

BUILDING
REGULATORY
REFORM
SUMMIT 2018

The State of Contemporary Property Development Structures and Systems in Australia

Dr Jonathan Drane

Western Sydney University, Sydney Graduate School of Management

Today : How Did We Get Here?

Introduction: The Drowned Building and other tragedies

A Little History of The Property Development System

In The Beginning: The Erosion of Architectural Practice

The Rise of the Private Property Developer

The Advent of Project Management & D&C

Emergence of The Private Certifier

Lessons from the Drowned Building

A Good Case Example: Gateway Apartment Tower Townsville

A Way Forward- A Defects Detection Matrix

Introduction: The Drowned Building

The apartment block was nearly a decade old and looked like a drowned beast,

Every apartment owner was demoralised and in a state of resignation.

The building had rooms which were mould-effected from continuous leaking and damp intrusion.

Introduction: The Drowned Building

The roof was very low quality, gutters were installed back the front,

Planters sat on balconies that leaked into apartments below.

Precast panels were not joined properly and allowed water to flow in.

The car park had flooded several times.

From Defect to Tragedy

Tower Tragedies National

Bankstown Fire 2012

The Bankstown incident involved a fire in a multi-apartment tower which saw two young women jump from the fifth floor to escape the intense fire and flames. Tragically one of the women did not survive the fall. Fire brigade commentary noted that a fire door burned down in a matter of minutes instead of having a one to two hour rating.



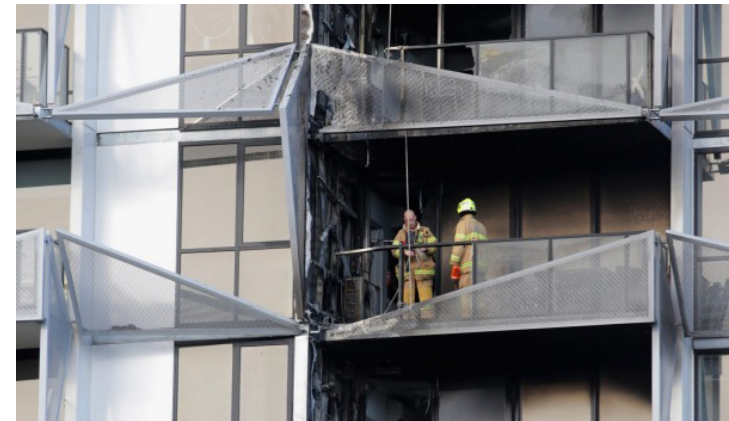
In memory

From Defect to Tragedy

Tower Tragedies National

Docklands Lacrosse Fire 2014

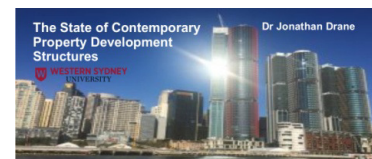
This 20 storey apartment tower saw 500 residents evacuated as the fire climbed the external balconies and engulfed seven floors. Later studies showed the façade materials to have contributed.



<http://www.afr.com/real-estate/two-years-after-fire-melbournes-lacrosse-building-retains-aluminium-cladding-20170615-gwrpkd>



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From Defect to Tragedy

Tower Tragedies International

Grenfell Tower UK 2017

The greatest tragedy in the era of tragedies, the Grenfell apartment tower was engulfed with rapidly ascending fire to see many people not survive.



In memory

From Defect to Tragedy

Tower Tragedies International

Torch Tower Dubai 2017

This high rise tower set fire and saw damage to 34 apartments over 64 floors. The residents thought it was a false alarm.



<https://www.thenational.ae/uae/cigarette-caused-dubai-s-torch-tower-fire-1.624072>

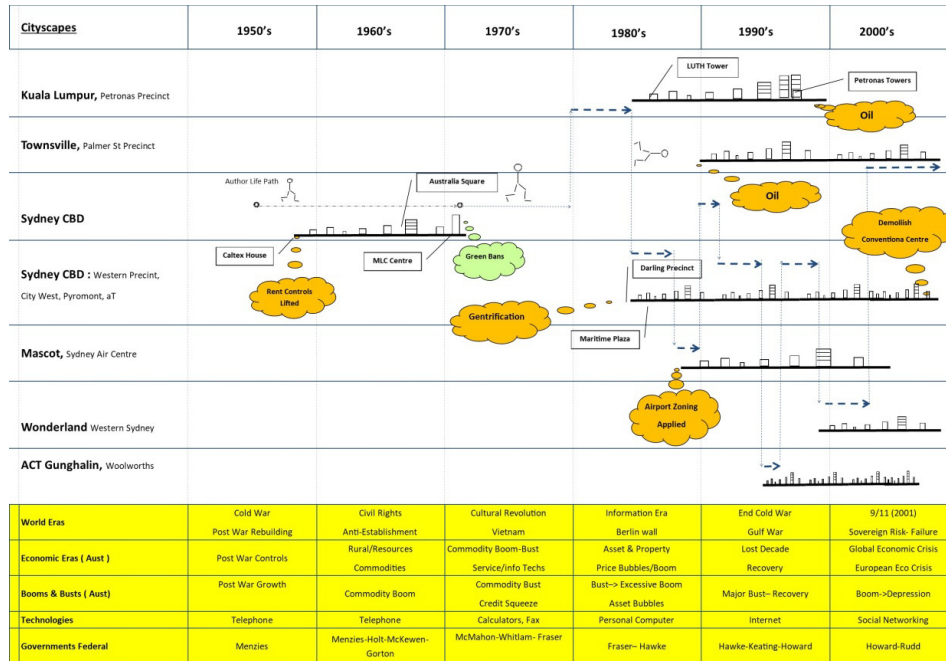


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A Mini-History of The Property Development System (Sydney Centric)



Jonathan Drane's Historical Journey Through The Construction-Development and Finance Worlds

This formed the basis of an 'auto-ethnographic' historical reflection and subsequent history of the industry structures.

See separate document for more detail.

