

***Series on increasing project management contributions
to helping achieve broader ends¹***

Article 4 of 4

Scoping the project management discipline

By Alan Stretton

BACKGROUND

In the project management world, all too often the project is viewed as an end in itself. The focus is usually on delivering planned project outputs. However, this viewpoint loses sight of the bigger picture. It is virtually always the case that projects are really only part of a means to help achieve broader ends. If we focus more on the latter, opportunities can emerge to increase the contributions project managers can make towards the achievement of such ends. I believe it is important for the project management industry to understand and embrace this broader context, because it provides a platform for project managers to add more value to customers.

This series has looked at how project management can add value through three mechanisms.

- Helping convert project outputs to actual realisation of customers' planned business (or equivalent) outcomes;
- Helping customers determine their business needs, plan for appropriate outcomes, and establish requirements of projects to help realise these outcomes;
- Helping organizations determine their strategic objectives, plan for achieving them, and develop an appropriate portfolio of projects to help such achievement.

The first three articles of the series (Stretton 2016b,c,d) addressed these three bullet points. This final article is essentially an amalgamation of these articles, and scopes the project management discipline into wider contexts than are usually presented.

INTRODUCTION

This article develops a series of models of the potential, and in some cases actual, scope of the project management discipline. We start with a narrow execution-only model for individual projects. We then expand this model to include the realisation of outcomes to which project outputs contribute, and project management involvement therein, which was discussed in more detail in the first article of this series.

¹ Editor's note: This series of articles on increasing project management contributions to helping achieve broader outcomes is by Alan Stretton, PhD (Hon), Life Fellow of AIPM (Australia), a pioneer in the field of professional project management and one of the most widely recognized voices in the practice of program and project management. Long retired, Alan is still accepting some of the most challenging research and writing assignments; he is a frequent contributor to the *PM World Journal*. See his author profile at end of this article.

These business (or equivalent) outcomes then form bases for developing more progressively inclusive models of how project management could, and in many cases actually does, get involved in activities which precede the execution of individual projects.

These activities involve capturing the business needs of the project's key customers; planning to convert these needs to outcomes; and establishing the technical requirements of projects to help achieve these – as discussed in some detail in the second article of this series.

The third article then moved on to the broader context of organisational strategic planning, which was presented in three segments, namely establishing its strategic objectives; developing strategic options to achieve them, and choosing the best; and developing strategic portfolios of projects to help accomplish this.

This fourth article will discuss relationships of the latter organisational strategic group with the components of the individual project components. Finally, we add organisational outcomes realisation, and then consolidate a model illustrating the full extent of the scope of project management involvement already discussed.

But first, we distinguish between two different types of organisations.

TWO DIFFERENT TYPES OF ORGANIZATIONS THAT UNDERTAKE PROJECTS

There are two quite different types of organizations that plan and execute projects. I follow Cooke-Davies 2002 in describing them as project-based and production-based organizations, and borrow from Archibald et al 2012 (who use different descriptors) in defining them:

- **Project-based organizations** derive most (if not all) of their revenue and/or other benefits from creating and delivering projects.
- **Production-based organizations** derive most (if not all) of their revenue and/or benefits from producing and selling products and services. They utilize projects to create or improve new products and services, enter new markets, or otherwise improve or change their organizations.

As will be seen, the scope of involvement by project managers in project-based organisations is normally far greater than in production-based organisations.

PROJECT EXECUTION

A basic execution-only model of the scope of project management

Execution-only perceptions of the scope of project management vary a little. However, the most basic model is where the project requirements are done by others, and are accepted by the project manager as the basis for executing the project. The outputs of the project are then handed over to others.

This model is represented in Figure 1.

