

## **Further thoughts on Pells' May 2022 editorial: Representing environmental and global influences relevant to projects and their organisations <sup>1</sup>**

**By Alan Stretton**

### **INTRODUCTION**

Pells' editorial in the May 2022 edition of this journal was entitled, "*This war changes everything, Old themes revisited, Black elephants (again, bigger), and a New view of risk.*" In Pells' own words, much of this editorial is an update on themes he has written about before – notably in his series of four editorials from January to April 2021 whose theme was "*Project Management needs a Higher Purpose*" (Pells 2021).

Both groups of editorials were particularly concerned with major existing and emergent environmental and global issues, and their actual and potential relationships with project management (PM), and the organisations that undertake PM. In this commentary, I will try to represent many of these issues in models, some with checklists, which may hopefully help project managers and their organisations track such issues, to facilitate appropriate responses, and/or proactive initiatives.

The format of this model will be broadly based on a hierarchy of business-related systems proposed by Kerzner 1979:17. I chose this partly because it is the earliest representation of such a hierarchical model in project contexts that I know of, and partly because it goes beyond the normal outer environmental context of projects and their organisations to add upper-level contexts, which include the global context of "The Earth" – which has become so much more immediately relevant in the current era, particularly compared with the pre-1979 era.

This five-level model will be modified to better illustrate the main issues developed in this commentary, and the relevant supporting materials. The two inner levels, the employee level, and the organisational strategic management level, are first discussed, before moving on to the three levels external to the organisation and its projects.

The first of these is the organisational operations management level, and a checklist of twenty relevant stakeholders presented. The next level is described as the external stakeholders environmental level, which has over thirty relevant check-listed stakeholders, many of which also qualify as regional/global influences in their own right.

This is followed by discussion on the final broader environmental and global level, which incorporates some sixteen relevant issues from Pells' 2022 and 2021 editorials,

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and some of his earlier articles. These are supplemented with the 17 UN 2015 Sustainable Development Goals (SDGs) checklists, which Pells notes have already been found relevant for some sustainable project initiatives. A summary compilation of all the above stakeholders and influences/issues is then presented, with concluding discussions.

## BASIC HIERARCHIES OF PROJECT AND ORGANISATIONAL CONTEXTS

### A basic representation of a hierarchy of systems from Kerzner 1979

An early illustration of the multi-layered nature of hierarchies of systems in project-related contexts was proposed by Kerzner 1979:16-17 as follows.

Modern practitioners of systems management have attempted to redefine the hierarchy of systems first proposed by Boulding [1956] so as to obtain a more definitive picture of the business system. A representative grouping of system levels is shown in Figure 2.1.

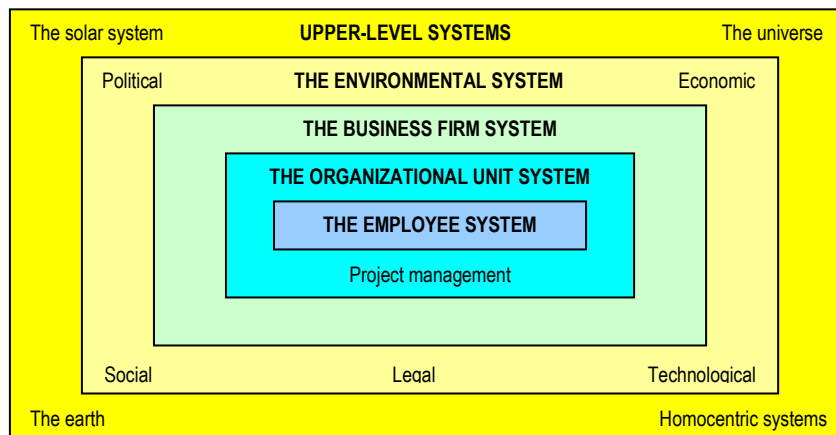


Figure 1. A representative grouping of system levels – adapted from Kerzner 1979, Figure 2.1

As Kerzner has pointed out, the hierarchy of systems is a very important element in “looking at the whole picture”. For example, in the above, projects are sub-systems, along with many other subsystems, of what he calls *the organisational unit system*. This, in turn, is a sub-system of the broader *business firm system*, which is a sub-system of the still broader *environmental system* – which is a subset of the broadest group of categories, which Kerzner describes as *upper-level systems*.

