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Program Management Diversity – Opportunity or Problem?

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ABSTRACT

There are many diverse understandings of the nature of programs, major projects, complex projects etc in the literature. Some of the most prominent of these are discussed, and a potentially controversial choice to use the descriptor ‘programs’ to include very large and/or complex projects is adopted in this paper.

Literature on program management is both diverse, and widely dispersed over a great variety of publications. It is noted that there appears to be a dearth of materials which aggregate and/or summarise program processes and/or practices relating to individual application areas. I know of only one (UMT 2007) and would certainly like to know about any others that exist, particularly those in the public domain.

Program management application areas are very diverse indeed. Using P2M 2008 as a basis, I develop a list of 14 representative types of programs, with some 40 case examples, primarily to illustrate the great diversity of program management application areas. What opportunities/problems emerge for these diversities of understanding, literature contributions, and application areas?

With regard to potential opportunities, whilst there is no doubt about the merits of focusing on specific application areas to continuously improve the performance therein, there would appear to be substantial additional potential benefits to many, if not most practitioners and researchers/writers, if best program management practices in different application areas could be aggregated/summarised, published, and then regularly updated. Three types of benefit could follow.

- Practitioners within particular application areas would benefit from the documented experience of others working in those particular areas.
- Practitioners could also stand to benefit from documented experiences in areas other than their own.
- Additionally, the literature would stand to be enriched by increased cross-referencing between different application area literatures.

On the other hand, there appear to be some practical problems to be overcome if these opportunities are to be realized. These would include

- Many documented experiences are held in-company, and there is an obvious reluctance to have them published for competitive reasons. How can this be overcome?
- Researches are universally encouraged, and usually required, to go “narrow and deep” into their chosen domains. In these circumstances an integrative effort (“broad and shallow”) is unlikely to be encouraged.
- Further, the current diverse understandings of what program management is about means that integrative research work does not readily qualify as a productive research topic.

Finally, this short article poses two questions. First, does the above make sense to those who know these diverse program management fields much better than I ever could. Second, if it doesn't, what are more potentially fruitful alternative approaches to advancing the state of the art?

INTRODUCTION

My interest in program management was initiated a few years ago through becoming involved in helping improve English translations of the program management section of Japan's P2M 2004, *Project and Program Management Guidebook*. Having gained a reasonable understanding of the Japanese approach to program management, I asked the question, “How does the Japanese approach differ from the Western approach?”

There appeared to be no ready answer to this question, as evidently no-one had yet published a detailed review/overview of the Western program management literature. So, I have been journeying into this literature myself in recent times, mainly out of personal interest/curiosity. After a little while, it became evident that I may have been touching only a few different parts of a very large program management beast, which brought to mind the analogy of the blind man and the elephant. At this stage of my journey I still have only an incomplete idea of what form the overall program management ‘elephant’ might take.

Further, I found what appeared to be a state of denial in some specific program application areas, namely that any other perspective on the nature of program management was not relevant to them. I see this as a second kind of elephant metaphor – i.e. that the elephant is evidently invisible to those in the room who do not wish to see it.

Perhaps I am pushing these two elephant analogies a bit hard. But it does seem to be the case that the size of the program management beast is huge, that there are very many diverse perceptions of the nature of the beast, and that no-one yet appears to have attempted to describe the nature of program management in its broadest contexts (if indeed this is possible).

The modest aim of this short article is to discuss many of the diversities of program management as they appear from the literature, to discuss apparent opportunities to benefit from these diversities, and to invite alternative proposals which may have better potential to benefit all involved in this field.

THERE ARE DIVERSE UNDERSTANDINGS OF PROGRAMS, MAJOR PROJECTS, ETC

The nature of programs and program management

When individuals involved in projects and programmes meet, they each spend time trying to understand what the other means by programme management. (Pellegrinelli 2008:3)

It is perhaps unfortunate that ‘program’ is a common-usage word, with many different meanings. It is also used in different ways in the more technical literature which tends to relate programs with projects, directly or indirectly.

The most dominant common element in the understanding of the nature of a program in the very diverse technical literature is that it is a group of related projects, which require coordinated management to achieve business (or equivalent) benefits.

Similarly, the most common understanding of the nature of program management in this literature is that it is a coherent set of management processes and practices, as opposed to the more common-usage sense of programs being merely ‘initiatives’ or ‘endeavours’.

Historical use of the descriptors programs and projects

Historically, the terminologies ‘program’ and ‘project’ appear to have been used interchangeably from the 1960s in many developments of management techniques, particularly in the US Department of Defense and NASA (for example ‘earned value’) which came to be generally associated with project management. I am not aware of any definitive distinction having been made between the usage of ‘program’ and ‘project’ in these contexts at the time, or indeed later. My impression was that very large projects were often described as programs, but that this was not always the case. Was a definitive distinction between ‘programs’ and ‘projects’ in these contexts ever made?

