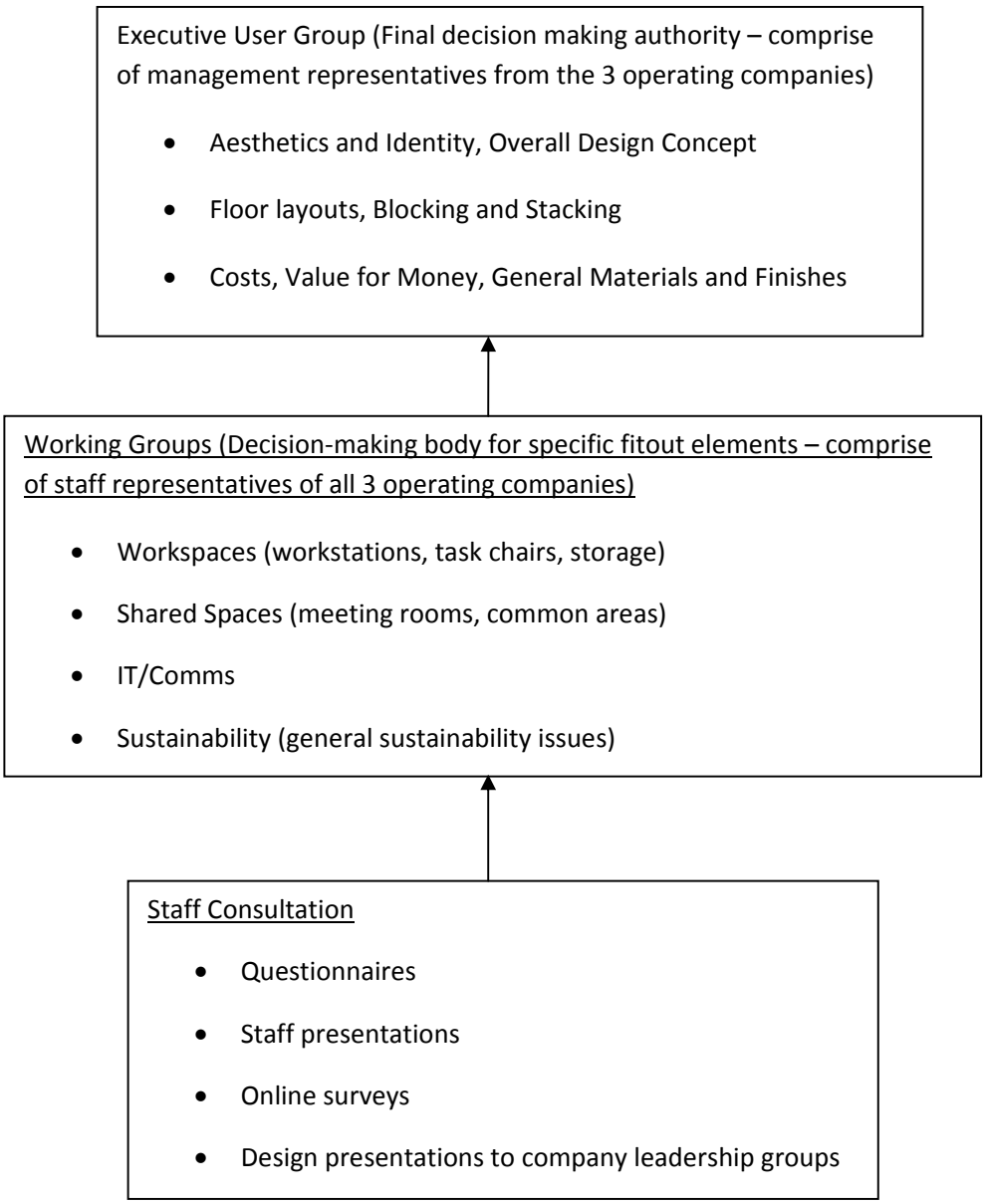
I commenced my career as a structural engineer with Arup in Hong Kong and was involved in the design and construction of a number of high-rise commercial and residential projects, including a 38 storey Office Building, an 89 storey hotel/apartment building and a 78 storey serviced apartment building. This experience proved to be invaluable in my future project management career by providing me with a solid understanding of the mechanics of design, working in a project team environment as well as site supervisory experience as a Resident Engineer. I attained my professional qualification with the Institution of Structural Engineers in 2005 and achieved a significant result (achievement of the highest mark out of all Hong Kong candidates and also second in the world out of more than 800 candidates). I also attained a Master degree in Real Estate with the University of Hong Kong at the same time. Looking to diverge my career, I moved my career towards project management, where I offered an opportunity to work for a major listed developer in Hong Kong (Hongkong Land) as an in-house project manager for a high-rise residential project. In 2007, I relocated back to Australia (where I grew up in primary and secondary school) and worked for a project management consultancy in Sydney (Coffey Projects) on a number of education, commercial and mixed use projects. In 2008, I relocated to Brisbane and worked with my current company (Thinc Projects – www.thincprojects.com) on commercial, fitout and education projects for clients from the private and public sectors. I am glad to have been exposed to different working environments early in my career (eastern and western cultures) as well as different business natures (engineering, PM consultancy and developer), which has given me the invaluable skills in managing different people, clients, situations and projects.

