Series on Project Contexts

7. Comments on major contexts, and further discussions[1]

By Alan Stretton

INTRODUCTION AND RECAP

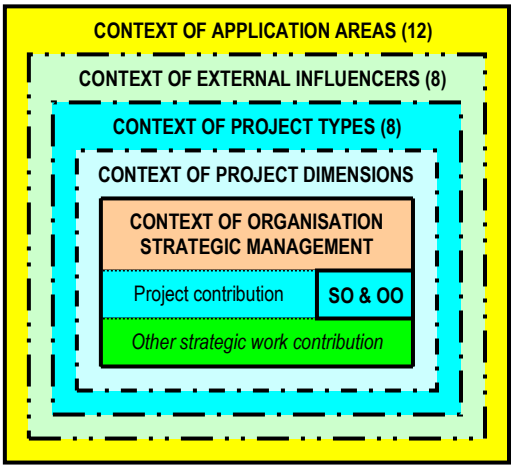

Figure 1: Outline project context model

This is the last of a series of seven articles which have identified and discussed a variety of key contexts impacting on the management of projects. The basic reason for developing this series is that there is far too little attention given to the contexts of projects in the relevant literature – particularly when you consider that, in practice, effective management of projects' contexts is usually quite critical to achieving overall project management (PM) success.

The first article of this series (Stretton 2019e) identified six key types of project contexts. These were summarised pictorially into a combined model, depicted in skeleton format in Figure 1 to the left.

The second article of this series was concerned with the context of organisational strategic management; the third with the contexts of projects being undertaken by supplier organisations (SOs), and by owner organisations (OOs); the fourth with the contexts of what Shenhar & Dvir 2007 have described as projects dimensions; the fifth with types of projects; and the sixth with external influencers, and with application areas in which projects are undertaken.

In this last article we will first re-present the full version of Figure 1, which illustrates the six contexts and their sub-contexts, and discuss their multitudinous nature, and potential utility. We will then return to look at each of the six contexts, with comments on key issues, and on related issues not previously discussed, including some further contexts. We conclude the whole series with a brief note on the importance of this somewhat neglected subject of the contexts in which projects are undertaken.

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We start with re-presenting the full version of Figure 1, which was first presented as Figure 5 in the immediately preceding article (Stretton 2019j).