This commentary is primarily concerned with how higher-level environmental and global (earth) influences can impact organisations and their projects, and vice-versa. The data I have been able to assemble on actual and potential components of these two higher-level contexts, and also that of organisational operations (which would include Kerzner’s “business firm”) have led me to modify the levels and descriptors used by Kerzner, as broadly indicated in Figure 2.

It will be seen that I have represented only “the earth” component of Kerzner’s *upper-level systems* in the following model. I have described this level as “global”, but have

also broadened its descriptor to “Broader environmental and global levels”, to allow for the inclusion of such items such as “Emergencies and disaster” which can be on a global scale, but also can cover regional and relatively local occurrences.

The remainder *upper-level* components could have been represented by yet another external level, or levels, but I have chosen not to add these to Figure 2.

### A modified representation of contextual levels relating to organisations/projects

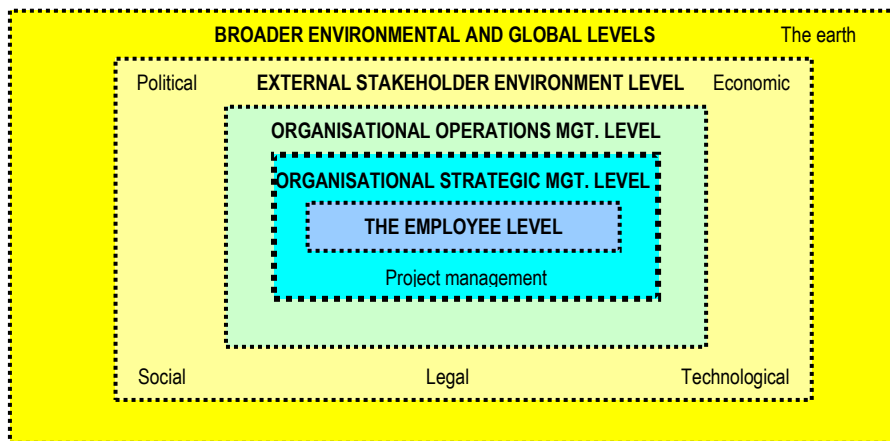
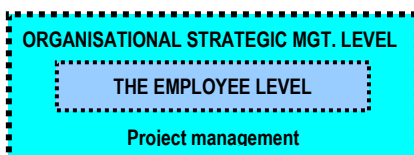


Figure 2. A modified hierarchical contextual format, and proposed titles of the various levels

## THE ORGANISATIONAL STRATEGIC MANAGEMENT AND EMPLOYEE LEVELS

### The employee level



This is the fifth and innermost system level in Figure 2. As Kerzner notes, “The interface between the fourth and fifth levels defines the employer-employee relationships that must exist within the business firm”.

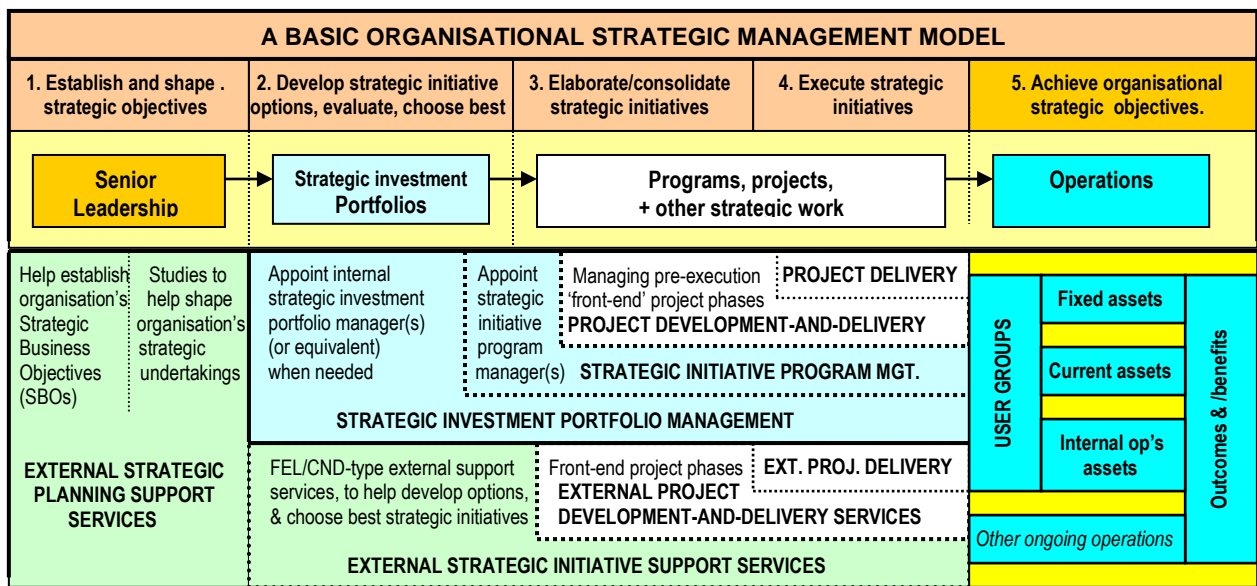
From my perspective, I welcome this specific provision of this level, which formally recognises the people within the organisation who actually cause things to happen. As Morris 2013:198 reminds us, “projects are built by people, for people, through people”. However, the project management literature all too often pays little attention to the crucial role of people in the project context.

