

Strategies for developing the autonomy, growth and external effectiveness of a project-based organisation: A case study¹

By Alan Stretton

INTRODUCTION

The subject of this case study is an Australian company, Civil & Civic (C&C), which was formed as a construction company in 1951. Its initial operations were as a contractor in the traditional construction tendering sector of the building industry in NSW. However, the company's CEO decided to extend its operations elsewhere, by providing design-and-construct services to external clients, and later extending these to client strategy-related services. These progressions also enhanced C&C's autonomy, and its ability to influence final project outcomes (external effectiveness). The above will be discussed in two separate sections, under the headings of **C&C contractor business [1] & [2]**.

In addition to, and broadly parallel with, the above, C&C began developing its own projects from around 1954, which I will discuss under the broad headings of **C&C development projects [1] & [2]**. The first of these developments was a substantial subdivision at Middle Cove, Sydney. Lessons learnt from that project, particularly regarding potential for improving design efficiency, were then applied to upgrade the management of later C&C development projects, particularly on the design side.

Importantly for this article, lessons from the latter also substantially influenced design-related decisions in the C&C contractor business. These facilitated substantial further developments in C&C's autonomy, growth and external effectiveness, as will be discussed in more detail in section [2] of the contractor business sector.

Finally, section [2] of the C&C development project sector will discuss a major move to establish high levels of autonomy, and of growth potential, in this sector.

In summary, the above topics will be discussed under the following main headings.

C&C CONTRACTOR BUSINESS [1]

Traditional tendering: Early recognition of some issues for contractors

C&C DEVELOPMENT PROJECTS [1]

C&C Middle Cove & later developments: Managing design for better outcomes

C&C CONTRACTOR BUSINESS [2]

Adding integrated design-and-construct services for external clients

Adding strategic support services for external clients

¹ How to cite this work: Stretton, A. (2025). Strategies for developing the autonomy, growth and external effectiveness of a project-based organisation: A case study, *PM World Journal*, Vol. XIV, Issue VII, July

C&C DEVELOPMENT PROJECTS [2]

Adding control of development finance to C&C's operational control

C&C CONTRACTOR BUSINESS [1]

Traditional tendering: Early recognition of some issues for contractors

As noted in the Introduction, Civil & Civic (C&C) initially operated as a contractor in the traditional construction tendering mode in the building industry in NSW.

Clark 2002:11 records the following early recognitions of C&C's CEO, G. J. Dusseldorp, about autonomy and control issues with the traditional tendering system.

Although construction contracting had given him an entrée into the Australian market, Dusseldorp was soon convinced that it was *not* the business to be in – the margins were too slim, for one thing; the factors outside his direct control (yet influencing project outcomes) were too numerous, for another.

This quotation reflects Dusseldorp's personal perspective on being in business in the traditional tendering domain. He saw C&C's potential prosperity as being constrained by traditionally low margins in the tendering system, and the organisation's control of its own operations constrained by too many uncontrollable external factors. Dusseldorp evidently regarded these constraints as significant impediments to C&C's autonomy – i.e. its ability to control its own destiny – on which he placed high value. This led to his looking beyond the traditional tendering domain to significantly expand C&C's business.

There are, of course, countless contractors who choose to remain in the traditional tendering system and are comfortable to continue operating in that domain. At a personal level, I spent two years with a major Australian construction contractor. This was excellent practical experience, but it also convinced me that the somewhat chaotic traditional tendering domain did not provide the type of longer-term professional environment that I was looking for. It happened that my next employer was Civil & Civic, which did provide such an environment – as will be further discussed shortly.

Another issue with this domain related to the design of buildings, about which Dusseldorp made the following observations, as recorded in Clark 2002:10

Dusseldorp believed there were two basic problems inherent in this hierarchical mode of project organisation. First, its counterproductive separation of design from construction denied clients the benefit of practical construction advice in the design planning phase (which, if incorporated then, could potentially reap significant cost savings without compromising ... aesthetics).

The second major drawback of the tender-based system was its flawed incentive structure, which, Dusseldorp argued, encouraged architects to design edifices and prompted contractors to cut costs in any way they could – neither of which necessarily served the best interests of the client.

Dusseldorp summarised the overall situation as follows (Clark 2002:29).

In sum, the financial microscope was being applied at the wrong end of the process: 'one goes to a lot of trouble analysing tenders to obtain "best value" for a pre-determined design,' Dusseldorp argued; 'whether the design itself is "best value" is, however, taken for granted.'