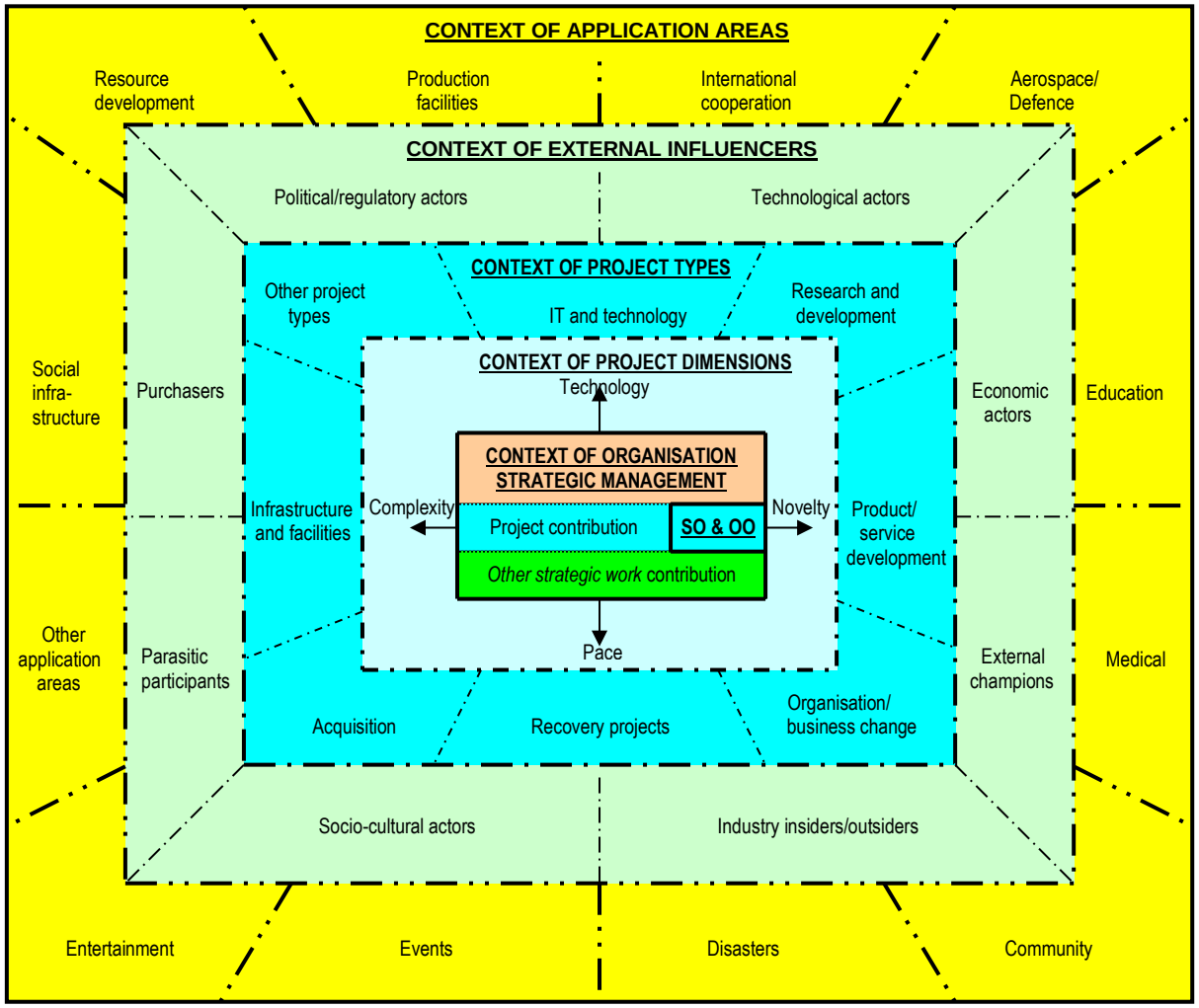

Figure 2: A cumulative representation of the six contexts and their sub-contexts

We will now discuss some aspects of these project contexts and sub-contexts

THE MULTITUDE OF PROJECT CONTEXTS AND SUB-CONTEXTS

Listing of major contexts and sub-contexts

I am listing (and numbering) these contexts and their components for convenience.

(1) The context of organisational strategic management
(2) The context of projects by supplier or owner organisations (SOs & OOs)
(3) The context of project dimensions (4 NTCP dimensions, 4 levels in each)
(4) The context of project types (8 groups, over 30 more specific types listed)
(5) The context of external influencers (8 groups, 36 potential external stakeholders)
(6) The context of application areas (12 areas, over 30 more specific areas listed)

The first point to be made is that this listing does not claim to cover all types of contexts relevant to projects – indeed, far from it, and we will be identifying some further contexts in the following discussions. But even with the above list of contexts and sub-contexts, it can be seen that the possible permutations and combinations of contextual issues are practically endless.

Combinations of contexts

I have one example of a two-context combination originally proposed in Stretton 2014i, and referred to again in Stretton 2017j, which is now represented in a slightly augmented form in Figure 3, as follows.

TYPES OF PROJECTS	APPLICATION AREAS: Social infrastructure	Resource development	Production facilities	International cooperation	Aerospace/ Defence	Educational	Medical	Community	Disaster	Events	Entertainment	Other application areas
Infrastructure and facilities												
Organisation/business change												
IT and technology												
Product/service development												
Research and development												
Acquisition												
Recovery projects												
Other types of projects												

Figure 3: A matrix for identifying intersections between project types and application areas

Potential utility of these lists of contexts and sub-contexts

I don't know how useful these listings of contexts and sub-contexts might be in practice. However, they appear to be reasonably representative checklists, which hopefully might help some in identifying the combination of contexts which are most relevant to their particular projects, and/or in helping make good decisions about how to go about managing them effectively, and who should be involved, and in what capacities.

We will now return to the six contexts, and look at each in turn, with comments on key issues, and on related issues not previously discussed. A common theme that emerges is the importance of the project manager having relevant know-how about the key attributes of the particular project contexts which are most relevant to the project being managed.

CONTEXT OF ORGANISATIONAL STRATEGIC MANAGEMENT

Project contributions to achieving organisational strategic objectives

The basic tenet of this context is that virtually all projects, no matter how originated, are, or soon become, direct components of organisational strategic management.

We have two different perceptions in the project management community about how projects relate to organisational strategic management. One group, which appears to be the majority group, has an execution-only perception of the role of project management – a group could be seen as representing what Dalcher 2019 describes as the "project delivery profession". The other group sees project management as including involvement in the pre-execution phases of projects, in helping determine the attributes of the project(s) which will contribute best to the achievement of the relevant organisational strategic objectives. The perception of this group has been described by Morris 2013 as the "management of projects".

Types of PM involvement in originating/developing project front ends

Project management can contribute so much more than simply project delivery when it becomes involved in pre-execution project phases. We discussed this in the second article of this series (Stretton 2019f)**,** and showed how it can, and does, vary. We summarise ways in which PM can be involved in project front ends as follows.

PM involvement in iterative project front end processes

PM involvement in iterative project front end processes was illustrated in the first article (Stretton 2019e) by the double-headed arrow "Iterate as required" as shown in the following figure from that article. This arrow is intended to represent the many, and evidently increasing number of project developments, such as Agile, in which iterative processes of various types are needed – typically where there are initial uncertainties about project goals, and/or the methods/tasks needed to achieve them, or in increasingly VUCA (Volatile, Uncertain, Complex, Ambiguous) environments.

