

Is “program” an appropriate universal descriptor in the project-related context?

By Alan Stretton

BACKGROUND

I developed an increasing interest in program management (I will use this shorter spelling except when quoting authors who don't) when I became 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 then asked the question, “How does the Japanese approach differ from the Western approach?”

I wasn't able to find a Western approach to which all would subscribe. I wrote a few articles on the subject, starting with Stretton 2009b, and ending with Stretton 2013n, after which I simply gave up trying to reconcile the many different approaches to, and understandings of, programs and their management. It also appeared to me that less focus was being directed to program management in more recent times, and that the descriptors ‘projects’ and ‘programs’ were increasingly being used interchangeably, particularly in the context of large complex programs/projects.

However, the recent appearance of the second edition of the *Gower Handbook of Programme Management* (Lock & Reinhard 2016) has rekindled my interest in the subject of programs and their management. This is the background to this article.

INTRODUCTION

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)

This quotation typifies the ongoing lack of agreement in the project management world about the nature of programs and their management. In a non-exhaustive literature search a few years ago, I found no less than thirty-six different definitions of programs and program management, as detailed in Stretton 2012c.

Revisiting these topics, there appear to be two rather different basic ways in which programs and their management are defined and/or discussed in the literature.

1. Programs comprise component projects requiring coordinated management to achieve a common objective.
2. Programs are seen as synonymous with large complex projects.

We will discuss each of these in turn.

1. PROGRAMS COMPRISE COMPONENT PROJECTS REQUIRING COORDINATED MANAGEMENT TO ACHIEVE A COMMON OBJECTIVE

From definitions/descriptors of programs and program management

As noted above, a few years ago I found some thirty-six different definitions/descriptors of programs and program management. I will not reproduce them here, but will start with four definitions from some of the best known project and program management standards.

[Program] A group of projects, subprograms and program activities, managed in a coordinated way to obtain benefits not available from managing them individually.
(PMI 2013b:2)

Programme management is the coordinated management of projects and change management activities to achieve beneficial change.
(APM 2012:14)

[Programme]...a temporary flexible organization created to coordinate, direct and oversee the implementation of a set of related projects and activities in order to deliver outcomes and benefits related to the organization’s strategic objectives: a programme is likely to have a life that lasts several years.
(OGC2011) [Turner 2016:32]

A program is defined as an undertaking in which a group of projects for achieving a program mission are organically combined
(PMAJ 2008:57)

All 36 definitions include component projects. A few add other entities. As can be seen, PMI has added subprograms and program activities to its group of projects. (Its 2006 definition had only the latter). APM has included change management activities. Five other definitions include other non-project activities. However, it should be noted that more detailed discussions in these cases are generally confined to component projects, with little further mention of non-project activities.

In the thirty six definitions, some of the component projects are varyingly described as related (6), interdependent or interconnected (6), and (purposely) grouped (7). In some other cases, connections between the component projects are not mentioned. Coordination of component projects (or its equivalent) is specifically included in two thirds of the definitions. It also appears to be implied in most of the others.

One further attribute which is either directly stated or implied in most definitions is that the component projects share the attribute that they are specifically contributing to an overall shared program objective – which is varyingly described as a benefit to the organisation (20), or as the organisation’s objectives or equivalent (11).

Although the many definitions of programs and their management differ in various ways, most of them share the attribute that programs have component projects which require coordinated management to achieve a common organisational objective and/or benefit.

We now turn to a second perspective on programs.

2. PROGRAMS SEEN AS SYNONYMOUS WITH LARGE COMPLEX PROJECTS

From discussions of programs and their management in the literature

As noted by Wagner & Lock 2016:5, historically, the terminologies ‘program’ and ‘project’ appear to have been used interchangeably for quite some time from the 1950s in the US aerospace and defence sectors, as project management approaches were being developed there-in. Indeed, this still may well be the case in some major application areas.

For example, in the second edition of the *Gower Handbook of Programme Management*, its *Part II: Good Practice in Programme Management*, has chapters on program management in the Space sector (Drogaul), the Aircraft industry (Henly), the Automotive industry (Altfeld), and the Pharmaceutical sector (Hughes & Boyce). Essentially, these chapters are concerned with managing very large and complex programs in their sectors, but they do not specifically discuss their component projects, nor their management. (However, it is also true that authors in some other sectors place considerable emphasis on coordinated management of component projects – see next section below).

Similarly, in *Part IV: Programme Lifecycles, Processes, Methods and Tools*, about half of the fourteen chapters do not have anything significant to say about managing component projects. To a greater or lesser extent, their primary concern is with scale and complexity.

These particular perspectives certainly see programs as being synonymous with large complex projects. As Parth 2016 observes,

For terminology, current practice uses the word project to cover both projects and programs (in German the word project is used for both) with the specific meaning provided by context.

The above two perspectives are combined by some authors

As just noted, there are also many authors in the *Gower Handbook* who do discuss component projects and their coordinated management in varying degrees of detail. These include the Aviation industry (Dietrich), Construction and engineering (Reyes), Mining (Bekker), Humanitarian and development projects (Vargas et al), The [Scottish] Police (Stewart), [London] Transport sector (Ganney & Banerjee), The ICT Sector (Gortz & Schonert) [German armed forces], and Change programmes (Mack).