These questions about whether designs in the tendering system provided best value to the client came into sharp practical focus on the first of C&C's own development projects and prompted some significant shifts in both internal management arrangements, and external contracting mode, as now discussed.

C&C DEVELOPMENT PROJECTS [1]

C&C Middle Cove & later developments: Managing design for better outcomes

Civil & Civic's first development project was a substantial subdivision at Middle Cove, Sydney, in 1954-55 – as discussed in some detail in Murphy 1984, Chapter 3. With regard to design and value issues, cost estimates based on the original designs by external consultants indicated that this would be only a marginal investment.

So, Dusseldorp then began looking in detail at the various design components, and into integrating their contributions. As recorded in an internal document (Civil & Civic 1969),

By persistent analysis and investigation of design aspects, a 40% reduction was achieved in site costs [based on consultants' designs and projected capital expenditure] and the project converted from a marginal investment to a successful venture.

This experience affirmed the potential to reduce costs and add value by more extensive analysis and management coordination of project design phases.

C&C then made the following organisational design-related changes.

Appointment of "Project engineers" to manage design of all C&C developments

The subdivision experience was evidently the catalyst for C&C to appoint its own "project engineers" to manage the design phases of all its own development projects. (It is noted here that this descriptor was something of a misnomer, as the role could be, and was, filled by a variety of professional people, including architects, quantity surveyors and the like, as well as engineers).

Initially the project engineers were predominantly coordinating and managing the work of external design consultants – as for instance with Caltex House, Sydney, the first major office building developed by Civil & Civic. However, it was soon evident that control of design processes and outcomes could be further enhanced by C&C having its own in-

house design resources, to provide greater flexibility in managing these processes. This led to the establishment of an internal Design Services Group in the late 1950s.

Internal Design Services group established to further facilitate design control

...a Design Services group was set up within the Company, which included architectural, structural, electrical, mechanical and plumbing design services, and quantity surveyors. (Murphy 1984:29)

One advantage of this arrangement was that it is easier to control one's own design resources than those of other organisations. It also allowed more flexibility when needed, particularly with developing novel designs, such as the Progressive Strength system, which C&C developed in the 1960s. However, it should also be noted that external design consultants continued to be engaged, albeit on a more selective basis.

The cumulation of experienced project engineers, with internal design services backup, not only facilitated design control on C&C developments, but also facilitated extensions to C&C's contractor business to include the management of design, as now discussed.

C&C CONTRACTOR BUSINESS [2]

Adding integrated design-and-construct services for external clients

In effect, the C&C development projects just discussed could be seen as internal design-and-construct projects. Dusseldorp's concerns about the traditional tendering system not provided best value to the client then prompted his move to offer external clients an integrated design and construct building service. As Clark 2002:82 recorded, by 1958,

...he [Dusseldorp] had become convinced that participation in the traditional tender-based system of construction – with its inbuilt wastefulness, adversarial relationships, protracted delays, and cost over-runs – was 'no way of spending your life'. He resolved.... to free himself from the tender system's shackles by instead going to clients direct and offering them an integrated 'Design & Construct' [D&C] building service.

By this time C&C had been acquiring both experience and resources from its own internal development projects to be in a position to offer such a service to external clients with increasing levels of confidence.

As Murphy 1984:60 recorded, "By 1960 ...Civil & Civic had begun to sell its Design and Construct package deals".

After a modest start in the early 1960s, this D&C service became C&C's mainstream contracting business from the later 1960s and beyond. Evidently, the increasing number of client organisations believed it provided better value than traditional tendering.

In terms of organisational autonomy, most of the constraints of the traditional tendering system simply did not apply to C&C's design and construct service. Consequently, C&C

had much more autonomy with this type of service. (However, it should also be noted here that C&C continued limited operations in the traditional tendering field, primarily to keep up to date with what was happening in that market.)

One of the factors which undoubtedly contributed to the success of its D&C projects was C&C's insistence on a joint governance and participation body for each such project, which was called a Project Control Group (PCG). The PCG has been discussed in several of my earlier articles in this journal – most recently in Stretton 2024g and 2024k – so I will not go into any detail about its constitution and mode of operation here.

I will, however, reproduce part of a quotation from Clark 2002:40, which describes how the project team, which included client representatives, went about building greater value into the project design.

The first job of the project teamwas to consider 'alternative ways in which the various problems encountered in the design of a building can be overcome. These alternatives would be mulled over, costed and compared, in conjunction with an assessment of alternative methods of construction, 'to enable the correct solution to be obtained'. The 'correct solution' was the best value solution for the client. With the client actively participating in the project team during the initial design planning they were in a position to reach an informed decision as to which alternatives generated the most value for them.