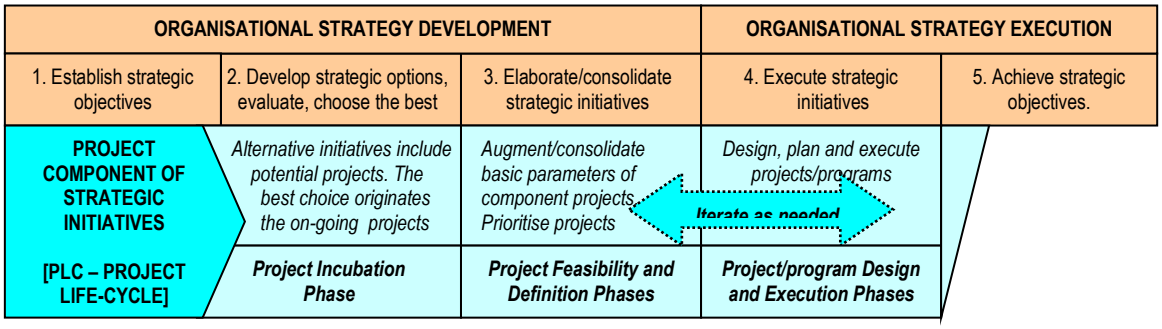

Figure 4: Representation of project management involvement in the front end phases of projects, including iterative processes (from Stretton 2019e, Figure 1)

Degrees of PM involvement in linear project front-end processes

The varying degrees in which project management can, and often does, become involved in the front-end processes of more traditional linear types of project developments, which generally have relatively high levels of initial certainties, was discussed in Stretton 2019f, and is illustrated in the lower section of Figure 5.

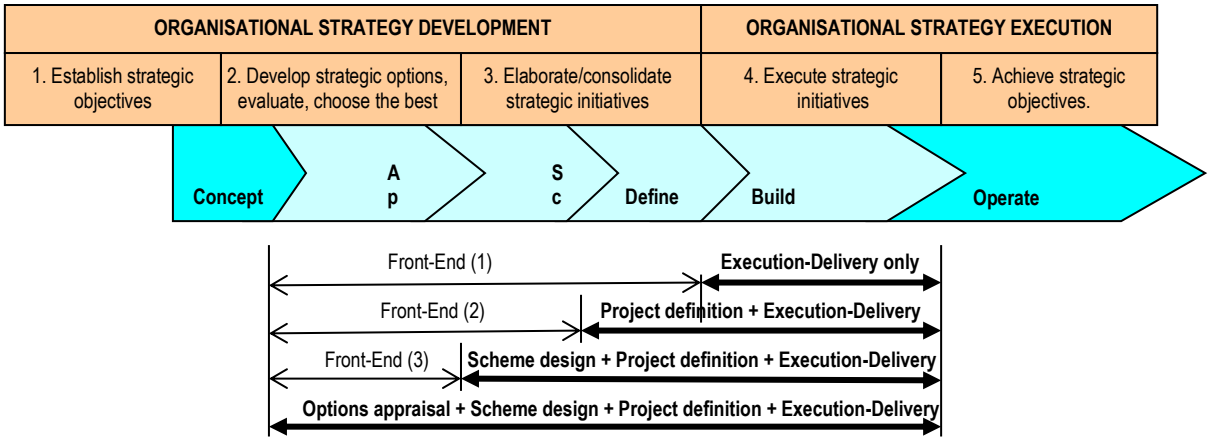

Figure 5: Representations of four possible combinations of project management involvement in linear front end phases of projects (Stretton 2019f, Figure 5)

From my perspective, a key issue from the above is that project management has much more to contribute to the achievement of organisational strategic objectives than simply executing and delivering the project. Project management has more relevant know-how than any others about issues involved in developing the pre-execution phases of projects, particularly in the project definition phase. In my view, it is a shameful waste of a key resource not to involve project managers in these front end project phases. Along with many other writers, I have been pressing for such increased involvement for a long time, but evidently without much success.

In addition to the above, in Stretton 2019f I introduced the subject of extending project management involvement even further back into the domain of organisational strategic decision making. However, I developed this in much more detail in the following article of the series, so will be commenting further on that in the next major section below. I also introduced the subject of project management involvement in the contexts of long-term asset-based organisational strategic management, but will defer comment on that to the section on the context of project application areas.

A further context of types of organisational strategic initiatives

It stands to reason that project attributes will be strongly dependent on the type of organisational strategic initiatives being undertaken, and of which it is a key component. However, I have not yet found a depiction of types or classes of organisational strategic initiatives which appear to cover most cases.

The nearest classification I have been able to find is a strategic portfolio classification from Shenhar & Dvir 2004, adapted as follows.

	Operational (Existing businesses)	**Strategic (New businesses)**
External customers	• Product improvement	• New product development
Internal customers	• Maintenance • Improvement • Problem solving	• Utility and infrastructure • Research

Figure 6: A strategic portfolio classification. Adapted from Shenhar & Dvir 2004, Table 50.2

This suggests many types or groups of strategic initiatives, but by no means all. For example, from my own experience education and/or training initiatives are often needed to ensure the achievement of many types of strategic initiatives.

Another list derives from what I described as potential *other strategic work* in Stretton 2019a. The following list includes both stand-alone strategic initiatives, and others often needed to help the primary strategic initiative achieve its goals.

- Business change (Dalcher 2017, Hudson 2016)
- Organisational change (Buttrick 2016, Dalcher 2017, Demaria & Sopko 2016, Koch & Lock 2016, Sedlmayer 2016)
- Education, training, behavioural change (Dalcher 2017, Hudson 2016, PMI 2017)
- Operational management/changes (Buttrick 2016, Hudson 2016, PMI 2017)
- Service management, maintenance functions (Buttrick 2016, PMI 2017)

However, there are still some gaps and overlaps which I have not succeeded in rationalising. I am not sure how useful a more complete classification of types of organisational strategic initiatives might be. If any reader knows of any such classifications, I would certainly like to know about them.