### The organisational strategic management level

I have written a multitude of articles in this journal about organisational strategic management, and the contribution of its component projects, programs, and project-related services to the achievement of organisational strategic objectives.

The most recent of these articles was the *Series on project-related contributions to organisational objectives* (Stretton 2022a,b,c), which was summarised in the latter of these references as shown in Figure 3 below.

I will be discussing the operational side of organisational management in the context of the next major level in the hierarchical contextual model. The summary of project and project-related contributions in the four earlier stages looks rather complicated, but the above referenced series can be accessed by those interested in its details, and therefore will not be enlarged on in this commentary.



**Figure 3. Summary of project-related contributions to organisational strategic mgt. (Stretton 2022c)**

I have added “other strategic work” to the programs and projects heading in Stretton 2022c, and discussed the importance of its contribution (in addition to programs/projects) to the achievement of organisational objectives in several previous articles, including particularly Stretton 2019a.

More detailed discussions about operational users converting project-related outputs to organisational outcomes and benefits, as summarised on the right of Figure 3, were undertaken in Stretton 2021k and 2021l.

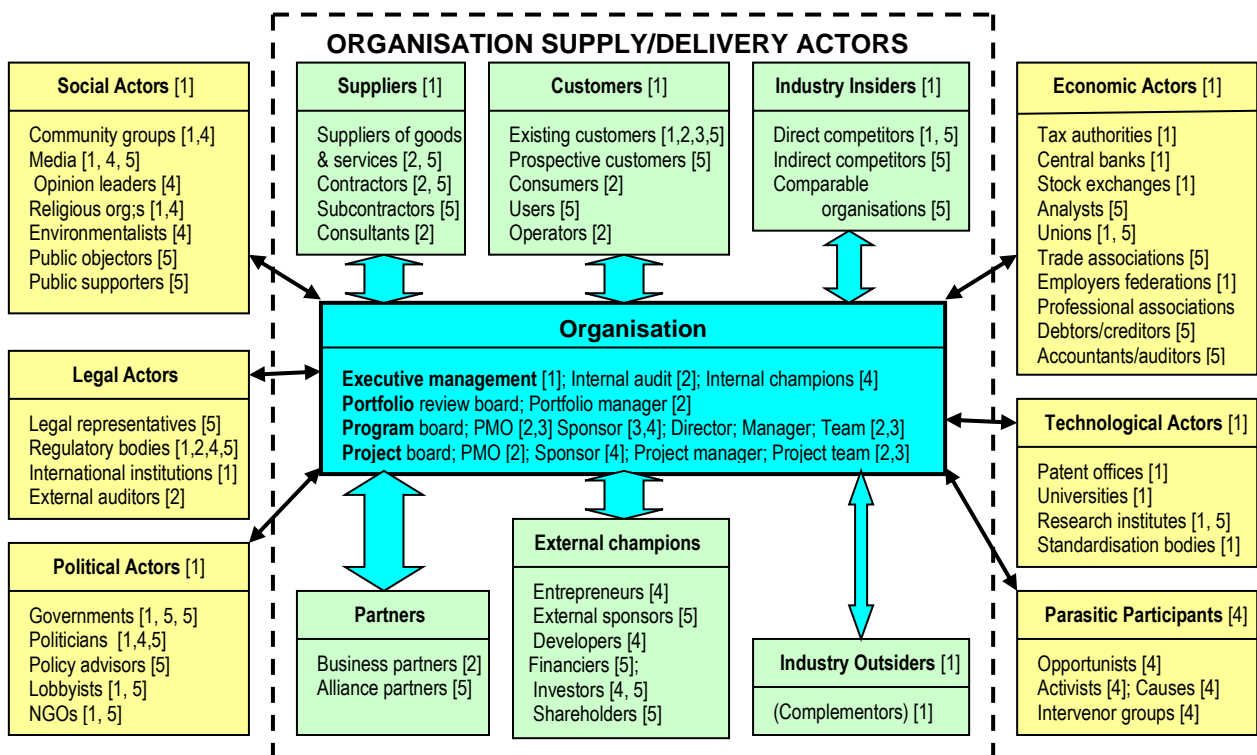
In this commentary we will be more interested in identifying other parties involved in broader organisational operations (to be discussed in more detail shortly), and in the other levels external to the organisation identified in Figure 2 above.

