed position has been expressed in 181 words.

The Professional PLM Premise is that PLM is a specialty that is sufficiently complex that its practitioners should be certified to carry it out; and is of sufficient value to the business world to warrant its being recognised as a profession.

The Vision is of a discipline that is recognised globally, championed by a Professional Body that acts on behalf of its members and of the industry as a whole.

Forming a PLM Profession, with everything that that entails, will have benefits to organisations that are applying, providing or advising on PLM; to individual practitioners on their career paths; and to education and training providers as they strive to offer a more complete and accurate syllabus.

Making the PLM industry more professional will bring its participants together with a common sense of purpose, and create an interactive platform for long-term improvement. The detailed process of establishing a profession will generate a neutral, agreed Body of Knowledge that will bring its own extensive benefits.

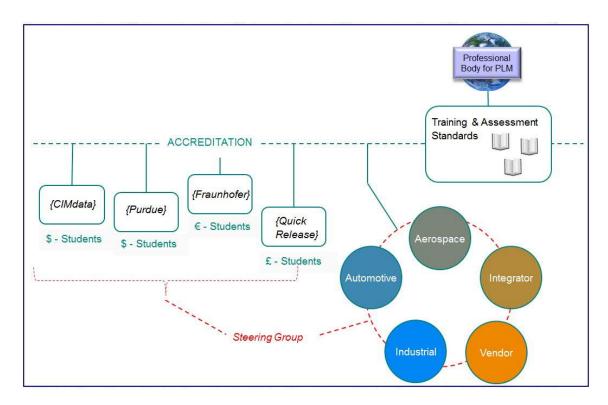
This White Paper therefore proposes that a recognised PLM Profession is formed, and that these benefits are realised.

Accreditation and Certification

It is worth thinking about the enormous effect that a recognised Professional Body would have as it fulfilled its responsibilities to provide Accreditation for training and education providers, and Training and Assessment Standards against which to Certify individuals.

Steering Group

All of the Accreditation and Certification criteria will need to be defined in writing, which will bring collaboration across the industry.

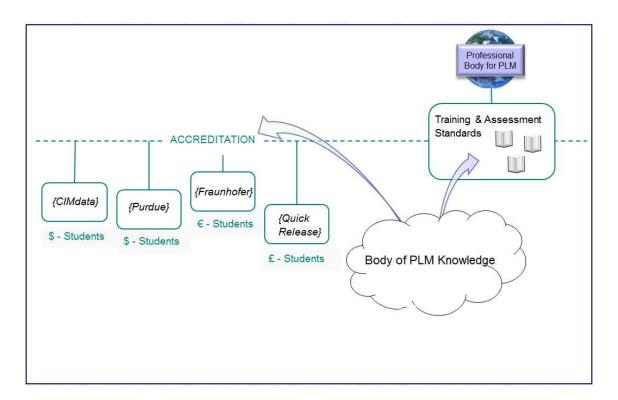


Training providers (such as, but not restricted to the rhetorical examples in the slide) will want to be part of this process. Companies and corporations that have their own internal PLM training programmes will want to align them with Certification for maximum effect.

This multi-organisational cooperation and interaction is the underlying concept of the Steering Group.

Body of Knowledge

This activity of bringing together "What We Know About PLM" into a structured, assessable format will inherently generate a new, neutral PLM Body of Knowledge.



There are experienced practitioners all over the world who understand the same things about PLM but who have no way of expressing what they have learned. At the same time, young people are starting out on their careers having to learn for themselves what their forbears already know.

The compilation of the widespread, implicit understanding of PLM into a peer-reviewed professional structure will form a neutral Body of Knowledge that will be useful to everyone whose career lies in this discipline.

9 Paths to a Profession

At the time of the Forum, 9 possible routes to achieving a PLM Profession are theoretically possible:-

- ➤ PLMIG
- Steering Group
- Working Group
- ➤ Body of Knowledge
- > Associate Programme
- International Panel
- Training Courses
- Industry Activists
- Someone Else Does It

PLMIG

The PLM Interest Group is running the Professional PLM Initiative and is currently the main driver of progress.

The PLMIG was original formed at the end of 2003 because "there was no neutral PLM Institute", and practitioners from more than 10 countries met in Oxford UK to decide how this could be remedied.

The PLMIG began as a membership and meeting forum, and it may seem logical that the PLMIG itself could develop into the Institute or Professional Body that is needed. However, the PLMIG has evolved over the past two decades to develop new PLM knowledge in the form of methodologies and toolsets, and is now seen as proprietary.

It is also the case that a PLM Profession will need to last 20 years or more into the future, so it needs to be owned and maintained by the PLM industry as a whole.

That is why the Professional PLM Initiative was created as a separate stand-alone entity. The PLMIG aims to be the engine that creates the platform for a Professional Body - after which it will drop out like the early stage of a rocket.

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Steering Group

The underlying concept of the Steering Group is shown on Page 9, and such a Steering Group has already formed, though it has not yet reached a critical mass.