CONTEXT OF PROJECTS UNDERTAKEN BY SUPPLIER ORGANISATIONS (SOs) AND OWNER ORGANISATIONS (OOs)

In Stretton 2019g we first described supplier organisations (SOs), aka project-based organisations, as those that derive most (if not all) of their revenue and/or other benefits from creating and delivering projects; and owner organisations (OOs), aka production-based organisations, which derive most (if not all) of their revenue and/or benefits from producing and selling products and services, and utilise projects to create or improve new products and services, enter new markets, or otherwise improve or change their organisations.

Differences for project management between SOs and OOs

We listed ten important differences derived from Lehmann 2016, and added four more from other sources. We also included in observation from Taggart 2015 that the project management literature is substantially biased towards discussing projects undertaken internally by OOs – a contention with which I agree.

We than went on to discuss particular types of SOs that provide services that go well beyond the traditional scope of project management, but which evidently emerged as a natural extension of their services in response to emergent client needs.

SOs which provide extended strategy-related services to clients

In Stretton 2019g, we discussed how two different types of SOs went beyond the front end phases of project to help clients in their organisational strategic planning activities. Specifically, we first discussed how my old employer, Civil & Civic, extended the range of its services into the latter domain to help clients who had limited in-house strategic management capabilities. We then discussed how many large EPC (Engineering, Procurement and Construction) organisations have for a very long time routinely helped clients make decisions in strategic planning (normally concerned with asset creation), in a process which is widely known as Front End Loading, particularly in the mega-project domain.

Such extended services are seldom discussed in the mainstream project management literature, although they have been a fact of life for so long with EPC organisations. It appears to me that mainstream project management has deliberately restricted itself to a relatively narrow field of specialisation. If that is its decision, so be it. But, in doing so, it does deny itself opportunities to expand its sphere of influence in a way which appears to me to be needlessly inward-looking, if not downright myopic.

A further context of types of organisations undertaking projects

The distinction between SOs and OOs is only one type of difference between organisations in which projects are undertaken. A more detailed typology is represented in Figure 7 below.

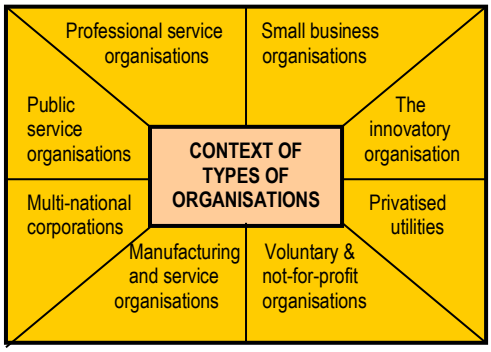

Figure 7: A context of types of organisations (adapted from Johnson & Scholes 1999)

This figure is adapted from a classification by Johnson & Scholes 1999, and I have called it *A context of types of organisations*. I don't believe the authors intended to imply that their listing was comprehensive, but that it was reasonably representative.

Although much of the discussion on project contexts in this series has tended to relate to business organisations, such discussions will also be relevant to other types of organisations, such as the *Voluntary and not-for-profit organisations* depicted in Figure 7.

In the context of projects being undertaken by SOs or OOs, we can only associate one of these to a specific type of organisation – clearly *Professional services organisations* are in the SO category. In all the other types of organisations, projects could be undertaken internally (by OOs), or by external service providers (SOs), or both.

I have not seen materials which compare project management in relation to the various types of organisations in Figure 7, so am not sure how useful this particular contextual classification might be in relation to managing projects.

CONTEXT OF PROJECT NTCP DIMENSIONS

The NTCP model, the four dimensions, and levels within the dimensions

The four dimensions of the basic NTCP (Novelty, Technology, Complexity, Pace) model, and the four levels within each dimension, are shown in Figure 8. The levels on the Novelty and Technology dimensions reflect increasing degrees of uncertainty, and one the other two, simply increases in their respective domains.