We start this process by identifying representative examples of those parties who are normally referred to as stakeholders in the organisation and its projects, as now discussed in more detail.

## SOME DETAILED LISTINGS OF ORGANISATIONAL/PROJECT STAKEHOLDERS

The following listings are a modified version of a basic model of project/program supply/delivery organisational stakeholders developed in Stretton 2014a (from four sources), with added external influencers from Ingason & Jonasson's Figure 5.1.

All five sources for the detailed sub-components are numerically coded in square brackets in Figure 4 below, and their sources identified in that figure's descriptor.



**Figure 4: A synthesised cumulative organisational/program/project stakeholder identification/classification model, adapted from de Wit & Meyer 2004 [1], with additional inputs from Tasmanian Government 2004 [2], PMI 2006a [3], Tuman 2006 [4], and Ingason & Jonasson 2019 [5]**

It is recognised that there are many entries that could be classed as duplications. However, for the purposes of this article, we do not really need a consolidation of such duplications – so I will simply leave them as they emerged from the various sources.

Although this commentary is primarily concerned with external influences relevant to projects and their organisations, I have included a summary of internal organisational stakeholders from Stretton 2014a, which focus particularly on portfolio/program/project stakeholders, to round out these listings of stakeholders.

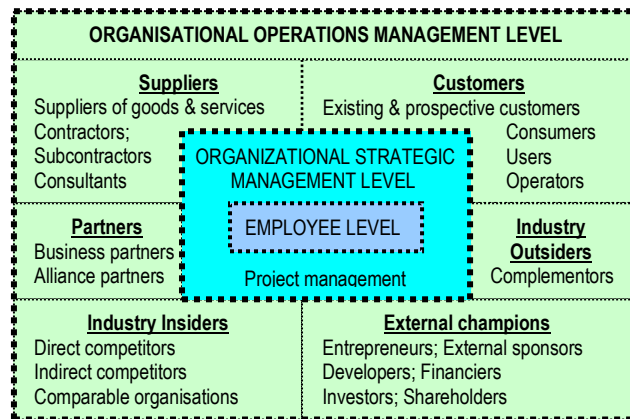
But we now return to the next two levels of the hierarchical model of Figure 2, and relate the above listings of stakeholders to them, starting with the organisational operations management level.

## THE ORGANISATIONAL OPERATIONS MANAGEMENT LEVEL



We can readily relate the listings of the six groups of stakeholders in Figure 4 under its “Organisation supply/ delivery actors” umbrella with the *Organisational operations management level*.

These stakeholder groups have been slightly rearranged to accommodate their relatively compact aggregation within Figure 5 below.

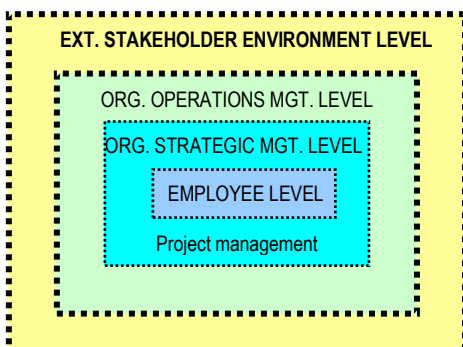


**Figure 5. A stakeholder checklist for the organisational operations management level**

Whilst these stakeholders are closely linked to the organisation’s immediate operations, they are also external to it – and for this reason are included in this evolving model of environmental and global influences relevant to projects and their organisations.