However, all these sections are also concerned with programs which are very large and complex. This might give the impression that all programs are large and complex, but of course this is not necessarily so. A program may not be particularly large, nor complex.

A program is not necessarily large or complex

For some seven years I was program manager for an internal management education program in Lend Lease Corporation, which at the time had ten main subsidiary companies. Each of these had a project manager who was responsible for the delivery of the program in his company. I simply coordinated the various project managers, mainly in quality contexts. Under most definitions this initiative would certainly qualify as a program – but this program was neither large, nor complex.

Further, of course, complexity is not confined to programs. An individual stand-alone project may be quite complex in its own right.

Large projects are not necessarily programs

Certain types of large projects do not naturally lend themselves to division into component projects. Very large dams could be an example. They might be seen as a series of projects, such as diversion works, foundation preparation, curtain and blanket grouting, placing of concrete and/or earth-fill, etc. However, the coordination required between such projects is normally relatively trivial, and I doubt that many would class dams as programs. And the most visible activity – i.e. actual placing of concrete or earth-fill on large dams – is essentially a production-line-type challenge.

There are certainly other types of standalone projects which do not lend themselves to being classed as programs, simply because their constituent elements interact in a way that is not amenable to their being subdivided into component projects.

Summarising the above

Whilst programs are not necessarily large and/or complex, the focus in the *Gower Handbook* is most certainly on large complex programs/projects. There is no doubt that effective management of these types of programs is difficult, and fully deserving of the increasing amount of attention it appears to be attracting in the literature. I propose discussing one aspect of the coverage of the management of large complex programs/projects in the literature in a following article.

In the meantime, I want to briefly discuss an attribute which is unique to programs.

A UNIQUE PROGRAM ATTRIBUTE

I return to the theme of the first section of this article, which is the understanding of programs as comprising component projects requiring coordinated management to achieve a common objective and/or benefit.

This attribute is unique to programs. It distinguishes them from standalone projects, and also from portfolios of projects, which are not normally directly concerned with the more immediate achievement of common objectives of component projects.

Yet this attribute is ignored in most sections of the relevant literature. For example, in a very substantial bibliometric study of 517 program articles and 1164 project articles published in the 21 years up to 2007, under the heading *Neglect of inter-project coordination*, Artto et al 2009 say,

We have noticed that *inter-project coordination* does not appear as a separate issue in the program and project articles.

However, inter-project coordination was being increasingly discussed in project management journals. Around that time, one of the more substantial empirical analyses of mechanisms for such coordination in the program context was made by Dietrich 2006. Danilovic & Sandkill 2005 developed a dependence structure matrix and domain mapping matrix approach for the systematic identification of interdependencies and relations in the multi-project environment of the development of complex products. There were many others who included this topic, albeit a little less definitively, in writing about program management – e.g. Engwall & Jerbrant 2003, Lycett et al 2004, Maylor et al 2006.

Yet, in spite of these, and many other later contributions, more recent editions of the two main standards for program management, namely PMI 2013b and OGC 2011, continue to give scant attention to inter-project coordination. This is particularly surprising in light of the fact that both of these standards include the latter very specifically in their definitions of programs, as recorded in Section 1 above.

And, as we have already noted, even more recently, some of the industry-specific chapters in the *Gower Handbook of Programme Management* (2nd ed., 2016) do not discuss inter-project coordination. Their programs are essentially treated more in the manner of being just very large projects.

However, as was also noted, several of the chapters in the *Gower Handbook* do discuss this issue, some quite intensively. I believe that these, and other industry specific contributions from other sources, are to be particularly welcomed, as they move us towards overcoming another situation identified by Artto et al 2009, namely that

The program and project literatures do not address industry approaches, nor do they include industry-specific knowledge bases that would address program management in certain industry environments.

Returning to the topic of inter-project coordination, it is, of course, true there is more to program management than managing such coordination (which I have sometimes termed ‘internal integration’). There is also the responsibility to manage the integration of the product(s) of the program into its environment, which I have termed ‘external integration’.

However, as I have said over and over again (e.g. Stretton 2012e, 2012h), standalone projects also have exactly the same responsibility regarding external integration. This responsibility is not just confined to program management. The relevant point I want to make here is that it is very important indeed that people who write about the latter make a clear distinction between a program’s component projects on the one hand, and standalone projects on the other. At the present time this happens all too seldom.

Summarising the main point of this section, I would like to see much more guidance in the literature on how to go about coordinating the management of the component projects of programs.

SUMMARY

This article is entitled *Is “program” an appropriate universal descriptor in the project context?* From the above, the short answer appears to be probably not. However this descriptor is widely used, in spite of its meaning different things to different people. So, for the time being, we appear to be stuck with it, appropriate or not.

However, serious study and analysis of programs and program management in the literature does not have a long history – perhaps fifteen to twenty years. By comparison with project management it is relatively immature. So, hopefully future work in the domain of programs and their management may help clarify relevant terminologies and descriptors.

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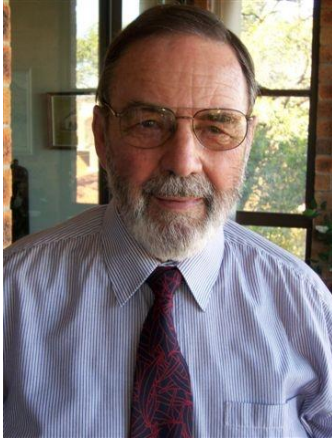
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