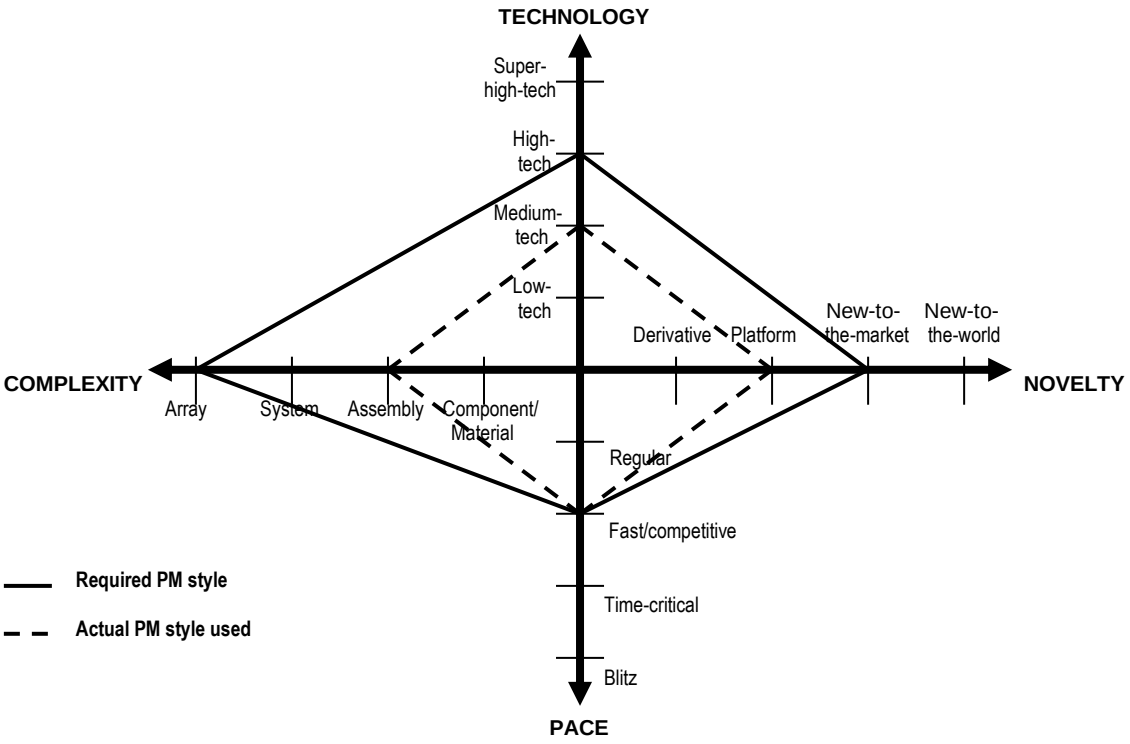

Figure 8: The NTCP model, adapted from Shenhar at al 2016, illustrating a difference between required and actual project management styles

Guidelines for managing the different levels of each dimension

Shenhar & Dvir 2007 have a multitude of guidelines for managing different levels of each dimension. Perhaps most notable are guidelines which relate these to each of the knowledge areas of PMI's PMBOK Guide. Each of the four NTCP dimensions also has a separate table which summarises the impact of its various levels on other project management processes that are particularly relevant to that individual dimension. There are also several other management-related tables and guidelines in Shenhar & Dvir.

All in all, something of the order of two hundred guidelines emerge from the above, and at least two thirds of these are concerned with the management of "non-traditional" contextual items – i.e. items that are not covered in bodies of knowledge of project management, and similar documents. Combined, these constitute a treasure-trove of guidelines over and above those already existing for more traditional domains.

Identifying the project's level on each dimension, and best management styles

We then looked at utilising this information in the context of the NTCP diamond model, which can be used to identify the levels the project occupies on each dimension (its diamond), and then to adopt the management guidelines which are appropriate for those levels.

The importance of getting this right is demonstrated in Figure 8, which depicts a case where the actual management styles adopted on three of the four dimensions did not match the management styles best suited to the actual project diamond. Shenhar and colleagues have analysed over twenty actual cases – many of them well-known, and often quite graphic – of problems, delays, cost overruns and the like, which were basically caused by not using project management styles and techniques appropriate to the actual levels the project occupies on each dimension.

A further context of dimensions of project success

Shenhar & Dvir 2007 also introduced discussions on a quite different set of dimensions to NTCP, namely dimensions associated with project success.

The context of what constitutes project success is obviously very relevant to how the project is conceived and developed in the first place. If you don't have a clear perception of what the project is trying to achieve, and what will be seen as constituting success, and by whom, then the chances of delivering the right project are rather obviously severely jeopardised.

Shenhar & Dvir 2007:26-33 nominate and discuss five main dimensions of project success, which to some extent reflect the perspectives of different stakeholders in the project, and which also involve different time horizons. In the following I attempt to briefly summarise their rather substantial discussions on these dimensions.

The success dimension of project efficiency

The success dimension of *project efficiency* has been described by others as "project management success", or "doing the project right", and essentially reflects the classic "iron triangle" criteria of "on time, within budget, to specification/scope". This success dimension can be seen as an internal criterion which is essentially about meeting the planned project goals.

Success dimension of impact on customer

As the authors say, "This dimension should clearly state how the project's result improved the customer's life or business and how it addressed the customer's needs". We can broadly associate this dimension of success with what both Cooke-Davies 2002 and Dalcher 2014 have described as "project success" – i.e. "doing the right project" in Cooke-Davies' jargon.

In a later section of their book, Shenhar & Dvir identify three types of customers, and set down some sixteen characteristics of projects for each of these. We will touch on this again later in the section on the context of external influencers.

Success dimension of impact on team

This is a welcome addition to discussions on contextual matters in relation to projects. Specific success measures suggested by Shenhar & Dvir for this dimension include team satisfaction, team morale, skill development, and retention of team members after the project is completed.

Success dimension of business and direct success

Shenhar & Dvir 2007:28 say that this dimension "reflects the direct and immediate impact the project has on the parent organisation". Evidently the context is that the project is provided internally within a production-based organisation (an OO), to an internal customer (such as a sponsor, or equivalent). This appears to be broadly equivalent to what Dalcher 2014 has described as "business success".