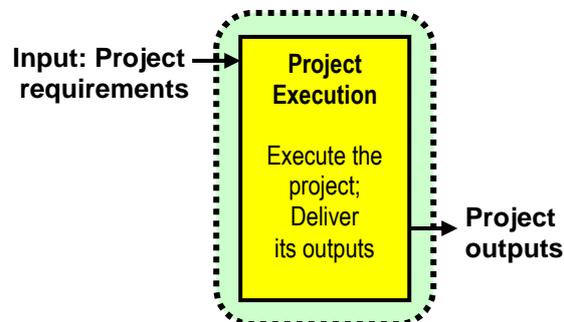


Figure 1: A basic execution-only perspective of the scope of project management

In the past, this model has tended to dominate the project management literature, and it still holds a prominent place. For example, Morris et al 2006 comment that

The PMBOK Guide reflects a strong execution orientation, having hardly any material on strategy and project definition....

Going beyond the literature, and into the world of project management research and practice, Zwikael & Smyrk 2009 say that

...most of project management research and practice is focused on the delivery of project outputs with agreed quality on time and within budget.

The “execution-only” practice with which I am most familiar is traditional construction contracting. My position is that I do not regard construction contracting as project management, because it separates design and construction responsibilities, and thence does not have the single-responsibility attribute which I regard as an integral part of project management. This single-responsibility attribute drives the need for project management to have a stake in, and accountability across, the input and output components of the above model.

Exploring this further, we first look at the output side of Figure 1.

PROJECT OUTPUTS AND CUSTOMERS’ OUTCOMES

Project outputs and their relevance to the realisation of broader outcomes

It is being increasingly emphasised in the project management literature that project outputs are not an end in themselves. They are means (and only partial means at that) to help customers satisfy broader needs – i.e. to help them realise their planned business (or equivalent) objectives or outcomes. This was the subject of the first article in this series (Stretton 2016b), now summarised as follows.

The article first discussed, in some detail, contributions from three author groups (Zwikael & Smyrk 2009, Driver & Seath 2015, and Cooke-Davies 2002) about how

project outputs contribute to the realisation of business (or equivalent) outcomes for clients and key stakeholders (jointly describe as “customers” in this article).

Although they used different terminologies and models, all three followed the same basic pattern, namely that project outputs had to be utilized to produce beneficial outcomes before the *raison d’etre* for the project could be properly justified.

Project management involvement in the realisation of beneficial outcomes

The extent to which project management could or should get involved in the actual realisation of outcomes/benefits appears to vary greatly with context, and the nature of the project management contractual arrangements. Three broad types of situations were discussed:

- Hand-over of project outputs to others, with few possibilities to further help
- Hand-over of project outputs, but with opportunities to further help
- Ongoing contractual obligations to help use project outputs effectively

It was concluded that project managers should do all they can to help customers achieve their business objectives, even in cases where they are not contractually obliged to do so. This is an opportunity area for project management to increase its contribution towards helping customers achieve their broader ends. As a reviewer of an earlier draft of this series commented (Blythman 2016),

This part of the journey may also be viewed as an opportunity for PM to strengthen its own validity – the Handover / Transition / Operationalisation part of the journey is often done poorly.

Adding outcomes realisation to the scope of project management

In the context of project management helping ensure the realisation of project outcomes (actually and/or potentially), we can add the following to the previous execution-only perspective of the scope of project management.

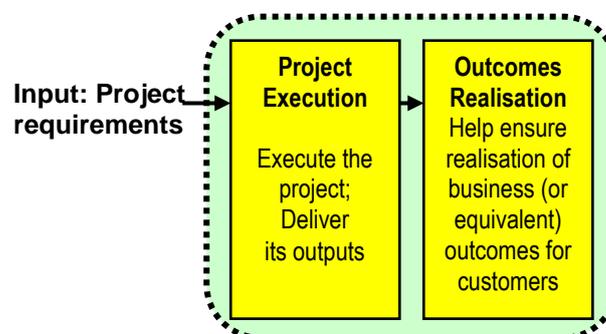


Figure 2: Adding outcomes realisation to the scope of project management

CUSTOMERS' NEEDS AND PROJECT REQUIREMENTS

We now turn to the input side of Figures 1 & 2 – i.e. project requirements.

