

A short tall story

Steve Watts

CVU Vice Chair

Director, Turner and Townsend

**High-rise construction:
international insights**

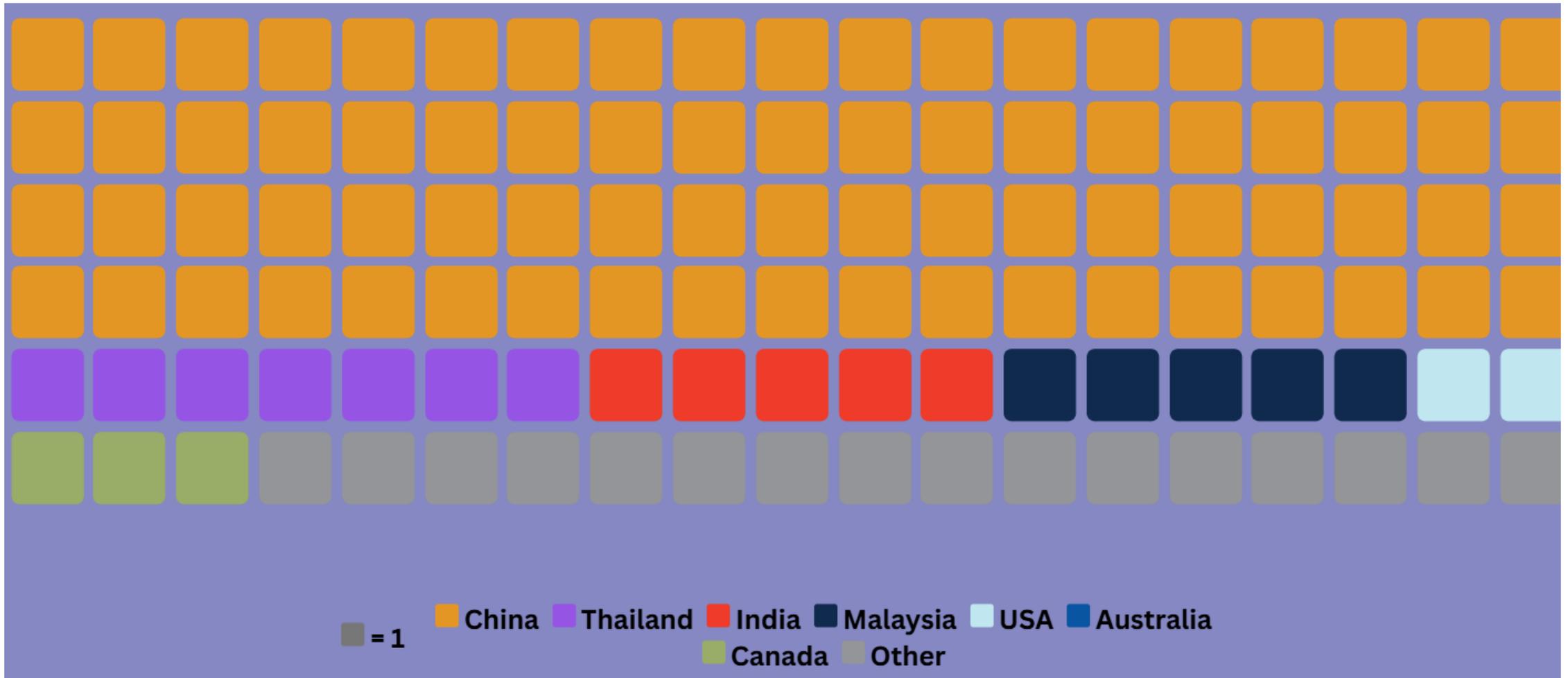
Helsinki

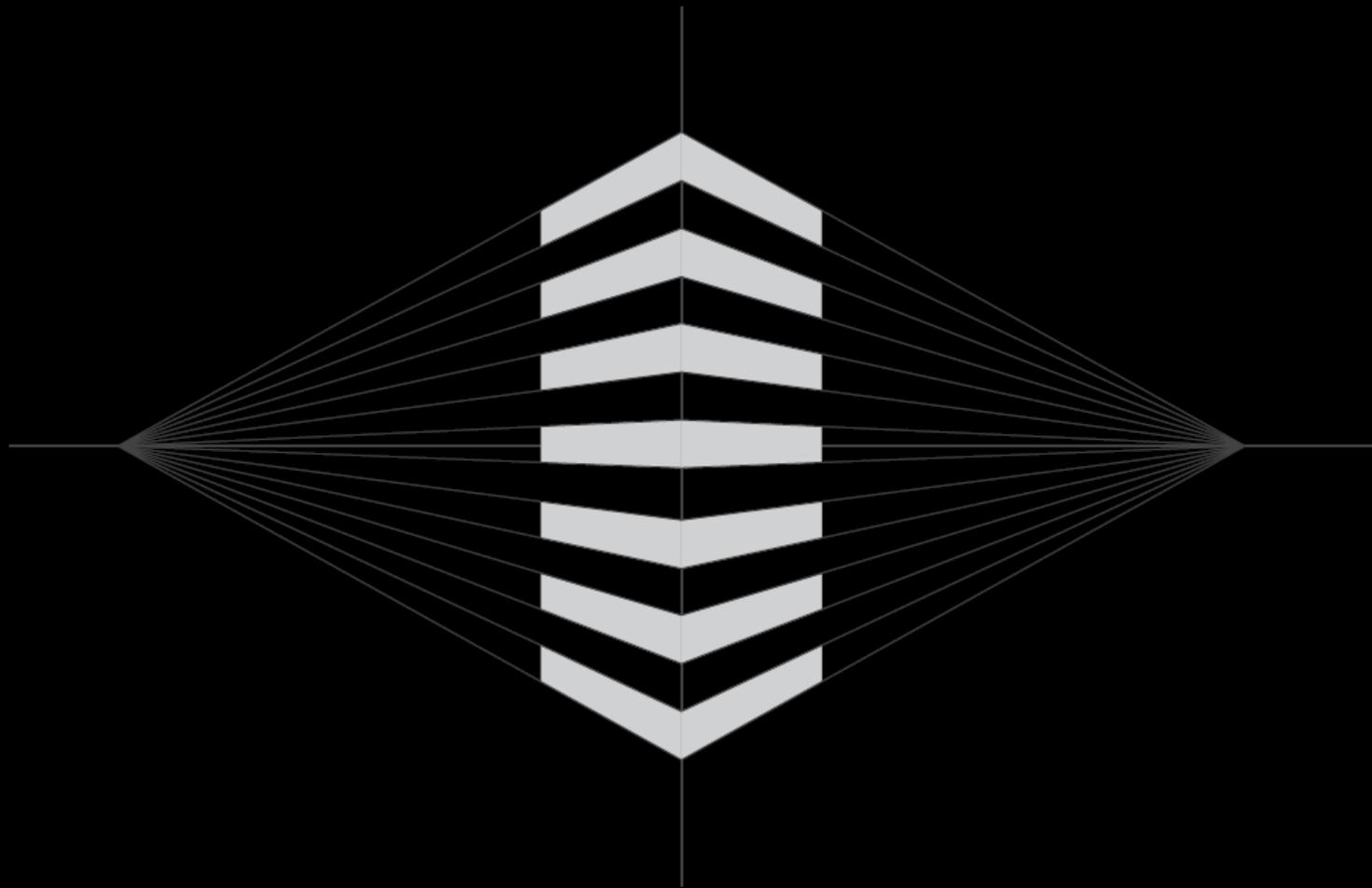
3 February 2026

We love numbers...

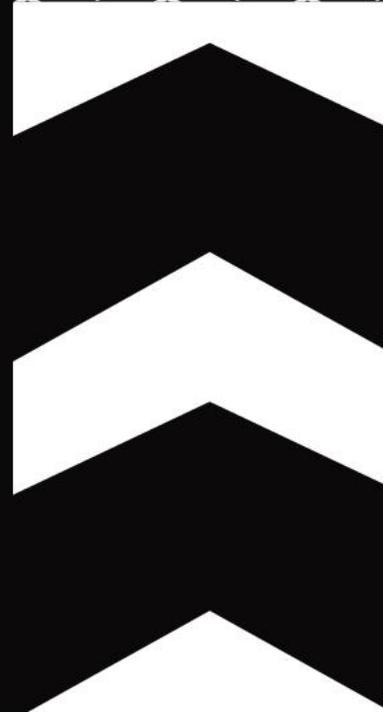


2024 – tall building completions by country





Council on
Vertical
Urbanism





Building tall better.