We now move on to the next level, which has many actual and potential stakeholders.

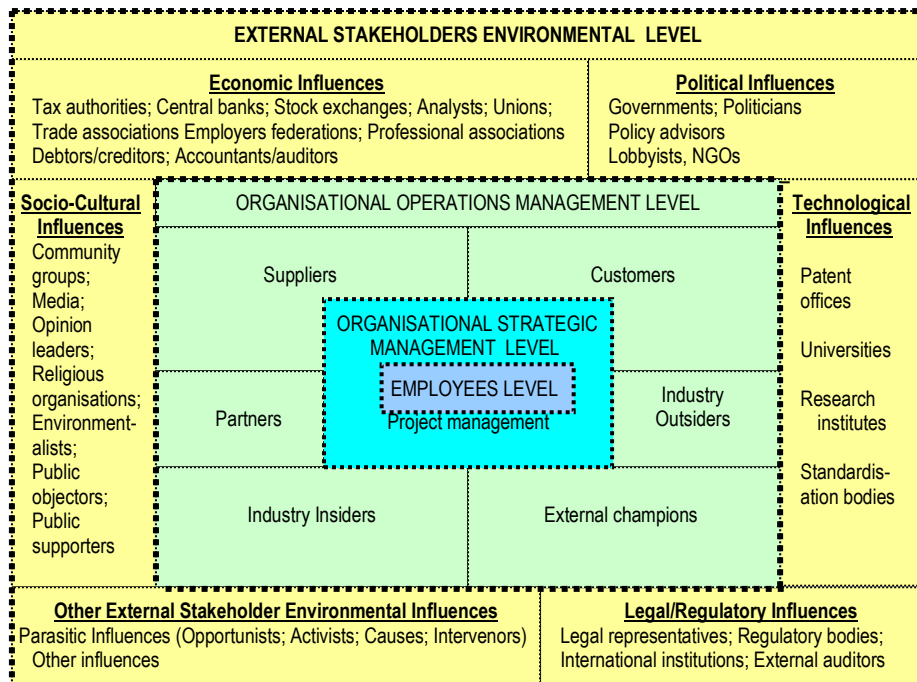
## THE EXTERNAL STAKEHOLDERS ENVIRONMENTAL LEVEL



I had a little difficulty finding an appropriate descriptor for this level. On the one hand I had a very substantial listing of stakeholders from Figure 4 which belong to this category. On the other hand there are undoubtedly other environmental influences which also fit most comfortably here. So, my hope is that this descriptor will be seen as being able to accommodate both the following stakeholders and other environmental influences appropriate to this level.

In Figure 4 these stakeholder groupings external to the “Organisation supply/ delivery actors” group were also described as “actors”. I have elected to describe them in Figure 6 below as “influences”, which can influence, or be influenced by, the organisation.



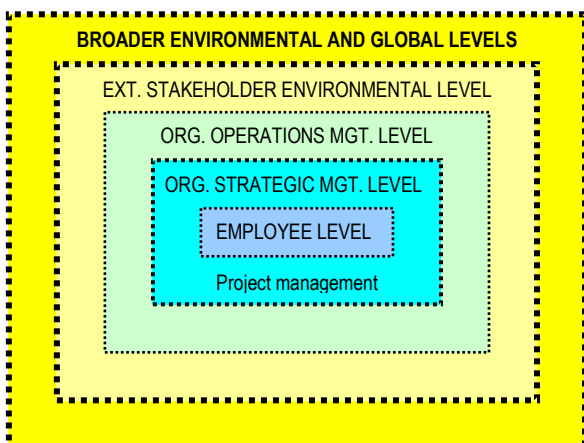


**Figure 6. A stakeholder checklist for the external stakeholders environmental level**

It can be seen that the above stakeholder headings are much the same as those nominated by Kerzner in Figure 2, with added provision for other relevant influences.

We now move to the next level – the one most immediately relevant to Pells 2022.