What inputs are needed to get the project requirements right?

To answer this question, we go back to discussions above on Project Outputs and Customers' Outcomes, where we pointed out that project outputs are most appropriately seen as means to help customers satisfy their broader needs – i.e. to help them realise their planned business (or equivalent) objectives/outcomes.

We therefore need to know what our customers' broader business needs are, before we can have any hope of undertaking any definitions of the requirements for a project (or projects) which would make the greatest contribution to helping satisfy these needs. As Frame 1994:103 expressed it, "Requirements, in turn, are developed from our understanding of needs".

Historically, my organisation of the time, Civil & Civic, had already been offering project management services from the late 1950s by putting design and construction under the one management roof. In the early 1960s we added "needs capture" (which we called Client Needs Determination - CND), to further broaden the scope of the project management services it offered.

"Needs capture" is concerned with capturing the customer's business needs. This, in turn, involves clarifying the nature of the business outcomes the customer wishes to achieve to satisfy these needs.

So, we turn to the subject of the second article of this series (Stretton 2016c), which was entitled "Customers' needs and project requirements", under the sub-headings of "Capturing customers' business (or equivalent) needs", "Planning to convert business needs into business outcomes", and "Establishing requirements of projects to help satisfy needs". These were summarised, under abbreviated headings, as follows.

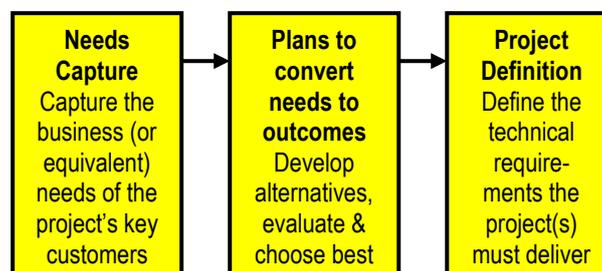


Figure 3: Summarising the three main sections discussed in Stretton 2016c

The article discussed a number of key points in relation to each of these headings, which are summarised as follows.

Needs capture

- Customers' needs are rarely, if ever, for a project per se. Their needs are invariably focused on their broader business needs (or their equivalent in other contexts, such as educational, healthcare, infrastructure, etc.).
- Capturing needs is a process of helping customers think through the nature of their business, and their business needs.
- It is critically important to accurately capture customers' needs. The validity and utility of all current actions depend on it.
- "Needs capture" therefore requires the needs analyst to have particular relevant skills.
- Civil & Civic's experience in "needs capture" indicates that most project managers managed this well. Indeed some became specialist needs analysts in their own right in certain industries.

Plans to convert needs to outcomes

- These planning processes involve developing alternative ways to convert these needs into desired outcomes, evaluating these alternatives, and then choosing the best option.
- The nature and discipline of project management provides people who appear to be best qualified to undertake this kind of planning work.

Project definition – project requirements

- These are processes for establishing the technical requirements of projects which will make the best contribution in helping satisfy customers' needs.
- The terminologies "requirements" and "requirements management" are used in two very different contexts in the literature, which can cause real confusion. It was recommended that these terminologies be applied only in the context of project requirements (rather than using the term to describe what we have called client needs).
- The broader project management literature offers few guidelines on developing project requirements. However, evidently some service industries such as IT, finance and marketing have developed substantial know-how in this domain, and it would be most helpful to have these more widely published and accessed.
- Who else is better placed than project managers to define the technical requirements which the project must deliver, and to do so in formats best suited to facilitate subsequent project execution?

In project-based organisations, project managers typically manage all three stages of needs capture, through plans to convert them, and then project definition.

I have never worked on projects in a production-based organisation, but understand from colleagues who have done so, that a wide variety of people can be involved in requirements gathering – people like business analysts, financial analysts, systems analysts/engineers, and the like.

However, my colleagues also indicate that these processes are not always well coordinated, and would benefit from management by people who are specialist integrators – namely project managers.