Previously the Council on Tall Buildings and Urban Habitat



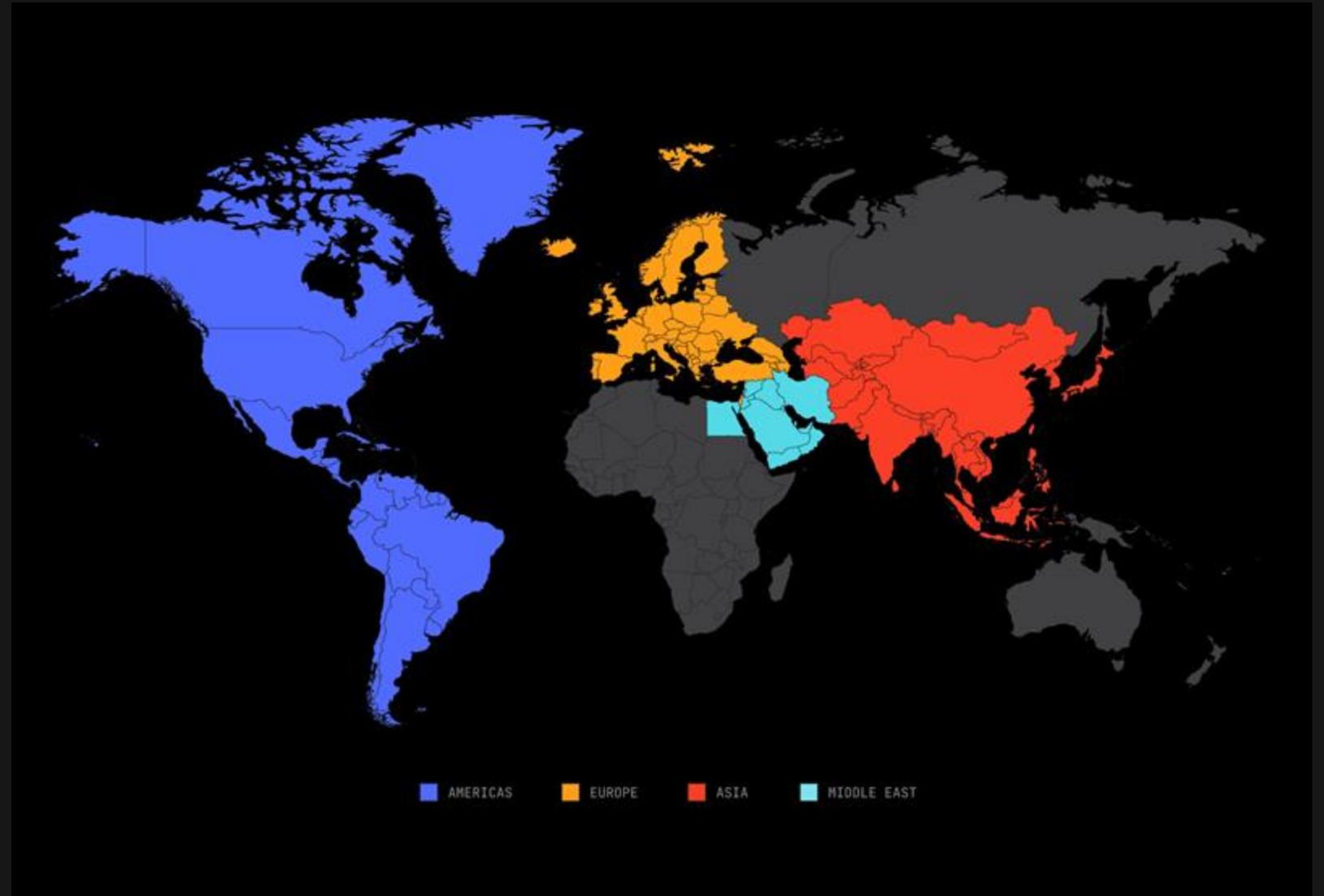


The **Council on Vertical Urbanism (CVU)** is the leading global authority on tall buildings and sustainable, resilient cities. We explore how responsible density, upward growth, and three-dimensional solutions can support more livable and healthier cities, especially in the face of rapid urbanization and the effects of climate change.

Regional hubs

CVU has **six offices worldwide**: the Chicago Headquarters, Academic offices in Chicago and Toronto, a Research office in Venice, an office in Riyadh and the Asia Headquarters in Shanghai.

Our members form a truly global network. CVU offices on **three continents** and regional chapters, committees, and representatives in over **50 countries** means that you can get involved wherever you are in the world.