Success dimension of preparation for future

This dimension is concerned with the long-range benefits of the project and reflects how well it helps the organisation prepare its infrastructure for the future, and how it creates new opportunities. Dalcher 2014 also has a similar dimension, which he describes as "Future potential".

In concluding this section on the context of dimensions of project success, I also note that project success is a very complex issue, and that much more could have been said about these dimensions, and allied issues. However, a more detailed treatment is beyond the scope of this series of articles. I do, however, hope to return to this complex topic in a later article in this journal.

CONTEXT OF PROJECT TYPES

Stretton 2019h identified eight types of projects – but the eighth, "Other project types", could be quite voluminous, depending on the level of detail adopted in making this type of classification. That article did not discuss individual types of projects in any detail, but focused on a couple of particular issues relevant to this broad context, as summarised in the next two sub-headings

The importance of know-how re the (technical) nature of the project work

The first major issue discussed was the key importance of the project manager being familiar with the specific nature of the work involved in the project, in the technical or equivalent sense. In addition to appropriate skills in project management per se, the project manager and project team members need to bring specific nature-of-work related knowledge, skills and experience to bear on their project to ensure that the totality of the work is effectively prosecuted.

Additionally, since different types of project work need different project management approaches, it follows that a project manager who is skilled in the domain of one type of project may be well out of his/her depth in a different domain which has different types of work involved. I also noted that the importance of know-how about the nature of the project work is not often acknowledged in the project management literature.

Finally, I offered some reflections on my personal experiences in managing four different types of projects, which involved different types of know-how, and different management approaches.

- Developing and deploying a new financial and cost control system
- Introducing network techniques (CPM) into construction planning
- Managing the Lend Lease group management education program
- Managing a Research and Development (R&D) department and programs

The particular context of managing large complex mega-projects

We then moved on to the particular context of managing mega-projects, which is not well covered in the mainstream project management literature. By far the best coverage I know of is by Prieto 2015, who writes about "large complex projects", which appear to be broadly the same as what some others call mega projects.

I started by summarising twelve particular aspects of large complex projects about which managers would certainly need to have relevant know-how. I then went on to summarise his comparisons of many attributes of such projects with corresponding attributes of traditional or classical approaches – mainly to highlight the many contextual differences involved in managing mega projects. These included

- Comparisons of ten basic precepts/assumptions
- Types/extent of management focus
- Appropriate managerial leadership behaviours

In summary, the broad nature of the magnitude and significance of these differences is encapsulated in the following quote from Prieto 2015a:24 (his emphasis):

> Large complex projects differ from those that comprise the traditional domain of projects as defined and served by the Project Management Institute and its Project Management Body of Knowledge (PMBOK). Remember its admonishment that PMBOK provides a management framework for ***most projects, most of the time.*** Large complex projects appear to live outside these boundary conditions.

Adding guidelines for transitioning to management of large complex projects

In a recent article in this journal, Wyatt 2019, discusses issues and approaches for transitioning project managers from managing small simple projects, through more complex ones, to managing large and complex projects. Wyatt set down five key principles for the latter, as now summarised.

1. ***Loosen the direct grip on project detail:*** Complexity grows exponentially, and it is not possible to micromanage once a project reaches a certain size.
2. ***Organise into autonomous but accountable subgroups/work streams:*** Create structures at the interfaces.
3. ***Focus on where challenges are most likely to occur:*** Analyse the project environment
4. ***Recognise interconnected sub-goals:*** Understand that even committed project team members will also have direct line managers. Know the demands placed on each of them ….
5. ***Build project plans that are flexible:*** The business environment is dynamic. Avoid falling into a tactical role as project plan administrator.

Wyatt also added the following five additional principles that are important for project managers to transition successfully to managing large and complex projects.

- ***Match communications to the audience:*** Proactive communications tailored to the audience will minimise time spent reacting to requests for clarification.
- ***Optimise the output:*** Move focus from micro-managing project [expenditures] to optimising the output. Cost and value are different.
- ***Many levers to pull:*** Delivery of maximum value in a complex and dynamic environment requires a balance of elapsed time, cost and functionality.
- ***Lead leaders:*** Invest time in developing followers into leaders.
- ***Enable coexistence of project management methodologies:*** There are many approaches to managing projects. Success with large and complex projects requires the ability to apply the best methodology for each situation and integrate methodologies seamlessly

I have not travelled all the way along this road myself, but it would certainly appear that Wyatt's article should help relevant project managers to bridge the evidently very large gap between management of more traditional projects and management of large complex projects/mega-projects.

CONTEXT OF EXTERNAL INFLUENCERS

The importance of recognising and engaging with external influencers

In the article which discussed the context of external influencers we used a checklist of potential external stakeholders from Stretton 2018j to identify external influencers. There have been multitudinous cases in practice, many of them also quoted in the literature, where failures to identify and/or deal with potential and/or actual adversarial external influencers have adversely affected, and in some cases killed, a project.