I can certainly understand that appointing project managers to be part of the needs capture and planning team might be quite difficult for some people in general management to contemplate. In light of this, I made some suggestions which might facilitate such appointments in Stretton 2015e. However, I have had no feedback on the relevance of these suggestions.

Adding needs capture, plans to convert them to outcomes, and project definition to the scope of project management

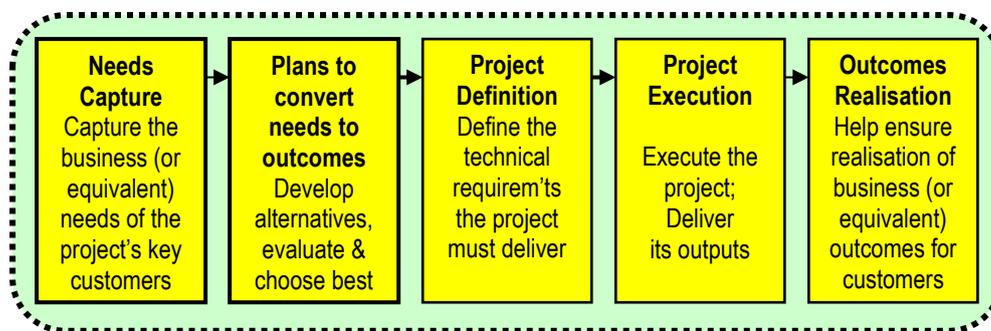


Figure 4: Adding needs capture, plans to convert these to outcomes to the scope of PM

From individual projects to organisational strategic portfolios of projects

To date we have been discussing the scope of project management involvement in the context of individual projects. However, we also need to consider the much broader context of organisational strategic planning and management, and strategic portfolios of projects (and programs).

ORGANISATIONAL STRATEGIC PLANNING & PORTFOLIOS OF PROJECTS

This was the primary topic of the third article in this series (Stretton 2016d). It started with organisational strategic planning processes, which were summarised as follows.

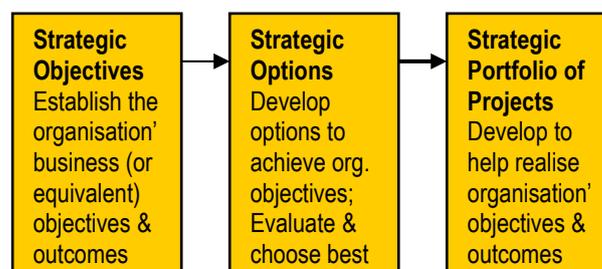


Figure 5: An abbreviated organisational strategic planning sequence

The above steps in organisational strategic planning were summarised as follows.

Organisational strategic objectives

- This first step establishes the organisation's business objectives, and thence the desired organisational outcomes.
- There is substantial evidence that this work is often poorly done, or poorly communicated. Prieto 2015 claims this often happens in large organisations.
- Civil & Civic found this applied also with many smaller organisations, and frequently had to help such organisations define their strategic objectives, before capturing their more immediate business needs.

Developing strategic options

- This step involves developing strategic options for achieving the organisational objectives, evaluating these options, and choosing the best.
- The chosen option eventually manifests itself as a project. This type of planning work is bread-and-butter for project managers, so that there is a very strong case for involving them in this.

Developing a strategic portfolio of projects

- This step involves first selecting projects which make the most effective contribution to realising the desired organisational outcomes; prioritised them to maximise their combined contributions; and allocating key resources to ensure that this can happen.
- There appears to be an unanswerable case for heavily involving project managers in this work

Overall, the case for involving project managers in strategic planning is supported by the notion that you should begin with the end in mind. Since strategic outcomes are delivered largely through projects, then project managers are best placed to provide continuity and integrative management skills from initial objectives setting right through to achievement of these objectives.

We now turn to linking the above processes in Figure 5 which lead to the strategic portfolio of projects with the processes summarised in Figure 4 in relation to customers' needs and project requirements for the individual projects within the portfolio.