Mumbai: different challenges



Two world colliding



Sharing and learning



“There are risks that clients haven’t dealt with for 50 years”

Meet the chaos consultants cashing in on the \$160bn RISK market

Many consultants start out as accountants, or climb the corporate ladder. Nitin Chadda cut his teeth at the White House and the Pentagon.

A political adviser during Barack Obama’s presidency, Chadda was in the room for thousands of critical discussions on policy, including negotiations for the 2015 nuclear deal with Iran. It was frenetic, all-consuming work.

“The White House in particular is a crucible ... The margin of error one can accept is quite small,” he said.

After leaving frontline politics when Donald Trump was first elected, Chadda now runs the consultancy firm WestExec. He founded it in 2017 alongside Antony Blinken, who went on to become Joe Biden’s secretary of state, and Michèle Flournoy, who had served as Obama’s under secretary of defence.

Their wager was that chief executives would pay a premium for the kind of geopolitical expertise that Chadda and his colleagues had cultivated in government.

“A potentially more aggressive or insurgent China, a more fragmented and unpredictable export of Russian ill-will ... and outright kinetic warfare across the European continent ... These are things companies want to better understand,” he said.

They wagered correctly: demand for specialist geopolitical advice has exploded since the pandemic, as supply shocks and lockdowns sent companies reeling. Further jolts such as wars in Ukraine and Gaza, and Donald Trump’s intervention in Venezuela, have only added to business leaders’ worries.

“We spent probably the last 30 years escalating globalisation, and the objective was always ‘how to reduce the cost of goods’ and never really considered the risk factors,” added Emile Naus, a former head of logistics strategy at Marks & Spencer, now a partner at the advisory firm BearingPoint.

“Covid was the point where it became super visible and people’s eyes opened.”

The figures are quite astonishing: the global risk market grew by \$52 billion to

Companies pay huge sums for expert advice to hedge against surprises. But the Big Four are losing out as bosses seek more specialist help, writes *Daniel Woolfson*

“There are risks that clients haven’t dealt with for 50 years”

\$160 billion (£120 billion) between 2020 and 2025, according to Source Global Research estimates, and it is predicted to grow a further \$37 billion by 2028.

Geopolitical risk is currently the top external risk for finance chiefs of large British companies, according to a recent survey by the Big Four accountancy and consultancy firm Deloitte – and has been so for the past three years.

Big investors are circling amid this heightened danger. Last month, private equity firm Cinven acquired a majority stake in Flint Global, a consultancy co-founded by Sir Simon Fraser, a former head of the Foreign Office and chief of staff to the EU commissioner for trade. WestExec itself was bought by the advisory giant Teneo in 2022.

This flurry of activity also raises questions about whether the Big Four – KPMG, EY, PwC and Deloitte – can maintain their hold on the risk market after decades of dominance.

“The nature of risk is changing. There are different kinds of risks that clients haven’t dealt with for 50 years. They don’t know how to go about doing this, but they’re not sure the Big Four firms are the firms to go to,” said Fiona Czerniawska, founder and chief executive of Source Global Research.

WestExec itself does not publicly share who its clients are, but Blinken disclosed that he had advised big-name companies – including private equity giant Black-

stone, Facebook, Uber, Bank of America and Sotheby’s, the auction house – under transparency rules, prior to becoming Biden’s secretary of state. Chadda says his colleagues are far from the only ones shifting their political expertise into the corporate world. The changing nature of risk has sparked a wave of investment from consultancies seeking to pack their firms with experts from a range of backgrounds.

Among others, the consulting giants McKinsey and the Boston Consulting Group (BCG) have both created specialist geopolitics arms, in 2023 and 2024 respectively – though they have offered advice in this area for many years.

Ziad Haider, partner and director of geopolitics at McKinsey, said: “We have been doing this for a while. Geopolitics is not new, it’s a feature companies have been living with for a very long time.”

“But even if you talk to some of the leaders of some companies that are 100 years old, they would say ‘my grandfa-ther lived through World War I, but for me it’s a new muscle’. The idea I cannot think about a frictionless existence ... is new.”

“Five to seven years ago, in a bull market, it was hard to make bad decisions. Now the scrutiny of expertise versus cost has gone up,” added Brent Tomlinson, president of risk advisory at Kroll.