Moves to distinguish between projects and very large projects

Evidently many people saw a need/opportunity to focus on very large projects as distinctive entities. As Morris 1994:193-4 notes, a Major Projects Association was formed in the UK in 1981, The American Society for Macro-Engineering in the USA in 1982, and similar macro-engineering societies in Canada, Japan and Spain around the same time. However, there are few indications that these very large projects were commonly described as programs. Did this ever happen?

More recent identification of programs with very large projects

As we will see in a moment, not all writers identify programs with large projects. However, we first quote from Teoh 2007, who says

Cooper Lee views mega projects as programs, “because there are multiple streams within a mega project and each stream is a project in itself with a team behind it”.

This identification of programs with very large projects is also shared by many others, as is indicated in the first part of the following quotation by Maylor et al 2006

.....programme management is viewed by some as ‘the management of multiple projects’, whilst by others as ‘the management of organisational change through projects that bring about change’.

Identification of programs with organisational change efforts in the project mgt. literature

As indicated in the latter part of the above quotation, some writers equate programs with organisational change efforts. This has been particularly so (since the early 1990s) with discussions on programs in the mainstream project management literature, where up to three-quarters of the materials are concerned with organisational change programs. It is not known why this particular perception of the nature of programs should have become so dominant in this particular literature.

Recent moves to distinguish complex projects from others

There have been recent moves to isolate complex projects from the mainstream, as is evidenced by the formation of an International Centre for Complex Project Management (ICCPM) in 2008, and a Complex Program Institute in Australia. It is a bit too early to know how this will relate with other projects and/or programs.

In the following discussions it is proposed to use the terminology ‘programs’ to include very large and/or complex projects.

This is essentially a simplification of terminology, which should not affect the following.

LITERATURE ON PROGRAM MANAGEMENT IS DIVERSE AND WIDELY DISPERSED

Contributions on program management appear in many different places in many different literatures. So far, I have found papers/articles in publications representing 24 such different disciplines and specific interest areas, and I suspect there may be many more.

- There are many contributions on program management in the project management literature;
- Very many contributions are associated with specific application areas, and appear in a large number of relevant publications – e.g. the US Department of Defense’s *Program Manager*, the *Acquisition Review Quarterly* and *Aviation Week & Space Technology*;
- Some papers/articles on program management find their way into the publications of other professional disciplines such as transactions of *AACE* and *IEEE*, and into various application areas within such disciplines;
- Others find their way into journals of allied disciplines and avocations such as engineering management, product innovation management, facilities management, R&D management, etc.;
- Yet others appear in publications over such widely different areas as public administration, bank systems, business finance, computer-related technologies, information technology, underwriting, automotive design and production, etc.

By and large these varying publications appear to regard program management as a coherent set of management processes and practices, rather than in the more common usage sense of being merely ‘initiatives’ or ‘endeavours’, although it must be said that some are not all that clear on this point.

Additionally, it is noted that many individual sets of management processes and practices in various application areas have been developed in-company, and have been retained there-in, so that they are not more generally accessible.

Finally, it is noted that there appears to be a dearth of materials which aggregate and/or summarise program processes and/or practices relating to individual application areas. I am aware of the University of Management and Technology’s “Management of Major Programs” (UMT 2007), which broadly covers US Federal Government procurement programs. However, the relevant course notes are copyrighted. I expect there may be other aggregations/summaries

of processes relating to other program application areas which I have not yet come across, which I would certainly like to know about.

PROGRAM MANAGEMENT APPLICATION AREAS ARE VERY DIVERSE INDEED

As with the program management literature, there is a very substantial dispersion in application areas in which program management is practised. So far, the most comprehensive program application areas classification I have come across is Japan's P2M 2008:56, which identifies 48 different program 'case examples' under 12 broad types of application areas.

I have rearranged, sometimes reworded, and slightly modified and augmented P2M's listings to identify the following 14 basic types of programs. This list does not claim to be comprehensive, but is thought to be reasonably representative, to illustrate the huge diversity of program application areas.