This is an absolutely key area in which the project manager and team must be fully cognisant of the importance of first making sure that they have identified all actual and potential external influencers, and then have taken appropriate action to accommodate their concerns

The particular context of a VUCA environment

We then went on to look at the broader external VUCA influence (Volatility, Uncertainty, Complexity, Ambiguity), which Hubbard & Rogers 2019 describes as the new norm in the business environment. We first showed their useful descriptors of the nature of each of the VUCA components, and then briefly discussed the challenge of managing projects in this context. We pointed particularly to the importance of increasingly emergent change driven methods such as Scrum in managing in VUCA environments, as opposed to traditional plan driven methods which are better suited to relatively stable predictable environments.

I concluded this section with the observation that managing projects effectively in the VUCA environment is one of the most significant mainstream challenges being faced by project management, and is still very much a work in progress.

The particular context of types of purchasers, or external customers

One of the group of external influencers identified in Figure 2 is *Purchasers*, which we can alternatively describe as *external customers.* We have had little to say to date about this most important project stakeholder, except for a brief mention of customers in this article under the sub-heading of “A further context of dimensions of project success”.

In this context we are talking of external customers for projects, which implies project management services provided by Supplier Organisations (SOs). These appear to be implied in discussions by Shenhar & Dvir 2007:190, who identify three different customer groups (the only such classification of customers I have come across):

- Consumers (business to consumer, or B2C)
- Industrial or business organisations (business to business, or B2B)
- Government (business to government, or B2G)

Shenhar & Dvir provide a table (Table 10-1) showing some sixteen characteristics of projects for each of these three groups of customers. These characteristics include value to customer, customer involvement, product definition, project scope, project focus, contractual obligations, customer involvement, financing, and product support. Figure 9 shows this table's format and gives an example of how the *customer involvement* characteristic varies between these types of customers.

Characteristics of projects for various customers			
	CUSTOMER TYPE		
Characteristic	***Consumer (B2C)***	***Industrial/Business (B2B)***	***Government/Public (B2G)***
Customer involvement	No direct involvement; customer opinion through focus groups or market trials	Sometimes direct customer involvement	Intense customer involvement often a full-time customer representative on the team
[15 other characteristics]			

Figure 9: Showing format of Table 10-1, Shenhar & Dvir 2007 – Characteristics of projects for various types of customers – with an example of how Customer involvement varies.

CONTEXT OF PROJECT APPLICATION AREAS

The importance of knowing how things are done in your application area

It is vitally important to project success to have a very good knowledge of how things are done in the application areas in which you are undertaking your project. Shenhar & Dvir 2007:198 discussed this topic in the context of the industry in which the project is being undertaken as follows.

> One of the major contextual factors affecting project management is the specific industry in which the project is being run. It is no secret that different industries have different ways of managing projects. Although you can find specific books and studies on project management in particular industries, the differences in project management among industries have rarely been identified, studied, collected, or reported. …..

Evidently, there is more information available about some types of industries or application areas than others. There are a couple of challenges in discussing these.

First, of course, it is virtually impossible to list all application areas/ industries in which projects are undertaken. Those appearing in Figure 2 are, at best, only partly representative – the "other application areas" could be very voluminous indeed.

Second, as Shenhar & Dvir imply, it would be similarly impossible to detail differences for projects in all application areas/ industries, even if the latter could be identified. Shenhar & Dvir tackled this problem by nominating what they see as the five most common industries, and identifying differences between them in relation to seven characteristics of projects, as now briefly discussed.

The particular context of five major industries/application areas

Shenhar & Dvir 2007:198 chose the following five major industries as a representative sample of the vast spectrum of industries:

- ***Construction:*** Buildings, roads, bridges, utilities, etc.
- ***Equipment and devices:*** Tangible hardware products – appliances, automobiles, machinery, etc.
- ***Pharmaceuticals and health care:*** Drugs, medicines, and medical products
- ***Software:*** Appliances, corporate planning, systems, service management systems
- ***Processes:*** Production lines for products such as chemicals, oil refineries, and plastics

In their Table 10-2, they then set down details of how each of seven characteristics of projects varied across the above five major industries. These project characteristics were *Focus; Product definition; Regulations, standards, approval; Processes; Preparation for production; Risk issues; Product support*. The basic format, and an example of the details for the *Focus* characteristic, was reproduced as Figure 6 in Stretton 2019j.

Shenhar & Dvir chose what they describe as "some of the most common industries" (p.203), but of course recognise that other industries could also be discussed. However, in their words, this grouping of major industries "may be a good starting point to further focus on projects in a specific industrial environment" (p.198).

The last comment appears to be a particularly relevant one from the point of view of practitioners who are looking for more detailed guidance about managing projects in the context of the specific industrial environment in which they are operating.

The particular context of asset-based organisations in many application areas

Another approach to tackling the context of project application areas is to look for attributes which are common to many of the application areas. One such attribute appears to be that asset-based organisations tend to be dominant in at least three of the twelve applications areas identified in Figure 2 (Social infrastructure, Resource development, and Production facilities), and are significant components of several of the others, including facilities in Education, Medical, Aerospace/Defence, and Community.

In the article on the context of organisational strategic management (Stretton 2019f), we introduced discussion on organisations whose strategic objectives centre around creating and operating long-term productive assets. We borrowed from Giammalvo 2019 in adding a seven-stage asset life span management framework to our representation of organisational strategic management.

In the next article on the context of projects undertaken by Supplier Organisations (SOs) and Owner Organisations (OOs) (Stretton 2019g) we added some discussions about OOs that focus on longer-term asset management.