Jonathan Drane's Historical Journey

<http://www.jondrane.net/research/the-state-of-contemporary-property-development-structures/>

<u>Cityscapes</u>	1950's	1960's	1970's	1980's	1990's	2000's
Kuala Lumpur , Petronas Precinct					LUTH Tower	Petronas Towers
Townsville , Palmer St Precinct						Oil
Sydney CBD	Author Life Path		Australia Square			Oil
Sydney CBD : Western Precinct , City West, Pyromont, aT	Caltex House	MLC Centre	Green Bans		Darling Precinct	Demolish Conventiona Centre
Mascot , Sydney Air Centre			Gentrification	Maritime Plaza		
Wonderland Western Sydney					Airport Zoning Applied	
ACT Gunghalin , Woolworths						
World Eras	Cold War Post War Rebuilding	Civil Rights Anti-Establishment	Cultural Revolution Vietnam	Information Era Berlin wall	End Cold War Gulf War	9/11 (2001) Sovereign Risk- Failure
Economic Eras (Aust)	Post War Controls	Rural/Resources Commodities	Commodity Boom-Bust Service/info Techs	Asset & Property Price Bubbles/Boom	Lost Decade Recovery	Global Economic Crisis European Eco Crisis
Booms & Busts (Aust)	Post War Growth	Commodity Boom	Commodity Bust Credit Squeeze	Bust-> Excessive Boom Asset Bubbles	Major Bust- Recovery	Boom->Depression
Technologies	Telephone	Telephone	Calculators, Fax	Personal Computer	Internet	Social Networking
Governments Federal	Menzies	Menzies-Holt-McKewen-Gorton	McMahon-Whitlam- Fraser	Fraser- Hawke	Hawke-Keating-Howard	Howard-Rudd

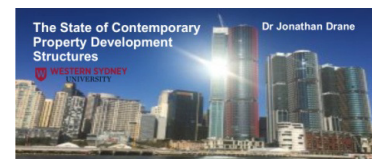


The Property Development System: Mini History (Sydney Centric)

System Made of:	1950s	1960s	1970s	1980s	1990s	2000s
Property Development	Institutions	Private Developers	Lend Lease Model	White Shoes? Skase, Bond	Fall out and regrouping	Anyone is a Developer
Finance/Banking	Anchor Tenant Finance	Developer Finance	Developer Finance	Property Trusts	Development Trust, Presales	Mezzanine Finance
Architect	Master Arch	Master Arch	Architect	Design & Attendance	Design & Document	Design & Document
Iconic Projects	AMP Building	Opera House	MLC Tower	Darling Harb'r	World Tower->	Green Square
Construction	Master Builder	Master Builder	D&C	Delivery Systems	Developer Builder	Developer DIY Private Cert'n
Key Events	Rent Controls Lifted. Post War Prosperity.	End of Coy Title Strata Act	Commodity Boom Oil Crisis	Banks De-regulated. Oz Dollar Floated	Asset Bubble Burst Wall St Crash	9/11 Sub-prime lending GFC

The Property Development System: Path To Decay (Sydney Centric)

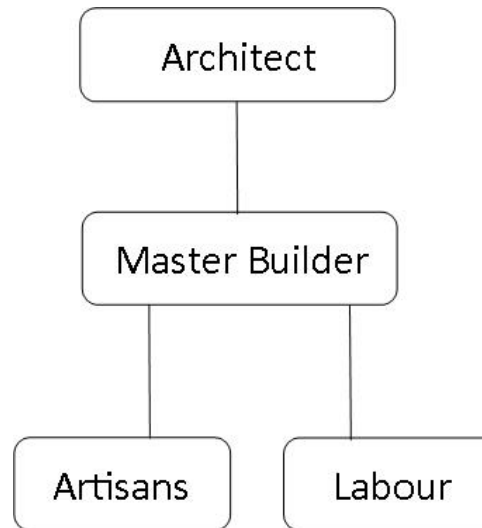
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The Erosion of Architectural Practice

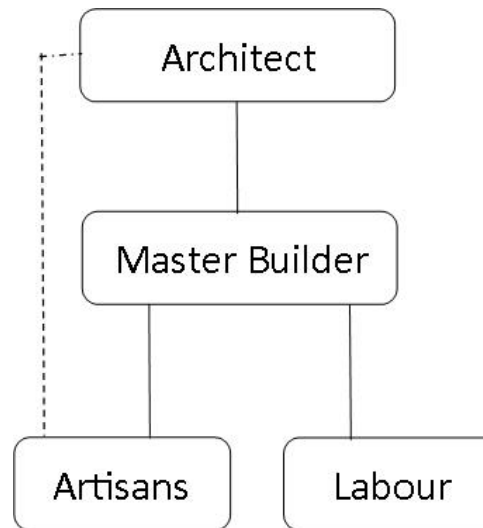
In the Beginning

In the beginning there was the architect, the creator of edifices and monuments that would seemingly last forever.