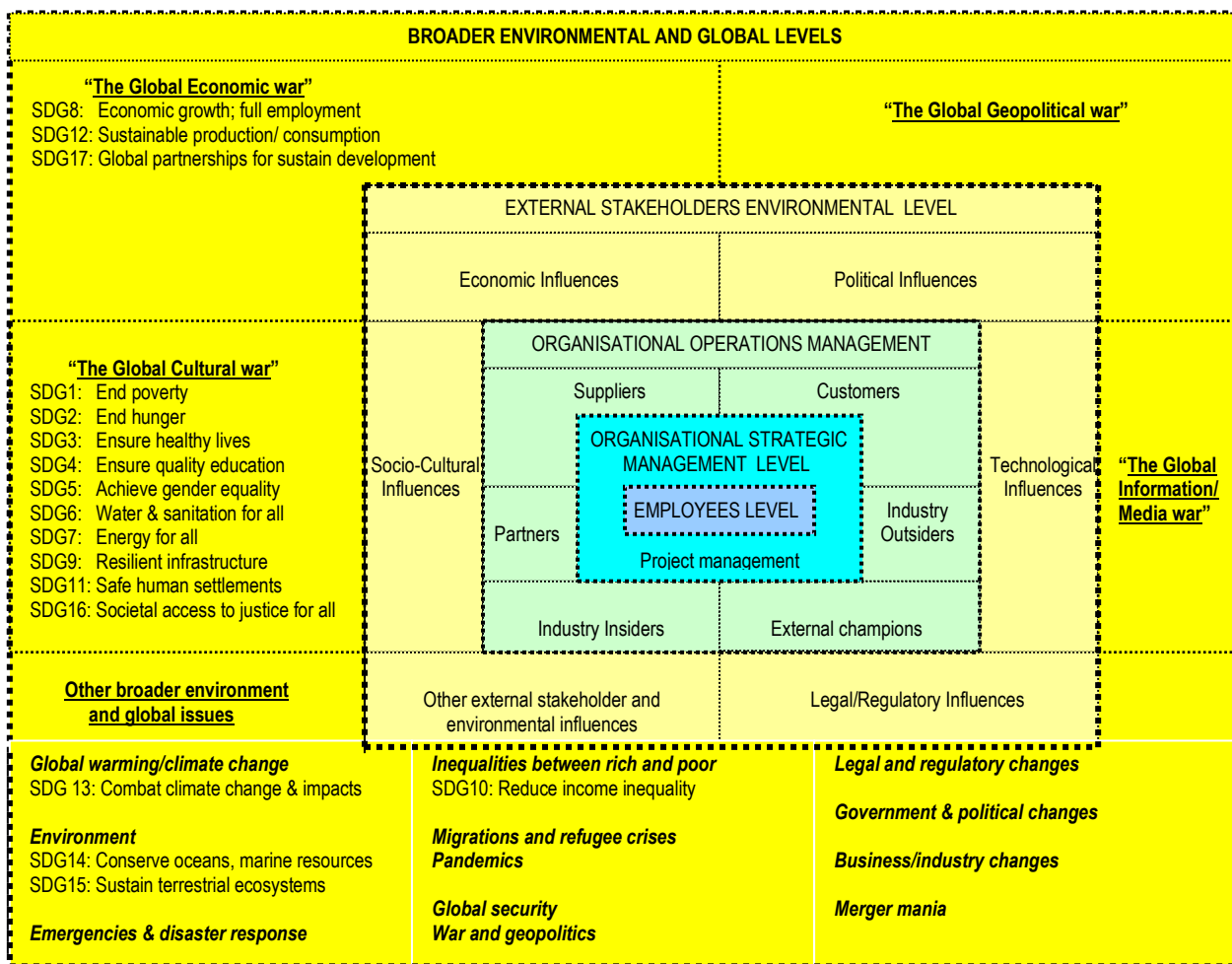
**BROADER ENVIRONMENTAL AND GLOBAL LEVELS**



As noted earlier, I have represented only “the earth” component of Kerzner’s *upper-level systems*, as indicated by “global”. I have also broadened the descriptor of this level to “Broader environmental and global levels”, to allow for the inclusion of items which can happen globally, but also on regional and local scales, and which are not covered in the previous stakeholder level.

I also noted that I have chosen not to add more levels to this figure to represent Kerzner’s other three *upper-level* items.

We now move beyond the stakeholder coverage of earlier levels into new territory. Here I draw on materials from both of Pells’ 2022 and 2021 editorials, and some of his earlier articles from 1998 through 2009 to set up an embryo framework of broader environmental and global issues most relevant to projects and their organisations, as shown in Figure 7.