The Steering Group route is by far the best of the 8 options. It provides high-level direction of the Initiative, bringing together the future Fellows of a Profession to combine their expertise. Experience has shown that a Group of around twelve organisations means that 7 or 8 take part in each meeting, applying a rigorous overview of progress and generating comprehensive actions for the next.

Most importantly, the Steering Group drives the PLMIG, which means that the PLM industry controls the Profession. If the Steering Group reaches this size then the Initiative succeeds.

Its drawback is that the Steering Group is self-funding, which entails a membership fee; and requires 1 day of interaction every 2 months. This creates a 'quorum inertia' that is still to be overcome.

Its benefits, however, go beyond the mere scope of professionalism. The Steering Group is the only neutral collective voice for the improvement of PLM. When experienced and fervent practitioners meet and debate, they express their views on everything. The SG therefore has the potential to become the international 'Voice of PLM' that has been needed for a long time.

Working Group

One route that has been followed by other disciplines is a 'group of volunteers' working together to define and set up a profession. This is the method that has been used in project management, for example, though it is worth noting that there may be around 16 million project managers in the world, whereas there are only about 100,000 PLM practitioners. This means that PLM may not have enough people with free time in order to do this.

However, there are some. The Professional PLM Initiative has had a Working Group ever since the Berlin workshop in 2018, where the delegates asked for a way in which they could continue to contribute. This group worked together through the pandemic to produce the first draft Neutral PLM Syllabus, which is a clear deliverable.

If a Working Group is to go the rest of the way in 2023-24 it will need a fairly large number of highly-motivated individuals working in supportive organisations.

Its likely Mission would be:-

"To support the Professional PLM Initiative by developing the working material for the new Profession."

It will need self-leadership, because in this scenario the Working Group would take over from the PLMIG and would have to decide on its own action plan as well as developing the required new material.

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Body of Knowledge

The development and value of a new PLM Body of Knowledge is shown on Page 10. This is not necessarily new knowledge – it is simply the collation and structuring of all of the existing knowledge that is required for the Professional Body to set its accreditation and certification standards.

However, once it exists it can be learned from by new practitioners; adopted by users; cross-referenced by vendors and advisors; and used universally as a definition of best practice.

This is likely to be commercially valuable, and even the quest for the Body of Knowledge will align ideas and improve general PLM thinking. It would therefore be possible to develop the BOK as an aim in its own right, which would provide the impetus and the funding to complete the rest of the Initiative.

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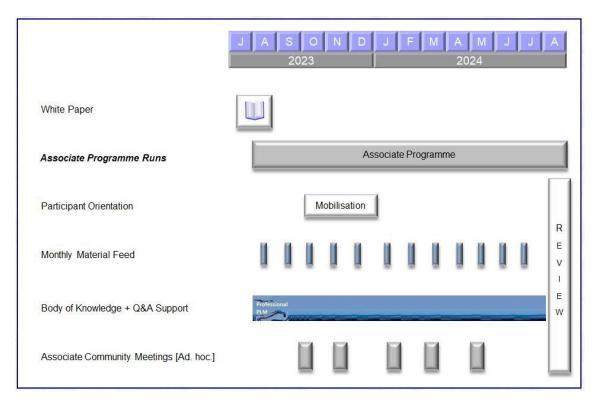
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Associate Programme

If the Steering Group route is the 'top-down' funded option, then the Associate Programme is the 'bottom-up' approach.

Eventually, if a Profession is formed, then individual practitioners would pay a fee to join and be qualified. That point is a couple of years away, and practitioners in all types of role would benefit from using that material now.

The Associate Programme makes that possible.



The Programme is designed to provide structured leverage and use of the new Professional material; and enables practitioners from any part of the world, and at any level of experience, to access the same central pool of advanced PLM thought.

Mobilisation commences with a 'Starter Pack' of career-positioning guidance. Participants receive a monthly material feed, oriented towards future qualification. Associates can cross-reference what they are doing and learning against the neutral PLM Body of Knowledge, gaining from it and contributing to it as they do so. There is Q&A support from the PLMIG, and Associates can meet with each other on-line to share ideas and working techniques.

The participant's organisation benefits from the enhanced skills applied to ongoing projects; can provide more effective training and career support; and can incorporate learnings and best practice from other participating. This is in some ways the most important aspect, because it is the organisation that is likely to pay the subscription.

International Panel

There are a number of 'luminaries' or recognised experts in PLM whose opinions would be respected throughout the industry. It is therefore possible that an International Panel of such experts could be formed that would provide high-level direction and detailed oversight of establishing a Profession.

This path was discussed at the various workshops in 2018, and the general conclusion was that such a Panel would not have the drive and tenacity to see the project through – but the option still exists.

Training Courses

During the Forum discussions it was pointed out that new and specific profession-oriented training and education will be needed to support the practitioners in their careers and in their adoption of knowledge. (See Page 16.)

As training courses are routinely paid for, and as there is a demand for early and effective PLM education, this could be a funding option going forward.

Industry Activists

There are many small firms of consultancies, integrators and other specialists in PLM who are too small to make an impact by themselves but who are always among the first to contribute comments and ideas as the Initiative develops. Many have been involved in the process so far.

It would be useful to find a method by which these proactive thinkers could combine their efforts in a constructive and effective way as part of the project.