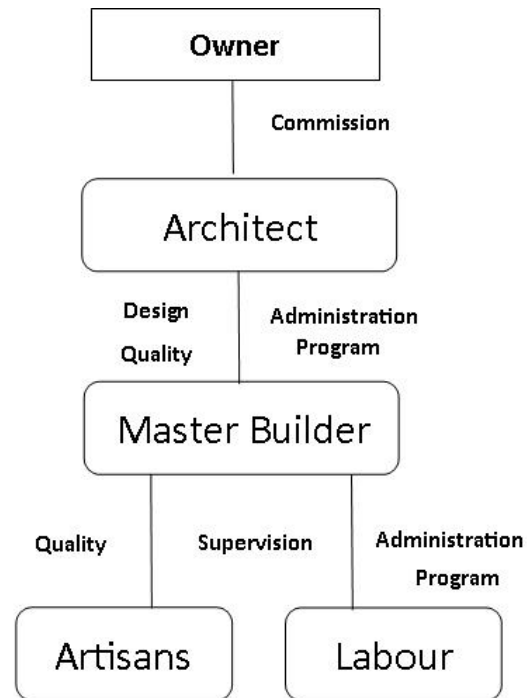
The Erosion of Architectural Practice

There was also the master builder



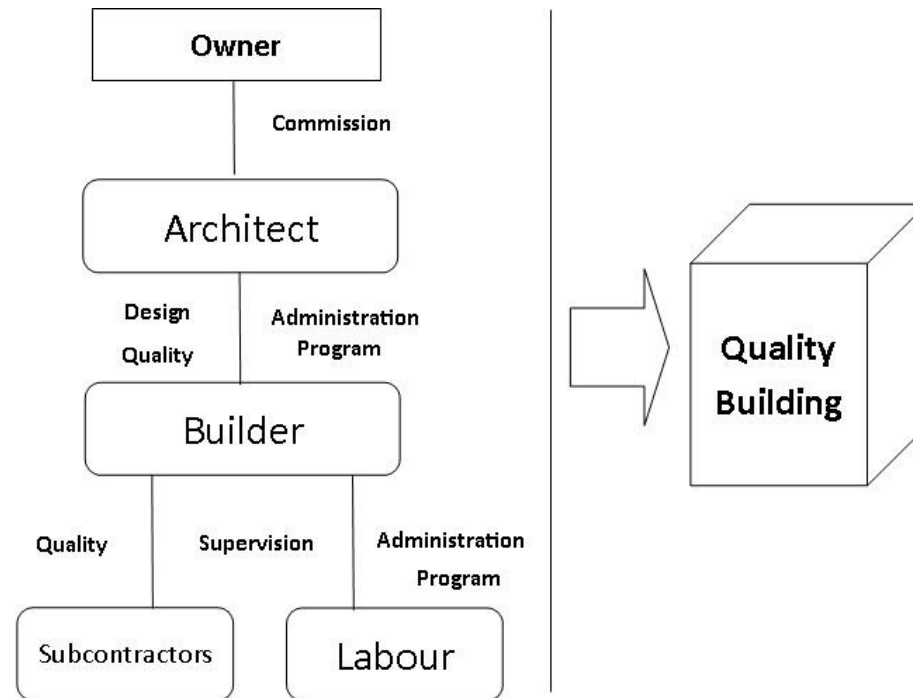
The Erosion of Architectural Practice

Design, Quality and Administration by the Architect



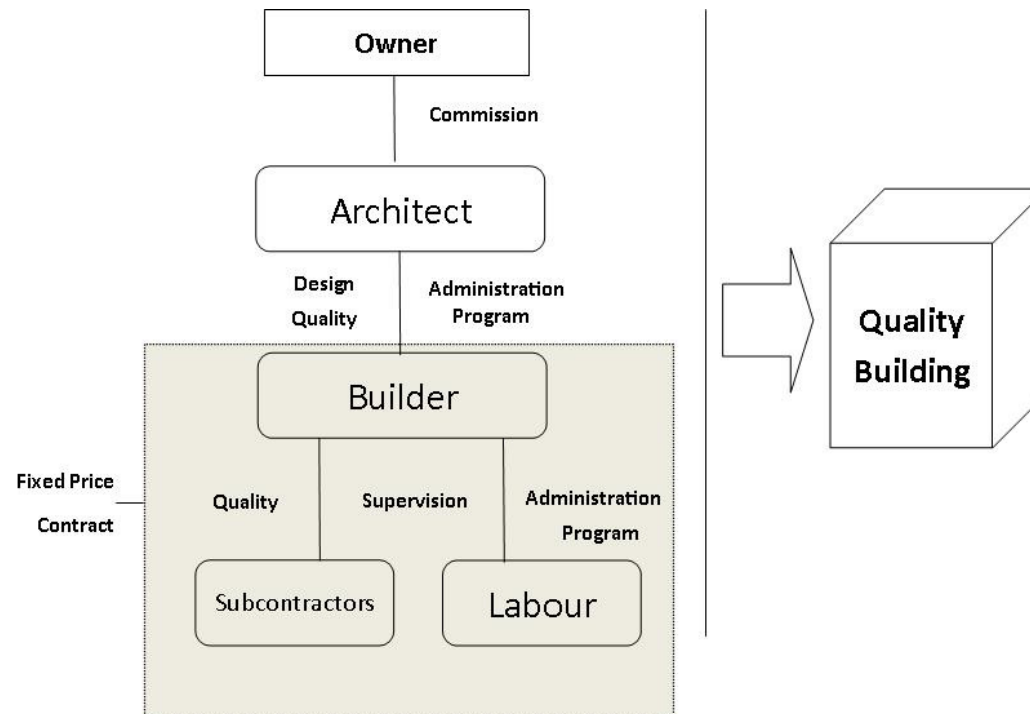
The Erosion of Architectural Practice

Traditional System- Architect and Master Builder



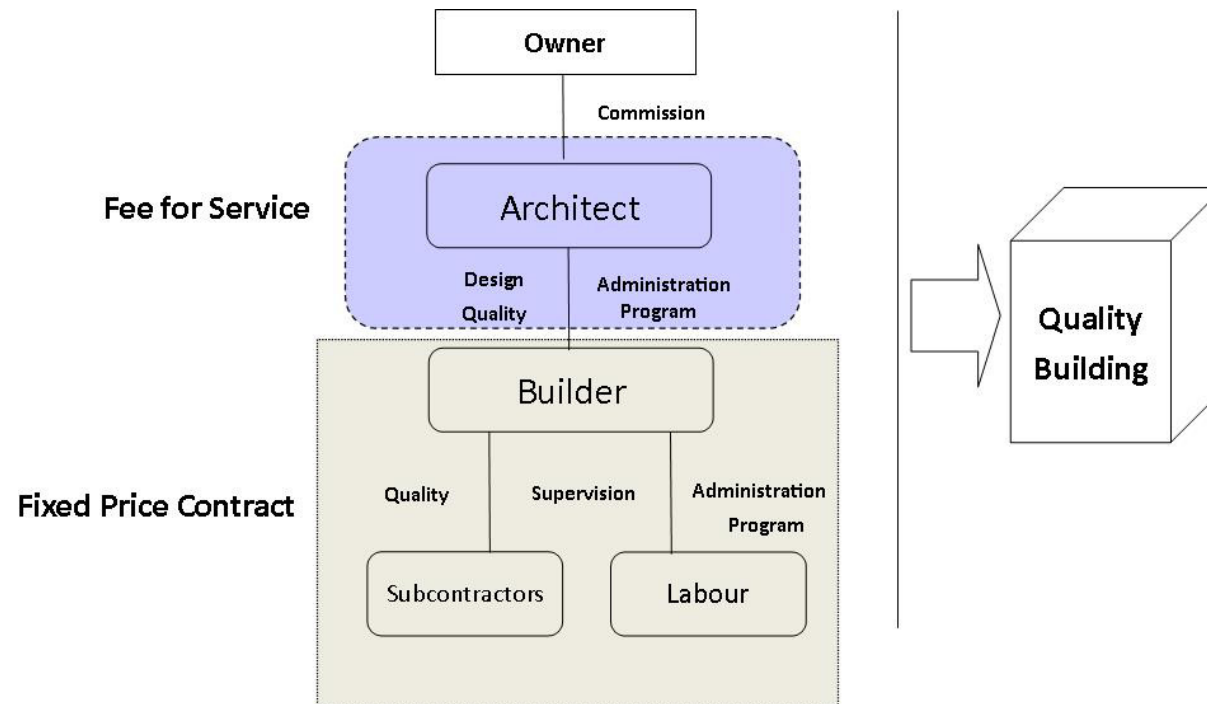
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Traditional System- Architect and Master Builder