FROM STRATEGIC PORTFOLIOS TO INDIVIDUAL PROJECTS

We first vertically align the components of Figure 5 (which I have called the *domain of strategic portfolios of projects*) with those of Figure 4 (the *domain of individual projects*).

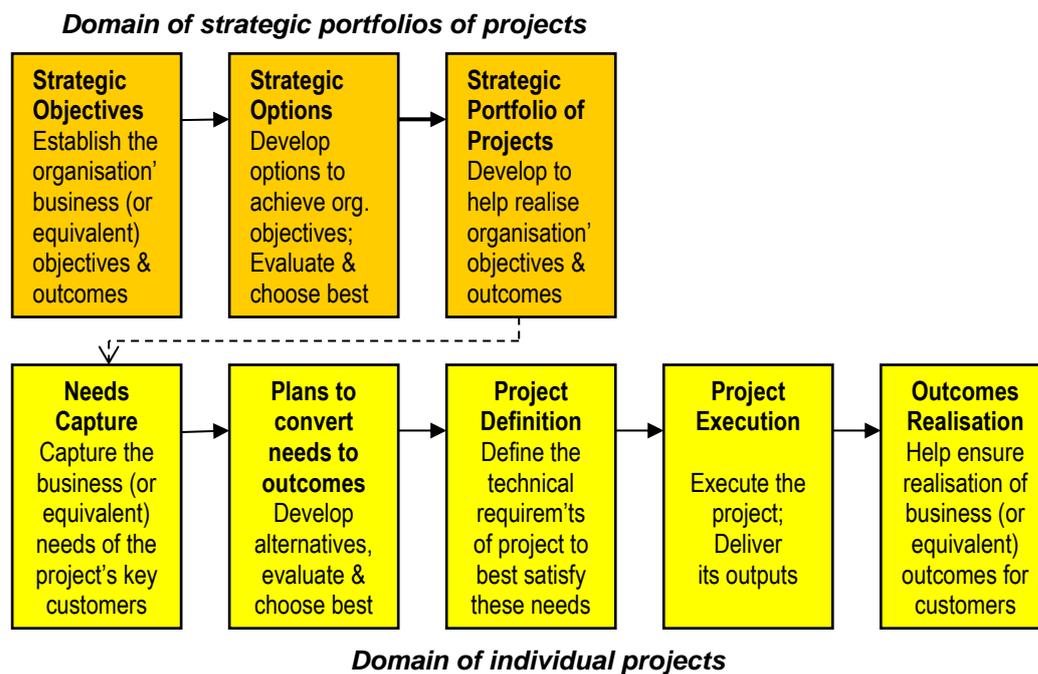


Figure 6: Aligning the components of Figures 4 and 5 above

It can be seen that the first three processes to initiate individual projects are very similar to those which initiate organisational strategic planning.

One way of interpreting this parallel was foreshadowed earlier, when it was noted that Civil & Civic found that Needs Capture on individual projects often involved helping the client clarify his organisation's strategic objectives. Although this was mainly with relatively small operators (and normally with only one project involved), it was a persistent pattern. So, in a sense, one could say that the first three components of the individual project sequence are a special case of the more generalised components associated with larger scale organisational strategic planning.

From a portfolio of projects to individual projects

When Strategic Portfolio of Projects has been developed, it is then time to address the further development of each individual project within the portfolio.

It is tempting to represent this in Figure 6 by an arrow from Strategic Portfolio of Projects directly down to Project Definition of individual projects. However, it is unlikely to be as simple as that in practice. Much depends on how much detailed work has been done in developing the portfolio of projects in the first place.

In the normal course of events one would expect that the latter would be relatively broad-brush, and that more detailed development of each individual project in the portfolio would involve the complete spectrum of activities listed in the domain of individual projects. Hence I have shown a corresponding connection in Figure 6.