Representative types of programs and case examples

1. National security & defence facility programs

2. Aerospace development/implementation programs

3. Large-scale R&D programs

Research on nuclear fusion, human genome, etc

4. Environmental research/preservation programs

5. Resources exploration/development/operation programs

Oil exploration, drilling, transporting, refining

Petrochemical, chemical refining

Natural gas exploration, development, processing

Minerals exploration, mine development/operation/refining

Pipeline construction

6. Production plants/facilities provision/operation programs

Petrochemical, chemical plants/facilities

Metal refining/processing plants/facilities

Various other production/processing plants/facilities

Atomic/thermal power plant construction/delivery

7. International social/economic development programs

Developing institutions in developing countries

Enhancing organisations in developing countries

Fostering HR development in developing countries
Official Development Aid (ODA) planning & mgt.

8. Social infrastructure provision programs

Public and social services facilities
Traffic and transportation systems
Urban area development
Regional development

9. Social lifeline/community welfare programs

Major educational systems/reform programs
Major health-related systems/reform programs
Major water systems management/reform programs

10. Events/entertainment programs

Major sporting events (e.g. Olympic Games, international/national sports events/festivals)
Major international/national expositions/exhibitions
Major entertainment programs (e.g. movies, TV dramas, stage plays, musical concerts series, etc)

11. Organisational change programs

Modify/improve existing systems or processes:
Implement new systems or processes:
Bring in place new business structures
Develop/implement strategic corporate alliance
Develop/implement mergers and acquisitions
Reorganise/privatise government ministries

12. IT, information & telecommunications programs

IT financial control systems development/integration
IT production control systems development/integration
Information and telecommunications systems

13. Product development/manufacturing programs

Development of new industrial products
Development of pharmaceuticals
Development of other types of products/services
Production systems innovations

14. New business development/commercialisation programs

Commercialisation of new business model
Developing marketing/services (including networking)

SO WHAT OPPORTUNITIES/PROBLEMS COULD EMERGE FROM THESE DIVERSITIES OF UNDERSTANDING, LITERATURE, AND APPLICATION AREAS OF PROGRAMS?

On the opportunity side, a main point from the above is that there would appear to be substantial potential benefits to many, if not most practitioners and researchers/writers, if best program management practices in different application areas could be aggregated/summarised, published, and then regularly updated.

Three types of benefits could then follow.

- Practitioners within particular application areas would benefit from the documented experience of others working in those particular areas.
- Practitioners could also stand to benefit from documented experiences in areas other than their own – although this is easier said than done. People like me who have spent well over a half-century in this environment have long since become sick of hearing the perpetual refrain, “But we are different”. The apparent unwillingness to even contemplate the possibility of learning from others operating in different (or even parallel) domains appears to me to be endemic to this avocation, and very hard to shift, although efforts to do so will become increasingly relevant, if not critical. But first we need to have these experiences documented before this problem can again be seriously addressed.
- The literature would then stand to be enriched by increased cross-referencing between different application area literatures – which brings us to researchers in program management. I first have to ask the question, “Are there researchers who have worked in the past, and/or are currently working, on trying to integrate, or find common links between, these very diverse situations with program management?” If there are such researchers, I have yet to meet them. But I would dearly love to do so, particularly in view of the fact that I am entering the second quarter of my eighth decade, which places an unknown but obvious limitation on any future personal contributions.

On the other hand, there appear to be some real problems to be overcome if these opportunities are to be realized. These would include

- Many documented experiences are held in-company, and there is an obvious reluctance to have them published for competitive reasons. How can this be overcome? My own (substantial) experience in this domain suggests that competitors who try to graft external materials into their own processes commonly experience substantial difficulties, and that such procedural acquisition is generally not a good option. But I have little evidence that this problem is widely recognized.

- Researchers are universally encouraged, and usually required, to go “narrow and deep” into their chosen domains. What is needed here is an integrative effort (“broad and shallow”) to summarise and consolidate the best practices over many different application areas. However, the problem is that this is unlikely to happen in the current “narrow and deep” research environment.
- This situation is not helped by the current diverse understandings of what program management is about, which means that it is even more unlikely that any integrative research work in program management would be seen as an attractive proposition.

CONCLUDING

This short article ultimately poses two further questions.

1. First, does the above make sense to those who know these diverse program management fields much better than I ever could?
2. Second, if it doesn't, what are more potentially fruitful approaches to advancing the state of the art in what we currently call program management?

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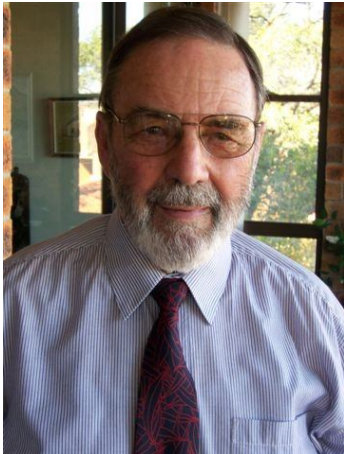
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