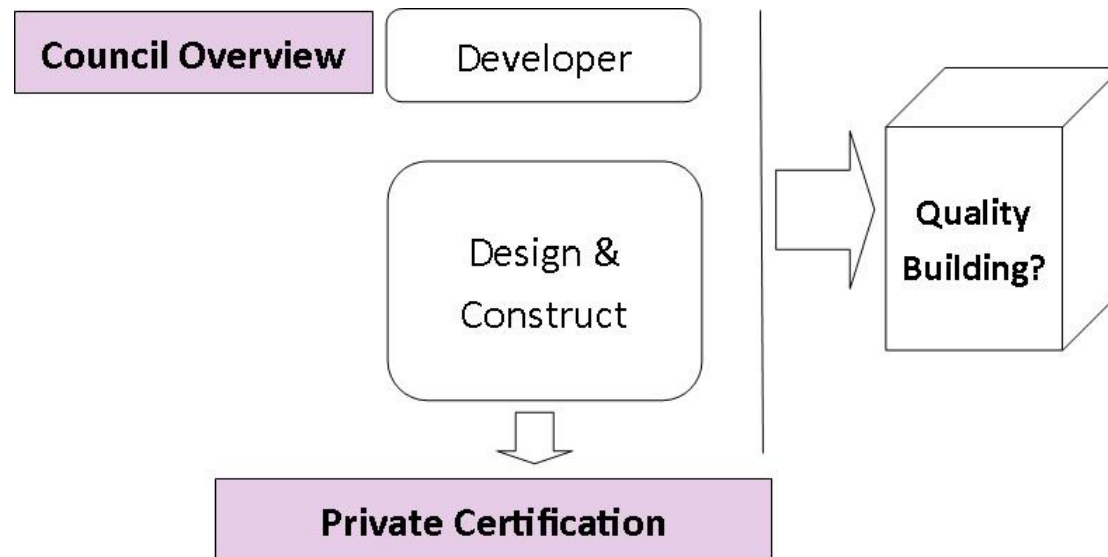


The Erosion of Architectural Practice

Traditional System- Architect and Master Builder



The Rise of the Private Property Developer



The Rise of the Private Property Developer

The first high rise property development Caltex House 1957 Civil & Civic



<http://sydneyarchitecture.com/GON/GON051.htm>

Vignette: Caltex House the first integrated Private Property Development Deal

The first recognised high rise building (and the first in concrete) in the city of Sydney (besides the Amalgamate Wireless buildings steel tower) was also built (and developed) by Civil and Civic in the form of Caltex House in October 1957 (Murphy 1984, p.16,27).

This project was also the first large scale commercial development deal, not only for Civil and Civic, but also for the city. Post war rent controls, which stopped profiteering were to be lifted in 1957 (Murphy 1984, p.16) and make way for what would be called the anchor or long term tenancy. This would become a prerequisite as a covenant on lending for development of commercial offices in years to come. The deal was between Civil and Civic (developer), Caltex Oil (long term tenant- forty years) and AMP (financier and end owner) (Murphy 1984, p.18). Lend Lease, which did not exist at this point was formed the year after, out of a Tahitian visit and vision by Dusseldorp in 1958 (Clark 2002, p.81)

Extracted from Drane 2015, p341, 342



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The Rise of the Private Property Developer

The first D&C Project 1953 Civil & Civic

Vignette: The First D&C Project

Civil and Civic had their origins in Australia in providing prefabricated housing to the Snowy Mountains scheme in the early 1950's. Their first design and construct project using what they called 'the better way' and probably the first of its kind in the commercial sector of the Australian building industry was a small gatehouse (Murphy 1984, p.7) built in 1953 for The Commonwealth Oil Refinery.

The first high rise property development Caltex House 1957 Civil & Civic

The first recognised high rise building (and the first in concrete) in the city of Sydney (besides the Amalgamate Wireless buildings steel tower) was also built (and developed) by Civil and Civic in the form of Caltex House in October 1957. (Murphy 1984, p.16, 27).

Extracted from Drane 2015, p341.



The Rise of the Private Property Developer

The advent of strata



**Blues Point Tower
North Sydney
1962**

<http://www.visitsydneyaustralia.com.au/blues-pt-tower.html>



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The Rise of the Private Property Developer

The advent of Strata 1961

On July 1 **1961** the Conveyancing (Strata Titles) Act came into force. The New South Wales government had officially formulated a framework for strata titled properties that would be replicated around the world in such countries as Canada, Dubai, Singapore, New Zealand, South Africa and Malaysia to name only a few. Further legislative refinement in **1973** led to the passing of the NSW *Strata Titles Act and Regulations*.

<https://www.netstrata.com.au/strata-title-history/>

Interestingly, the first strata-titled building in the world was located in Burwood. The strata plan for the 18 apartments was approved by Burwood Council on July 28 **1961**.



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The Rise of the Private Property Developer

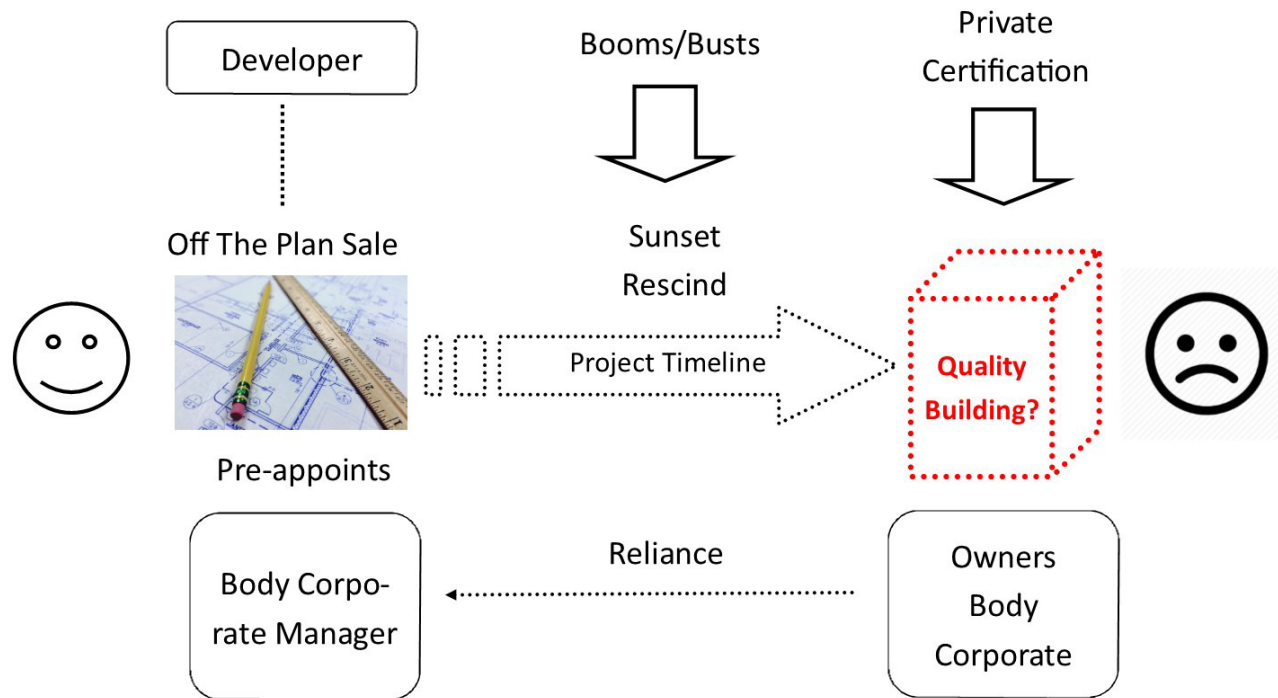
The advent of Pre-sales

From wholly owned buildings to trading of individual units
The 'un-real estate market?'