Even if quite detailed work has already been done in developing the portfolio of projects, at the very least the responsible manager for each individual project would need to check that the needs capture for that project has been properly undertaken and documented, and that plans to convert these needs into outcomes have also been completed, before undertaking project definition, and then going on to project execution, and then realising the outcomes of the individual projects.

This, then, brings us to a final element, which is the realisation of organisational outcomes at large.

ORGANISATIONAL OUTCOMES REALISATION

Finally, there is the question of project managers helping ensure that the organisation's strategic objectives – i.e. the realisation of business outcomes – have been achieved. There is more to this than merely the sum of the outcomes of component projects of the strategic portfolio. However, as with the latter, the extent to which project management can get involved in the actual realisation of the organisational outcomes/benefits will vary greatly with circumstances.

However, if you are in the business of providing project management services to external clients, as Civil & Civic was, then you have the strongest possible interest in ensuring that all clients get full benefit from their outcomes – not only from the individual projects, but from all the activities associated with realising organisational benefits. Therefore, if needs be, you will need to create opportunities to help the client organisation achieve such benefits, even if you are not contractually bound to do so.

If the project manager has ongoing contractual obligations to help use project outputs effectively – often called “business projects”, then this will happen.

AMALGAMATING THE ABOVE DISCUSSIONS AND MODELS

This article has progressively elaborated the potential, and in some cases actual, scope of the project management discipline. We started with a narrow execution-only model for individual projects, from which we expanded the scope to include realisation of outcomes on the one hand, and three initiating groups of activities on the other.

This individual-project-related model was then expanded to include the broader context of organisational strategic planning, which was presented in three segments, and its relationship with the components of the individual project components discussed. Finally, we added organisational outcomes realisation.

Figure 7 below amalgamates all the above, and illustrates what appears to be the maximum extent of the scope of project management involvement in all the contexts we have discussed to date.