**Figure 7: An embryo framework of broader environmental and global influences**

The five main sectors in the broader environmental and global level derive from Pells 2022, and comprise his four “global wars” – namely economic, geopolitical, cultural and information/media. I have added a fifth sector for “Other broader environmental and global issues”.

The eleven other issues in this sector come from a amalgamation of mainly global issues deriving from Pells’ two recent editorials – including six “black elephants” from Pells 2022 – plus global and regional issues from several of his older articles, namely Pells 2009 a,b, and Pells 1998 and 1999.

Finally, I have added summaries of the seventeen 2015 UN Sustainable Development Goals – abbreviated to SDGs – under what appear to be appropriate issue headings.

*In 2015, member states of the United Nations adopted the Sustainable Development Goals (SDGs) as a universal call to action to end poverty, protect the planet, and ensure that all people enjoy peace and prosperity by 2030. The 17 SDGs are integrated, they recognize that action in one area will affect outcomes in others, and that development must balance social, economic and environmental sustainability.*  
 (Pells, 2021a)



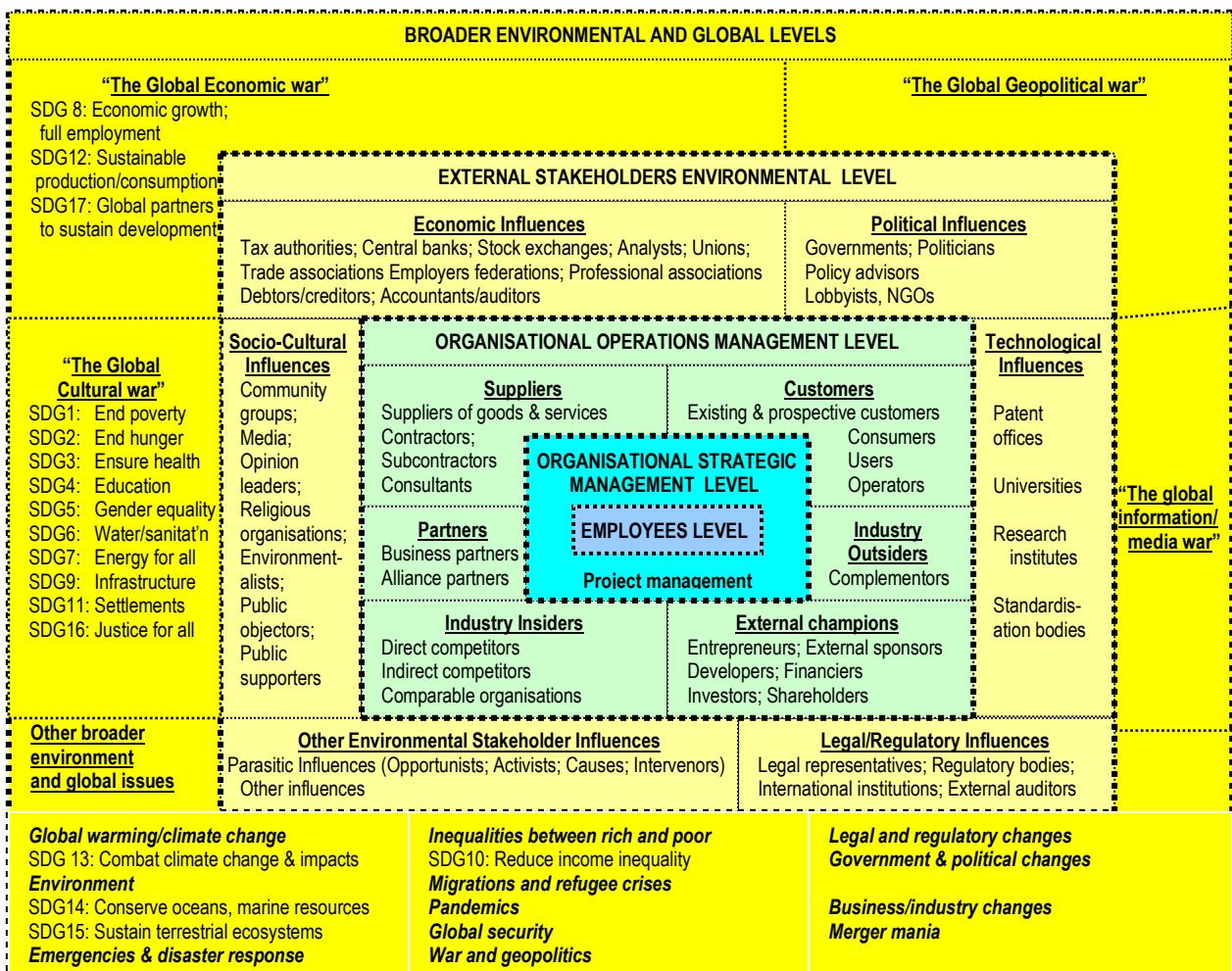
The summaries of these numbered SDGs hopefully indicate their nature clearly enough – but they are listed in their complete form in Pells 2021a, for those interested.