The umbilical connection Between Property Developer and Strata Community

The Umbilical Reliance

Between Property Developer and Strata Community



<https://pixabay.com/en/blueprint-ruler-architecture-964629/>

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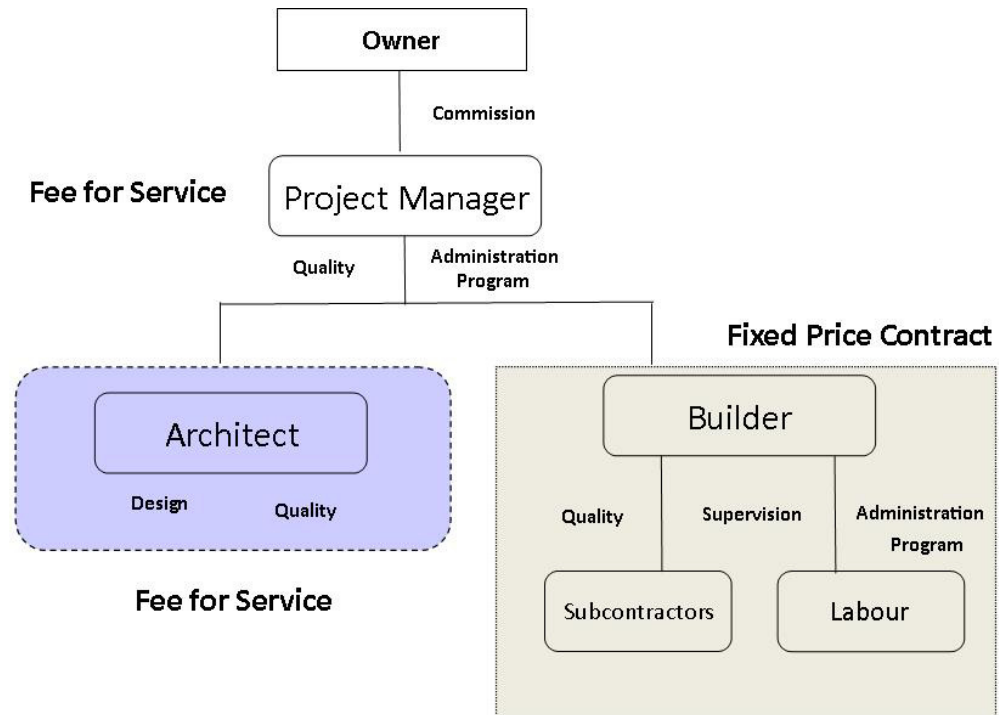


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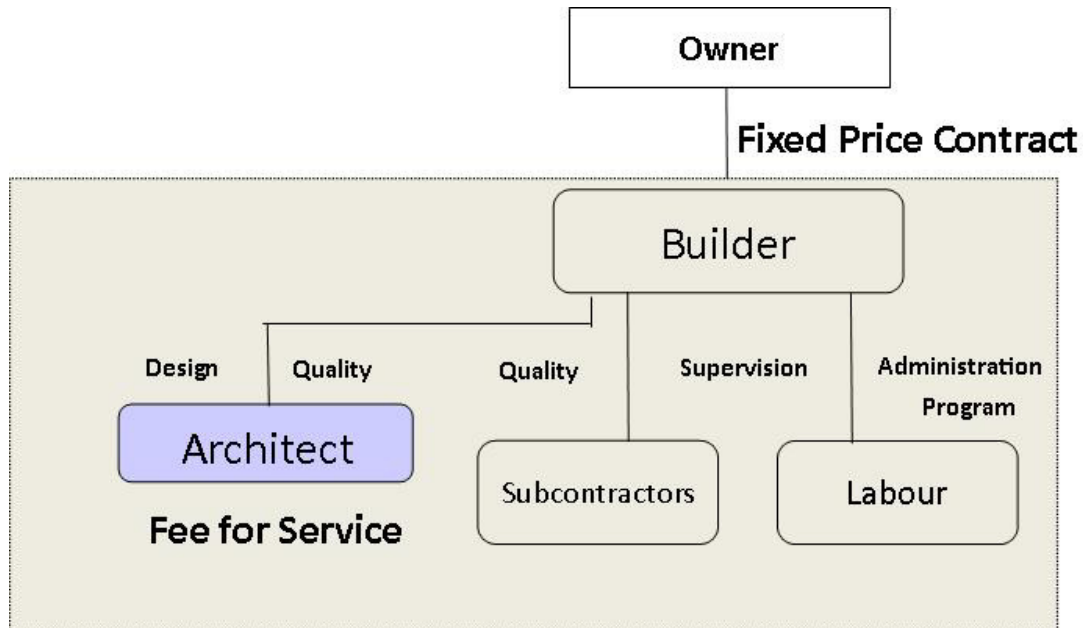