This addition of design-and-construct services not only greatly extended the scope of C&C's operations in its contractor business, but it also greatly enhanced what can be termed the effectiveness of its operations, in the sense of helping provide "the best value for the client", as indicated in the above quotation.

These PCG-based joint governance and operational arrangements with the client also strongly contributed to C&C going on to extend its services into what could be broadly described as strategic planning and support services, as now discussed.

Adding strategic support services for external clients

As discussed in Stretton 2024g, it soon became evident that many clients did not have the necessary in-house capability to ensure that their stated building requirements would really satisfy their more basic strategic business needs. As recorded in Clark 2002:93, this led us to probe more deeply into their needs.

"...instead of taking the client's stated requirements for a building at face value, we got into the practice of questioning with them those instructions".

This, in turn, led to Civil & Civic recognising that it needed to develop a capability to help clients re-examine and consolidate their underlying strategic business needs. This up-front activity came to be known as 'Client Needs Determination' (CND). Actually this descriptor is a slight misnomer, as it does not really indicate that the CND service was actually a facilitating role, helping the client organisation clarify and evaluate its specific

needs, investigate its strategic initiative options, and choose the best option. The latter was then extended to helping the client organisation choose the "right" projects to best facilitate satisfaction of its needs.

Over the years, Civil & Civic developed many CND specialists in particular market segments. As I recorded in Stretton 2019c,

The extent of the demand for helping clients determine their real needs was such that Civil & Civic developed a substantial team of specialists in various sectors to cater for these on-going demands, including the education, industrial, health, office, retail and leisure sectors. In effect, they were business unit managers for their particular customer groups,

This further extension beyond design-and-construct services further extended the scope of C&C's operations in its contractor business, and its autonomy. It also further enhanced the external effectiveness of its operations, as it became more deeply involved in helping the client clarify strategic business issues.

C&C DEVELOPMENT PROJECTS [2]

Adding control of development finance to C&C's operational control

Returning now to Civil & Civic's own development projects, we have already mentioned the Caltex House development, which was eminently successful. But this also led to Dusseldorp making another key decision in relation to the autonomy of his organisation, as recorded in Clark 2002:82.

While Dusseldorp had been firmly in charge of the building process at Caltex House – he hired the architect and other design consultants himself and he oversaw construction with his firm's own engineers – someone else was still controlling the purse-strings. 'If I want to control my destiny from A to Z,' Dusseldorp realised, 'I knew I needed to get control of the money.'

His plan for doing so was recorded in Clark 2002:83 as follows.

He would create his *own* finance and investment company – a company that would *lend* money in order to build and *lease* property in order to make money – a vehicle to act as the financial arm (Lend Lease) to his production arm (Civil & Civic).

Under the auspices of Civil & Civic, Lend Lease Corporation (LLC) was floated as a public company in April 1958, and rapidly prospered. It created LL Development and LL Investments for these specialist roles (along with several other subsidiaries). LLC eventually acquired C&C from its original owners, so that C&C then became a subsidiary company within the Lend Lease group.

SUMMARY/DISCUSSION

The following table summarises the above discussions and hopefully is self-explanatory.