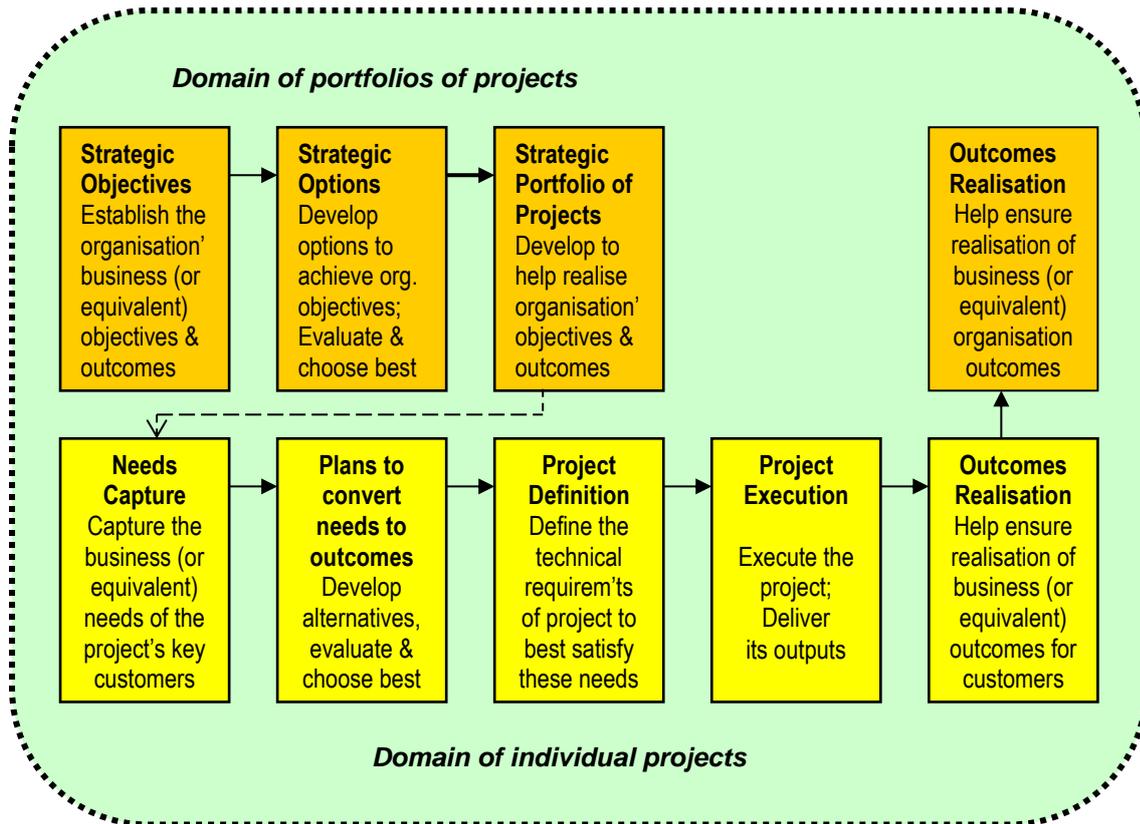


Figure 7: Adding organisational strategic planning and organisational outcomes realisation to the scope of project management

It should be noted that the broadest scope of these presentations are covered by project managers in project-based organisations. The extent to which project management is involved in production-based organisations varies enormously, but the potential certainly exists for increasing the scope of project management involvement in the latter context in several ways.

SUMMARY AND POST-SCRIPT

Summary

The main theme of this series of articles has been for project management to look beyond the project as an end in itself, with its focus on project outputs, towards also contributing to an organisation's business outcomes which the project outputs are intended to facilitate. We looked at possibilities for contributing directly to realisation of these outcomes in the first article; to helping customers determine their business needs, desired outcomes, and requirements of individual projects to facilitate the latter in the second article; and helping organizations determine their strategic objectives, plan for achieving them, and develop an appropriate portfolio of projects to best help achieve such outcomes in the third article.

This final article has amalgamated the materials of the first three articles, the results of which are summarised in Figure 7. This figure shows the scope of potential involvement by project management in the broader context of an organisation which undertakes projects to help realise its business objectives.

A post-script – wider opportunities to contribute?

There are, however, other areas in the wider society where project management skills could help achieve broader outcomes.

In 2011 Lynn Crawford and I presented a paper entitled *From project managers to 'synthesists'* (Stretton & Crawford 2011), in which we suggested that project managers are ideally qualified to occupy a much broader space in our societies which is currently vacant – a role we called "synthesists".

Our argument was that a significant section of the forward-looking non-management community is concerned with the downside of increasing specialization, and sees a need for "synthesists" to expertly integrate the work of many different specialist disciplines to achieve broader societal (or similar) goals. Since the project management discipline is specifically concerned with such integration work in its own domain, its practitioners are well placed to become effective "synthesists" in a much more generalised domain.

This appears to be a major opportunity area for people with project management backgrounds to occupy – if they have the imagination and willingness to undertake such initiatives.

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Alan Stretton is one of the pioneers of modern project management. He is currently a member of the Faculty Corps for the University of Management & Technology (UMT), USA. In 2006 he retired from a position as Adjunct Professor of Project Management in the Faculty of Design, Architecture and Building at the University of Technology, Sydney (UTS), Australia, which he joined in 1988 to develop and deliver a Master of Project Management program. Prior to joining UTS, Mr. Stretton worked in the building and construction industries in Australia, New Zealand and the USA for some 38 years, which included the project management of construction, R&D, introduction of information and control systems, internal management education programs and organizational change projects. He has degrees in Civil Engineering (BE, Tasmania) and Mathematics (MA, Oxford), and an honorary PhD in strategy, programme and project management (ESC, Lille, France). Alan was Chairman of the Standards (PMBOK) Committee of the Project Management Institute (PMI®) from late 1989 to early 1992. He held a similar position with the Australian Institute of Project Management (AIPM), and was elected a Life Fellow of AIPM in 1996. He was a member of the Core Working Group in the development of the Australian National Competency Standards for Project Management. He has published over 160 professional articles and papers. Alan can be contacted at alanailene@bigpond.com.au.

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