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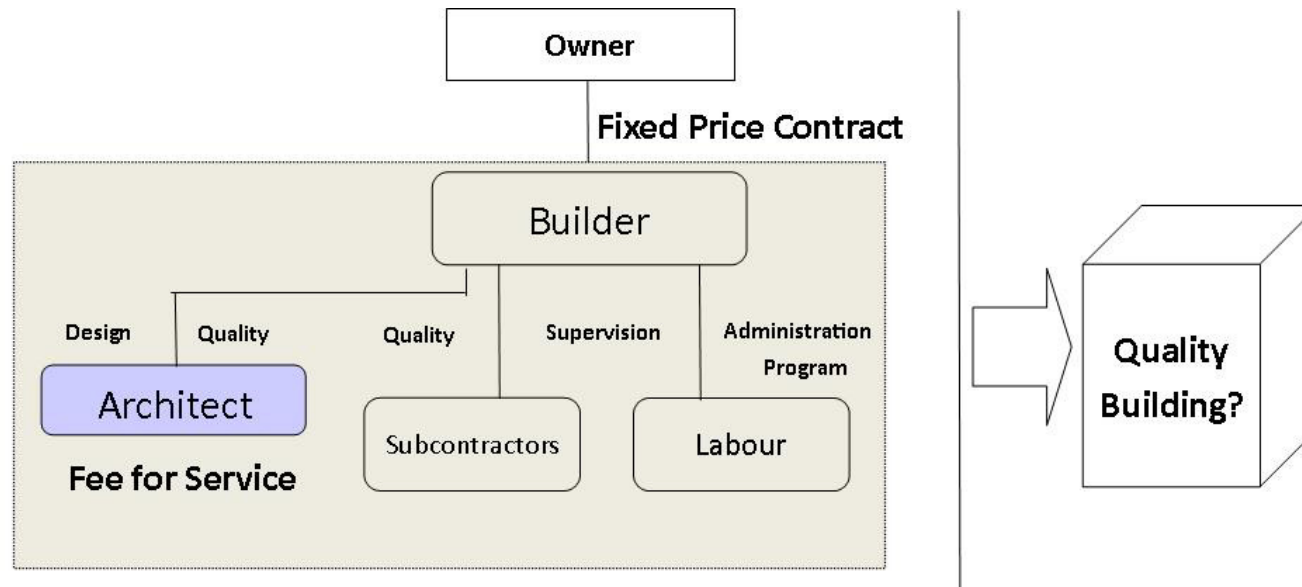
The Advent of Project Management



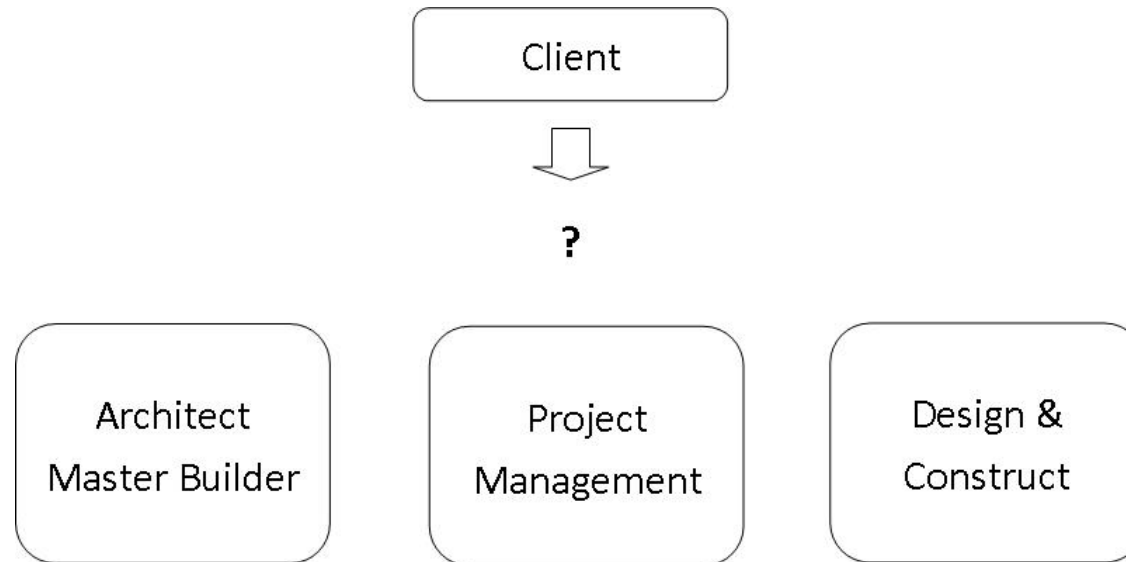
The Advent of D&C Building Contracts



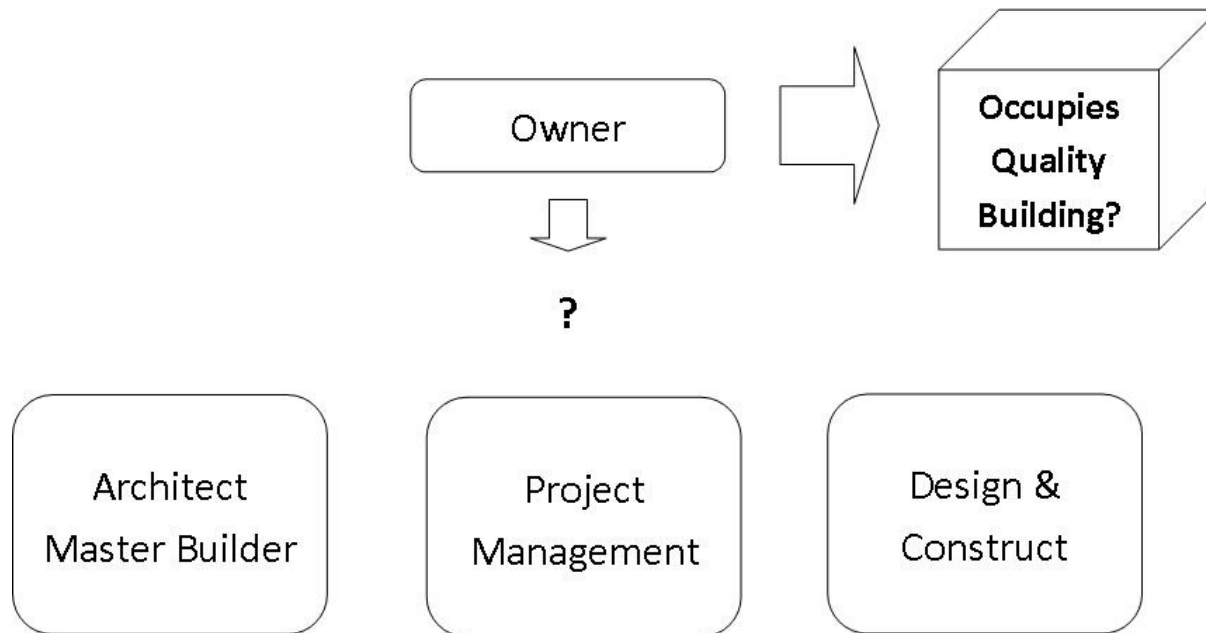
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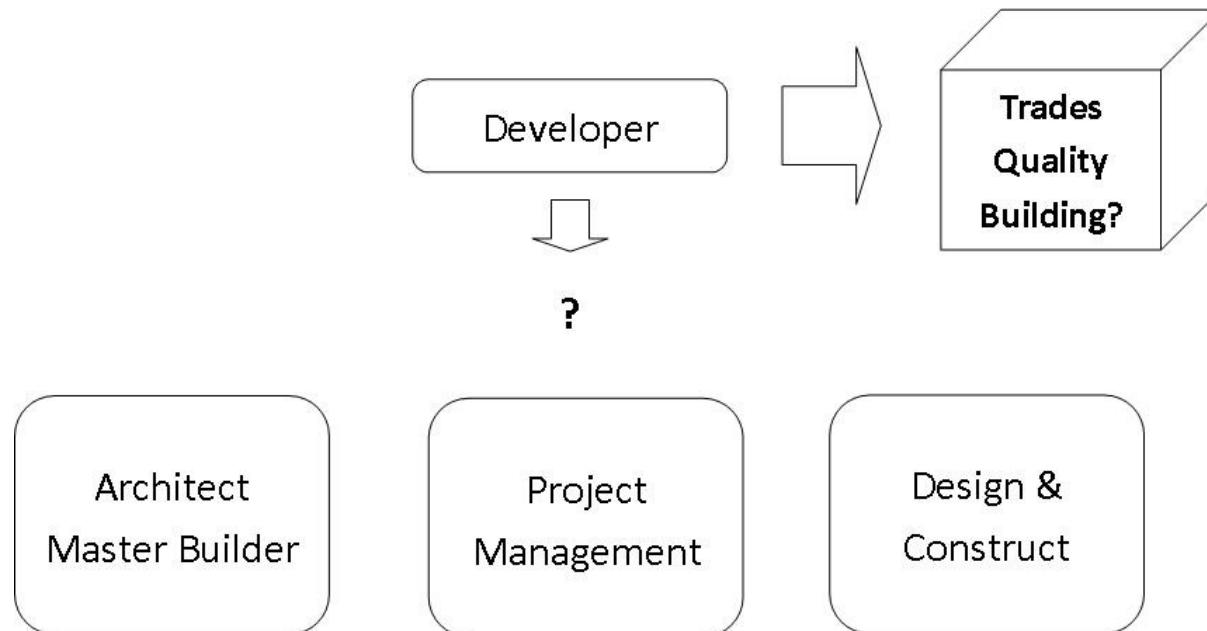
The Advent of Delivery Systems