Someone Else Does It

The *Professional PLM Initiative* does not have a monopoly on professionalism, and in theory it is possible that some other actors come forward and generate a PLM Profession.

In practice, this is not going to happen. If this Initiative fails then no-one else will take up the reins, and PLM will remain forever in its current state.

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Industry Forum Discussion Points

End Goal

The end goal of the Initiative can be expressed concisely in the form of two objectives:-

- To achieve the embodiment of PLM so that it can be certified; and,
- To establish a Body that will enact this over the next 20 years.

Career Plan

The benefits of a Profession on the careers of PLM practitioners were mentioned several times in the White Paper, and were picked up again in the Planning Forum.

At present there no career plan, and career development has been trial & error for many years. Development of an individual's career through the various possible roles takes time, and there is a need for an accelerated learning curve; as well as guidance to avoid issues and errors.

Career development through a structured Profession would cover the whole scope and multiyear timeframe of real-life work. New people starting from scratch get straight up to speed, and more experienced colleagues get continued guidance and a view of the big picture.

In some ways PLM can be seen as a progress parameter for a company, and an opportunity for an individual to progress in their career, but on the other hand...

Career Risks

... "if you succeed, great: if you fail, you're fired."

In many ways, PLM is business change management, and companies may stop projects depending on whether they are seen to fail or underperform. This can be a real risk for a PLM Manager, and some people may avoid the role to avoid possible career damage.

This is particularly true in large PLM programmes. The PLM Manager's job is on the line, and it can be a tough place to be. A solid PLM training framework would, reinforced by genuine best-practice points of reference on how to succeed, would be a valuable means of support for practitioners.

Education and Training

In the Forum, and in the background discussions that preceded it, the long overhead and paucity of training material that is available for PLM were mentioned several times.

It should not take a 12-18 month period of trial and error to on-board new people and make them fully productive. Once up to speed, they should have a clear 10-year view of how they can progress to the top of their game, and confidence that these goals can be achieved.

It is a feature of PLM that its fundamentals are not industry-specific, so people from different backgrounds and industries will be able to follow the same education path. This should also mean that they can change industry without losing time on their PLM development, opening up new possibilities for progression.

Body of Knowledge

Many body-of-knowledge projects have been run over the past 10 years or so, usually under the banner of 'One Platform' or 'One Company'. They are unlikely to provide a template for PLM because of PLM's unusual characteristics as a subject and a discipline, so this will be an entirely new activity.

The content obviously needs to be managed and written, and must be built to be shared and be valuable. It is possible that the Associate Programme could be the platform for this, or it could be a stand-alone development.

Such a huge amount of data could be presented in many different ways, and may need to be structured for different roles and grades. It will also need to cover the 'active' elements of PLM such as process optimisation and change management, and might include 'tips & tricks'. If it is accessible and useable the BOK would help implementation managers get onside and show them how to keep their implementation going and growing.

Time Compression

One of the most significant conclusions of the Industry Planning Forum was that people are looking for solutions they can apply now - whereas the declared aims of the Initiative are focused on how things should be in the future. The goal of establishing a Professional Body is where we are going, but the process of what we do now is, in many ways, more important.

The Professional PLM Initiative can produce a foreshortening effect on the many benefits of PLM that it will generate, and these should be emphasised now.

This means concentrating on the immediate activity of the Initiative to generate rapid and useful deliverables, and this theme has been carried forward in the Planning Options and Next Steps.

Role of the 'Big 4'

One other item of discussion was the role of the 'Big 4' vendors in this move toward professionalism. No conclusions could be drawn because none were present, but the question was raised as to what might persuade them to sign up and take part.

There was a suggestion that vendors may be moving away from solutions back to software positions - but there would be obvious benefits to their participation, both to the vendors and to PLM as a whole. They would contribute and advise on the Body of Knowledge; as well as to the certification criteria that would apply to their staff. Worldwide accreditation of PLM expertise would generate customer confidence and speed up mobilisation; and the deeper understanding of PLM by users would improve implementation success.

Way back in 2006 the primary vendors (at the time) did become Founder Members of a PLMIG project to establish a PLM Benefits Reference Model, and perhaps a similar approach might work with Professional PLM.

.../over

Professional PLM Initiative Planning Options

Planning Options

To summarise the various discussion points: added value is needed now, and the 'People' aspect of the 'People/Process/Technology' mantra is where it should happen.

Everyone neglects People, until they are reminded of it, and (apart from the BOK perhaps) the People aspects are where the benefits of professionalism overwhelmingly lie.

The high-level aims of the Initiative are written in the White Paper for all to refer to, so the emphasis should turn to short-term project actions.

These could be gathered under a heading such as: "Driving PLM Value - The People Option" or perhaps: "How to Drive Value out of PLM"; but in either case, actions that produce useful parts of the jigsaw at the earliest opportunity.

Next Steps

This Summary Document is intended to act as a reference point for this Industry Planning Forum for as long as its findings remain relevant.

It should be read in conjunction with the Industry White Paper, and copies of both are downloadable via the Professional PLM Initiative web site at www.professionalplm.org.

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