Finally, in the sixth article of the series (Stretton 2019j) we began by recognising that such long-term asset-based organisations are either dominant, or prominent, in many of the twelve project management application areas listed (as just recorded above). This led me to look a little more closely at the two asset life-cycle models I had found (Giammalvo 2019 and McGrath 2007), and to broadly align them with each other, and with my organisational strategic management framework. They aligned quite well, as is indicated in the upper sections of the following figure. I also show three primary stages of asset-based business management deriving from this alignment in the lower section of Figure 10.

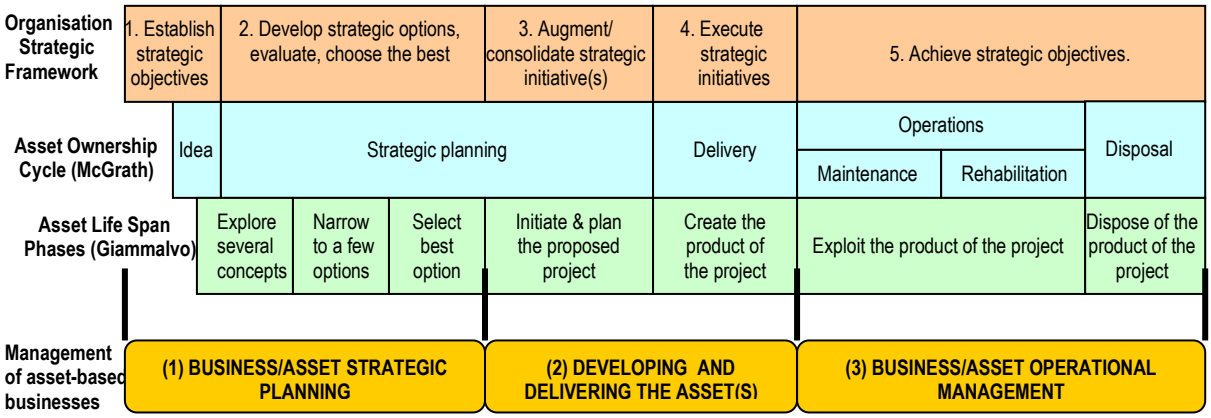

Figure 10: Aligning three strategic asset-related models, and identifying three primary stages of asset-based business management (from Stretton 2019i, Figure 11)

Ensuing discussions included particularly the role of programs/ projects in the second stage of developing and delivering the assets. It was noted that ways in which program/project management can contribute to the development and delivery of assets vary widely, from quite complex to relatively simple ways.

In particular, in more complex environments McGrath gave programs a prominent role prior to more traditional project management phases. These programs included what I described in earlier articles in this series as *other strategic work,* which normally needs to be undertaken along with projects. Many writers regard program management as covering both, as evidently McGrath also does. However, other writers have different perceptions of the nature of program management, which is one reason I did not adopt this descriptor.

We conclude this final section by again noting that, whilst projects have an important role to play in the broader context of managing asset-based organisation, they are not the most important contributors to achieving the organisation's objectives. As McGrath 2007 observed,

> Projects must fit within asset management and operational environments, ….

CONCLUDING THIS SERIES

I have never been comfortable with those major sections of the project management literature that separate its processes from its context. The reasons for developing so-called context-free guidelines are fully understandable. However, as practitioners quickly learn from direct experience, effective project management always includes engagement with, and management of, the project's context – and that this is all too often a very demanding task in its own right. However, this critically important component of the management of projects seldom gets the prominence in the project management literature that its importance deserves. Morris 2013:282 has summarised the overall situation rather well.

> Meanwhile, despite some academic misgivings, standards and guidelines continued to be published, contextualisation being left in the hands of practitioners, which is reasonable, but with little guidance on how to do this, which is not. Curiously, the ethos of at least the more important of such guidelines – *PMBOK Guide* and *ISO 21500* – seems to be 'plan and then put on cruise control'. There are few guides which emphasise influencing context or adding value, the Japanese being the major exception.

This series has proposed a skeleton framework and partial guidelines as steps towards rectifying this situation. The six main contexts in these articles were chosen because they appeared to me to be the most important of a very wide range of potential contexts. I have added a few more contexts in this final article, but there are undoubtedly many other contexts that could also be relevant and useful in certain project situations. I have not attempted a detailed coverage of each of the main contexts, but have focused on just a few aspects that I felt were particularly interesting and/or relevant.

Overall, I have tried to assemble these materials into a format which is both accessible and useful. Hopefully it might also encourage others to develop this important subject in much more comprehensive detail, to ultimately benefit most project management practitioners in most contexts.

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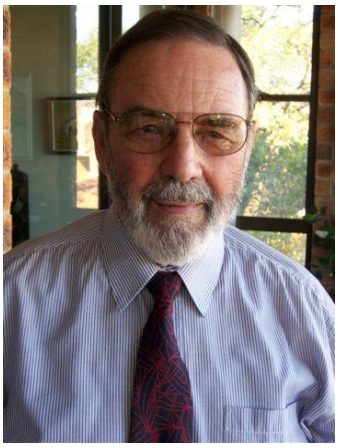

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