Pells also notes that SDGs have been relevant for GPM's *P5 Standard for sustainability in project management*, and for Steve Crosskey, head of the United Nations Office of Project Services, who has written about how “the SDGs can provide a basis for those involved with infrastructure projects to think about and advance sustainability”.

These notes encourage the thought that the above checklist format might be further developed into a more comprehensive type of model of environmental and global influences which are particularly relevant to projects and their organisations.

### SUMMARY/DISCUSSION

The environmental and global influences relevant to projects and their organisations which have been identified in this commentary can be conveniently summarised in the following very busy figure, which amalgamates the details of earlier models discussed.



**Figure 8. An embryo model of environmental & global influences relevant to projects/organisations**

This commentary was initially prompted by Pells' 2022 and 2021 editorials, which were concerned with "big picture" global and regional issues relevant to projects and their organisations. Since there are so many such issues, I thought of trying to model them in a way which gave a broad visual framework of different types of global/regional issues, their actual and/or potential components, and how they might relate to one another, and to projects/ organisations.

I elected to use an adaptation of an early Kerzner hierarchical model of project and organisational contextual levels as a basic five-level model for this commentary. I began by briefly discussing the two lowest levels of employees, and the strategic management of the organisation. This included a summary of various ways in which projects and project-related services contribute to the latter.

We then moved on to look at external stakeholders at what I described as the organisation's operations management level. We identified some twenty such stakeholders, in six groupings. The relevance of these stakeholders to broader environmental and global issues is that the latter may impact on the organisation and its projects via one or more of these stakeholders (as well as impacting directly). Therefore consequent reactive and proactive initiatives by the organisation may often include some form of involvement by, or partnership with, these operations-level stakeholders.

At the next level, which I described as the external stakeholders environmental level, over thirty such stakeholders were identified, in five groupings. Many of these qualify as global/regional-type influences in their own right. Additionally, outer level broader environmental and global issues may well impact on the organisation/projects via these types of external stakeholders – who could, in turn, often be included in consequent reactive and/or proactive initiatives from the organisation/project level.

These external stakeholder groupings rather naturally overlap with those of the outermost level – which I described as the broader environmental and global level – because the boundary between these two levels is essentially artificial, and certainly highly permeable. At this outermost level we identified over thirty issues potentially impacting organisations and their projects – most of them at a global level, with just a few at more regional levels. These also included the seventeen 2015 UN Sustainable Development Goals (SDGs) in a kind of checklist mode, allocated to certain of the global issues.

Although the above summary model is already quite detailed, there are undoubtedly many more broad global and regional issues that influence organisations and their projects. Additionally, the grouping of these issues can almost certainly be made more useful as further issues are added, and some of the existing duplications rationalised.

Finally, it is hoped that the above embryonic models might help others develop more comprehensive models of external influences and global/regional issues that affect organisations and their projects, and may prompt appropriate reactive or proactive initiatives by them.

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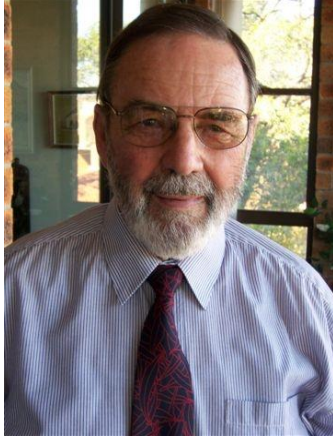
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**Alan Stretton** is one of the pioneers of modern project management. He is currently a member of the Faculty Corps for the University of Management & Technology (UMT), USA. In 2006 he retired from a position as Adjunct Professor of Project Management 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 240 professional articles and papers. Alan can be contacted at [alanilene@bigpond.com.au](mailto:alanilene@bigpond.com.au).

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