C&C OPERATIONAL GROWTH, AND FACTORS BEHIND RELEVANT DECISIONS	EFFECTS ON AUTONOMY ETC.
C&C contractor business [1] Traditional tendering: Early recognition of some issues for Supplier Organisations <ul style="list-style-type: none"> • Margins too slim; External uncontrollable factors too numerous • Constructability problems suggested that separating design from construction hinders optimal design solutions • However, the tendering system focuses on analysing tenders to obtain "best value", but the designs themselves are not similarly analysed for "best value" 	Autonomy: C&C autonomy constrained by uncontrollable external factors Growth: C&C elected not to focus on growth in traditional tendering Effectiveness: Little if any direct influence on final project outcomes
C&C development projects [1] C&C Middle Cove subdivision and subsequent developments: Better outcomes by analysing designs <ul style="list-style-type: none"> ❖ With C&C's Middle Cove subdivision, analyses and modifications of original consultants' designs resulted in 40% reduction in overall site costs, converting the venture from a marginal development to a successful one ❖ This affirmed the potential to reduce costs and add value by more extensive analysis and management coordination of project design phases. C&C then appointed "Project engineers" to manage design of all C&C developments, and subsequently established an internal Design Services group to facilitate these processes ❖ The cumulation of experienced project engineers, with internal design services backup, not only facilitated design control on C&C developments, but also facilitated extensions to C&C's contractor business 	Autonomy Initiating a development project already demonstrated substantial organisational autonomy. However, the extent of this autonomy is limited by reliance on external finance
C&C contractor business [2] Adding integrated design & construction services for external clients <ul style="list-style-type: none"> • By 1958, Dusseldorp had resolved to go to clients direct and offer them an integrated 'Design & Construct' [D&C] building service. • C&C had cumulated sufficient experience and resources from its own developments to confidently offer external D&C services • After a modest start in the early 1960s, this service became C&C's mainstream contracting business from the later 1960s and beyond • This service's effectiveness was enhanced by Project Control Groups (PCGs) - i.e. joint governance and operating arrangements with clients 	Autonomy: Traditional tendering constraints mostly eliminated in design-and-construct mode Growth: C&C expanded its scope to include design and construct Effectiveness: Substantial contribution to effectiveness because of control of design
Adding strategic support services for external clients <ul style="list-style-type: none"> • Via PCGs and/or direct questioning, C&C found that many D&C clients were unclear about their underlying business (or equivalent strategic) needs • Civil & Civic then developed the capability to help clients do this, which we called 'Client Needs Determination' (CND). • This service included then helping the client organisation choose the "right" projects to best facilitate satisfaction of these business needs. • Over the years, Civil & Civic developed CND specialists in many different market segments, which effectively became mini businesses in their own right. 	Autonomy: Enhanced autonomy via involvement with client strategic needs Growth: Further scope expansion via helping clients clarify strategic needs Effectiveness: Further contribution via involvement with client strategic needs
C&C development projects [2] Adding control of development finance to C&C's operational control <ul style="list-style-type: none"> ❖ C&C's earlier development projects were financed by external entities. Dusseldorp noted that ".....If I want to control my destiny from A to Z,..... I knew I needed to get control of the money". ❖ ' Clark 2002:83 records that he would do this by creating his own finance and investment company –a vehicle to act as the financial arm [Lend Lease] to his production arm [Civil & Civic]". ❖ Under the auspices of C&C, Lend Lease Corporation (LLC) was floated in April 1958. It created separate development, investment and other subsidiaries, and eventually acquired C&C from its original owners 	Autonomy Control of finance gives very high levels of organisational autonomy

The main reason for submitting this article for publication is that it is a concrete case study of how and why one project-based organisation elected to extend its activities beyond the boundaries of conventional project "boxes", and of some of the payoffs for so doing.

I believe there are many parallel opportunities for other project organisations to expand their operations in their own ways – ways that are appropriate to their own particular circumstances. My hope is that this article may stimulate others to further explore such possibilities.

REFERENCES

CIVIL & CIVIC (1969). Project Engineer Seminar, 18-19 September 1969: Notes on proceedings. (Mimeo)

CLARK, Lindie (2002). *Finding a common interest: The story of Dick Dusseldorp and Lend Lease*. Cambridge, UK; Cambridge University Press

MURPHY, Mary (1984). *Challenges of change: The Lend Lease story*. Sydney, Lend Lease Corporation Limited.

STRETTON, Alan (2024k). Commentary on project management partnering with external bodies. *PM World Journal*, Vol. XIII, Issue XI, December. <https://pmworldlibrary.net/wp-content/uploads/2024/12/pmwj147-Dec2024-Stretton-commentary-on-project-management-partnering.pdf>

STRETTON, Alan (2024g). Expanding construction project Supplier Organisations' services to deliver progressively increasing value to customers: A case-study-based exemplar. *PM World Journal*, Vol. XIII, Issue VII, July. <https://pmworldlibrary.net/wp-content/uploads/2024/06/pmwj143-Jul2024-Stretton-expanding-construction-supplier-services-to-increase-value-3.pdf>

STRETTON, Alan (2019c). Expanding the scope of project management services in the construction industry, to add value and reduce costs. *PM World Journal*, Vol. VIII, Issue III, April. <https://pmworldlibrary.net/wp-content/uploads/2019/03/pmwj80-Apr2019-Stretton-expanding-scope-of-project-management-services-in-construction.pdf>

About the Author



Alan Stretton, PhD

Life Fellow, AIPM
Sydney, Australia



Alan Stretton is one of the pioneers of modern project management. 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. Alan 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 270+ professional articles and papers. Alan can be contacted at alanailene@bigpond.com.au.

To see more works by Alan Stretton, visit his author showcase in the PM World Library at <http://pmworldlibrary.net/authors/alan-stretton/>.