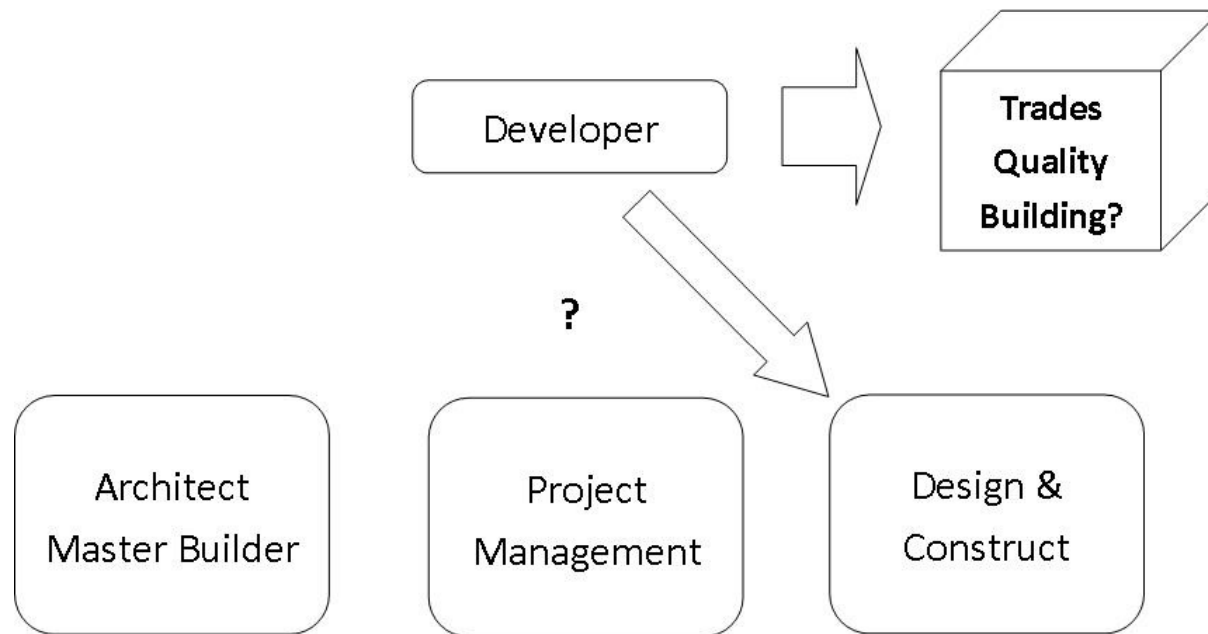
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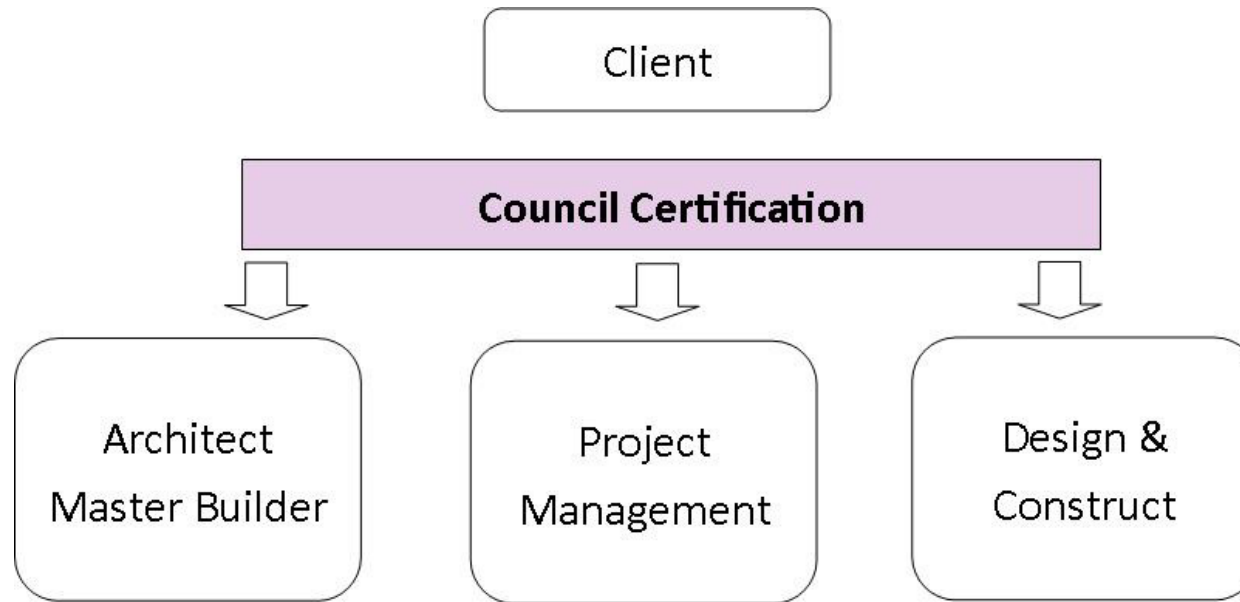
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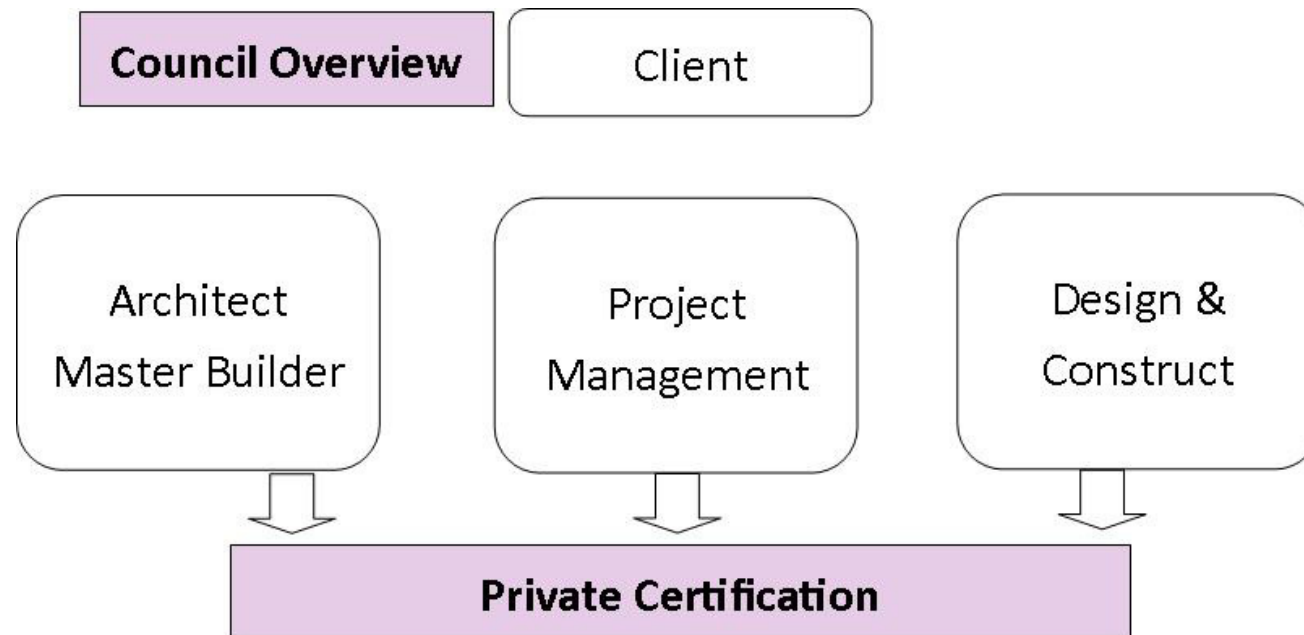
The Advent of Delivery Systems