I am fortunate enough to have been involved in a number of different projects in my early career, which has made me sensitive to different cultures and styles of working to achieve a positive outcome. In a highly commercial environment driven by the end result of sales and leasing, I have been able to adopt a practical and hard-lined approach to design and cost management and stress the importance of timely and accurate end-results. Working with public sector clients, I am a strong advocate of the importance of accuracy in process and ensuring that all stakeholders are well informed – communication and understanding of key stakeholder drivers are of paramount importance. I am also a firm believer in the value of strong team dynamics and project success can only be achieved by respect and co-operation amongst the team – consultants, contractors, clients, government. I believe that a person is at its best when motivated and given intellectually challenging tasks – as such, I tend to provide expected performance outcomes rather then prescriptive requirements. My role then tends to focus more on managing project risks and addressing the Client's main priorities – whether they'd be achievement of a market-driven interior design and sales outcome for a residential project, the achievement of a fixed timeframe for delivery of school infrastructure projects or delivery of a workplace which will cater for the client's future business structure/needs. In the transition from a structural engineer to a project manager, I have been able to step back from my technical background and avoid micro-managing issues.

In a current project in which I have been involved since August 2008, I was given the exciting challenge to manage a major integrated fitout. The Client is a global multi-disciplinary design, planning and engineering consultancy currently located in 9 office locations in Brisbane. An opportunity has arisen for these offices to co-locate all 900 staff members into one office location in a new building under construction and Thinc Projects has been appointed as the project manager for the fitout and the Tenant's Representative in liaison with the building Landlord. The Client is undergoing significant global business transformation involving the re-branding of different business practices (including engineering, architectural and environmental practices) into one coherent entity and this new fitout is intended to serve as a major catalyst. Thinc Project's role was to facilitate establishment of the client's brief and aspirations, project management of the fitout design and construction and liaison with the base building

landlord in the integration of fitout design into the base building. It is the intention of the client to utilize this project to motivate a wider audience in the company as part of the business transformation process. The Client's objective was simple – to create a workplace that unites all the business units into one entity.

We realized the importance of establishing a Client brief right from the outset. Realising the need for succinct and timely decision-making whilst ensuring that stakeholders are adequately informed, I devised a structured approach to formulate a client's aspirational brief. This involved a hierarchy of "Working Groups" as well as an "Executive User Group", which serves as key decision-making bodies in the fitout. The following diagram describes the construct of this structure, which is in place throughout the project's duration.



As the lead designer, the Architect has taken the lead in facilitating all the working group sessions and understanding detailed user requirements. At the completion of the initial briefing process with the Working Groups and Executive User Group spanning a period of 3 months, the following were identified as the project's key objectives and design principles, reflecting the company's core values:

- Show the company's commitment to sustainability
- Embody a sense of one company – sense of one community whilst maintaining identity of each business.
- Reflect the global, regional and local nature of the business
- Showcase the diversity of the business in planning, design and engineering

I managed the preparation and signoff of a functional design brief capturing project aspirations and user requirements prior to proceeding to schematic design. This document was socialized around the company through staff presentations, preparation of a project poster and advertising on the company's intranet as a means of staff engagement.

With the commencement of schematic design and the construction of the base building proceed in full speed, pressure was on for all project team members to progress the design in an efficient manner, whilst not compromising the original brief. The timely integration of the fitout's requirements (in-ceiling services, structure) into the base building was one of the team's targets. Understanding the natural tendency for Contractors to design and construct the building as efficiently as possible, I recognized the need to establish open communication with the base building team at the outset and initiated weekly program co-ordination sessions to understand priorities and integration requirements based on actual project progress. In light of the user consultation hierarchy described above, design elements were prioritized as follows and the fitout design program was developed on this basis.

- Structure – interconnecting staircases, structural steelwork, heavy load zones
- Services – ceiling design, floor layouts (governing detailed services design)
- Finishes and Fittings – Floor/wall finishes, FF&E, workstations, colours, artwork, signage etc.

One of the key features of the design was the introduction of an internal staircase linking up all 5 tenancy floors (total approx 13,500 sq m) of the fitout in response to the client's aspirational brief of greater inter-connectedness and a sense of one company. This was to be a key design element of the fitout and we successfully achieved this in the end. As this feature will greatly influence the final fitout solution and involve a number of technically challenging issues, great emphasis was placed on this feature.