Emergence of The Private Certifier



Emergence of The Private Certifier



Returning to the Drowned Building

The unscrupulous inexperienced developer who also acted as builder

The unscrupulous certifier

The absence of an architect

A D&C design created internally by the developer

The 'self design' of the building and construction details

Lessons from the Drowned Building

The absence of a structural/water resistant design

The lack of supervision of quality

The lack of duty of care to end owners

The complicity of the real estate agent in accepting the standard of building

The misrepresentation of the building design and quality in the sales documents

The lack of education of the buyers

A Good D&C Case Example: Gateway Apartment Tower Townsville

Vignette: A successful D&C project with low defects.

The project was initiated by a private project developer who had industry knowledge about delivery systems.

Apartments: 112 in a mix of managed and residential apartments.

Developer: Private developer with design and construct knowledge.

Project Manager: The developer was (client-side) PM and superintendent.

Architect: Appointed for concept, DA, by developer.

Certifier: Private certifier with reputable track record.

Builder: A reputable D&C builder with strong history in D&C was (construction side) project manager.

Design Team: Appointed by builder, the architect continued their commission for design documents, BA and relevant detail design.

Construction Team: Local subcontractors and suppliers under fixed price D&C arrangements appointed by builder. The subcontractors participated in detail design and workshop level drawings.

Dr Jonathan Drane, 2015

Gateway on Palmer Project 2007, Palmer Street Townsville.

Defects Outcomes:

Strong shared client/builder management with continuous approach to defects with 5% defect level (approx.) at completion and 1% at registration of title.



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A Way Forward- A Defects Detection Matrix

		Likelihood of Defects					
		High	← →		Low		
Developer Scenario						Traditional Scenario	
Developer led design						Client/Architect led design	
D&C Delivery System						Traditional Architect /Master Builder	
Private Certifier						Council Certifier	
No project management						Project management	
Developer is builder						Separate Builder	
No quality supervisor						Clerk of Works	
Detail design by subcontractors						Detail design by architect	

Defects– Scenario Matrix

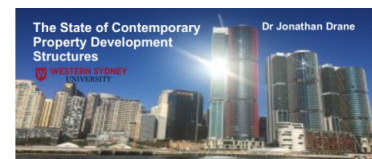
Dr Jonathan Drane www.jondrane.net Oct 2015

A Way Forward- A Defects Detection Matrix

	Likelihood of Defects		
	High	← →	Low
Developer Scenario	Drowned Building Project	Gateway Project	Traditional Scenario
Developer led design			Client/Architect led design
Inexperienced Developer			Experienced Team & Leader
D&C Delivery System			Traditional Architect /Master Builder
Private Certifier			Council Certifier
No project management			Project management
Developer is builder			Separate Builder
No quality supervisor			Clerk of Works
Detail design by subcontractors			Detail design by architect
Unscrupulous arrangements			Independent arrangements

Defects– Scenario Matrix

Dr Jonathan Drane www.jondrane.net Oct 2015



For More Information on Jonathan's Work

www.jondrane.net [One page flyer](#)

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Download Abstract: [Drane 2013- Abstract State of Contemporary Property Dev Theory](#)

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Thank You



Contact Dr Jonathan Drane

j.drane@westernsydney.edu.au

www.jondrane.net

Twitter @jondrane

Linked In: <https://www.linkedin.com/in/jonathan-drane-6761a717/>

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The State of Contemporary Property Development Structures



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Creating an Effective Australian Building Regulatory Framework for the 21st Century