The proposal presented a number of issues – landlord approval, fire engineering strategy, and structural feasibility. We identified the most critical issue as being the need to gain certainty on the proposal from external authorities i.e. fire department and the timely integration into the building's structural design and site construction. Various design options were thoroughly investigated, costed and presented to the Client. I instigated liaison with the fire department very early in the design process to minimize uncertainty surrounding this issue. The design was tested rigorously and refined numerous times prior to its final acceptance, just in time for structural design and concreting. I acted as the key liaison person between the tenant and the landlord throughout this process and was able to draw on my past technical background and assisted greatly in the resolution of this issue.

On the issue of people management, I am a believer of the establishment of strong team dynamics. Regular face-to-face communication and meetings were convened and chaired by myself to foster the team bond to resolve technical co-ordination issues. Being the leader of the project team, I also clearly defined expectations at the outset, with a detailed design programme prepared and monitored on a weekly basis. This programme also served as a tool to focus the project team on the required outcomes. Technical deliverables were also clearly defined at the commencement of each design stage so that the team is clear on the expectations from each stage – and draft documents were requested in advance for quality review and cost checks. At the completion of the design development stage, there was an issue of a cost overrun. I instigated a value management session with the Client and the consultant team to understand priorities, identify "over-designs" and identify potential cost savings. This was based on

preservation of the overall design concept and project principles developed at the outset. The result was a 10% reduction in costs, which was subsequently implemented into the fitout.

One of the key challenges in this project was the management of a learned and diverse Client group who had varying and sometimes conflicting priorities – budget, design quality and staff engagement. The Client consisted of people with different backgrounds – architects, engineers and the layman. Knowing that this will result in delays in the project and constant non-resolution of design issues, we initiated leadership group meetings with the senior management of each business entity. The purpose was to understand the company culture, define fundamental project principles and articulate the vision for the project. This sets the scene for the subsequent briefing phase. With the higher level of detail that is normally associated with a fitout design, a client's decision register was prepared and monitored on a monthly basis to capture all client decisions and ensure that information is not lost. A master design issues register was also prepared to keep track of pending design issues to be resolved and served as a main tool in consultant design management.

A key aspiration of the project was to embody practical and sustainable design initiatives. This required the team to challenge the boundaries of conventional workplace design. Conventional fitouts have focused on green rating tools as a basis for design. However, we were required to look beyond such rating tools and focus on initiatives that add value to the business operations. To realize this, I understood the need to create motivation and excitement and involved not only the engineers but also all other disciplines to inject an element of creativity. Extensive benchmarking was carried out with international organizations around the world and brainstorming sessions were held to challenge the boundaries. A forum was set up on the Client's intranet to gather ideas on this subject. I initiated a workshop to scrutinize the fitout design from first principles and instigate some lateral thoughts from all consultant disciplines.

Procurement of the fitout works also posed some challenges. The Client's intention was for a negotiated single-select design & construct contract to be adopted based on their past working relationship with the Contractor. The project was to be novated to the Contractor based on a partially complete design. This posed several issues - potential lack of price competitiveness and risk of jeopardizing quality at the expense of cost. We addressed this issue through a novel procurement arrangement with the following features:

- Preparation of a detailed brief which captures all of the client's design and project requirements i.e. materials/finishes quality, services requirements, design concept, project principles/objectives, fire engineering requirements. This was culminated from all previous user consultation sessions. This brief is tightly worded and serves as a performance-based document governing the contractor's project obligations.
- A design & construct contract which allowed for an extensive client design and cost audit mechanism at key project milestones to ensure that the client's brief is not compromised. We would remain as the Principal's Representative to protect the Client's interests and ensure compliance with the brief.
- Provisions to ensure that the sustainability agenda is not lost through time and the need for continuous end-user consultation.

- Ensuring that the Contractor is fully aware of the Tenant's fitout and construction-related obligations under the Lease.

The project is currently in contract negotiation stage and would be expected to be complete over the coming month.

I believe the biggest challenge on this project so far has been in the management of the various stakeholders – people within the Client organization itself, external authorities, the building owner and Contractor and achieving impartiality between varying and often opposing needs. I have been able to manage this successfully through close communication with all parties and programming of the project based on priorities. With the Contractor striving to complete the building and fitout on time and managing the numerous client groups and expectations, I functioned as the key interface and established a clear work plan for the consultant team.

In summary, the biggest lesson that I have learnt so far is the need to understand client drivers and priorities and manage expectations with all stakeholders for successful delivery. I see the role of a good project manager is to manage risk for the Client and possess the impetus and charisma to 'make things happen'. On this project, the main risk lies in the need to achieve the right balance between programme constraints against design quality and the level of user consultation. This dilemma will always be evident in all projects and the skills I have attained on this project will become extremely useful in my future career.