“We are recruiting former regulators, lawyers, investigative journalists and security services professionals ... the diversity of thought is valuable.”

While conflicts, or “kinetic” events as they are known in the jargon, are the most dramatic examples, they are far from the only worry.

“You have continued geopolitical uncertainty, the advent of AI, which is changing the threat landscape, the political push-pull between globalisation and nationalisation, and, for the first time in as long as I can remember, the various national banks are diverging in their approach to hawkish and dovish interest rates,” said Tomlinson.

Haider added: “Yes, one has to think about [conflicts], but now, increasingly, they have to think about lawfare, which is the use of economic tools and instruments... tariffs, industrial policy, export controls, sanctions.”

“When I started off, I was having these conversations largely with chief risk officers. Now it’s very much becoming a chief executive topic, a board-level topic.”

Bosses are facing more pressure from their own investors to come up with answers to geopolitical questions, after being caught off-guard in the past.

According to an analysis of earnings calls by Boston Consulting Group in 2024, “Ukraine” was mentioned in less than 1 per cent of more than 4,500 calls through most of 2021, despite a build-up of Russian troops on its border. Following the invasion, references to Ukraine surged as pressure was heaped on western companies to get out of Russia.

“Three to four years ago, most of the work we were doing was ‘geopolitical education,’” said Aparna Bharadwaj, who co-leads BCG’s specialist geopolitics arm. “Since the Ukraine conflict, clients have moved from ‘explain it to me’ to ‘help me solve a very specific business question with geopolitical elements’. You cannot advise a client on the future of supply chains or on M&A without thinking through geopolitics.”

What do advisers actually deliver, though? The process usually involves intensive interviews with senior executives, internal workshops and research, during which consultants try to gauge the key “dimensions of change”, such as political risk or oil risk, for a client.

They will then map out plans for possible scenarios, taking account of potential triggers, reactions and how the client can best respond. Consultants are likely

Aparna Bharadwaj co-leads BCG’s specialist geopolitics arm



to stress-test companies’ systems, too.

“The other aspect is contingency planning,” said Haider. “So, if things go particularly south in a market, or there’s a real geopolitical shock, how would we think about scaling back our footprint, withdrawing from the market?”

However, Czerniawska at Source Global Research said: “You can’t say ‘this is what the future will look like’, because nobody knows and clients are wary of anybody that pretends they have a reliable crystal ball.”

The idea that companies would be willing to pay huge sums for risk consulting is in itself relatively novel. Before the Enron accounting scandal in 2001 and the introduction in the following year of the Sarbanes-Oxley Act in the US, which dramatically toughened financial reporting requirements for American companies, risk was generally handled in-house.

“The amount of regulatory compliance that was required [after Sarbanes-Oxley] was beyond the ability of client organisations to do it, so it triggered an enormous amount of use of professional services doing regulation,” said Czerniawska.

The financial crash of 2008 and its aftermath only boosted the prominence of the risk business. During this time, the Big Four accountants cemented themselves as the market leaders for risk, and they still account for almost a fifth of the global risk market, according to Source Global Research.

However, the firm’s data suggests that bosses are becoming less confident in their ability to handle geopolitical risk. A fifth of risk clients deemed work done by the Big Four as “average”, a survey of 300 US-based senior executives showed.

The same survey rated the work of strategy firms such as McKinsey and BCG more highly.

“The Big Four are accountants at heart,” explained James O’Dowd, founder of Patrick Morgan, an executive search firm for professional services. “Geopolitical risk needs multifaceted teams – international relations, foreign policy, sector specialists.” Big Four pay packages, too, tend to be lower than remuneration at the likes of McKinsey and BCG.

Claire Reid, PwC UK’s head of risk, said the firm had made a “sizeable investment” in the past decade, “including specialist skills in geopolitics, strategy and economics.”

Lisa Fernihough, head of advisory at KPMG UK, said it was combining “deep expertise with the newest technologies to deliver practical solutions to help boards navigate ongoing global uncertainty”.

An EY spokesman said it was seeing a “significant increase” in demand for advice. Deloitte was contacted for comment.

When it comes to risk, the Big Four remain formidable. But, as the boundary between risk and grand strategy blurs, rivals big and small are clearly nipping at their heels.

“We hold all those larger firms in great esteem and regard for what they do,” said Chadda at WestExec. “But it comes down to having the right scalpel for the right surgical procedure.”

City of London 2025



Beyond the city



More than one city



Space for people!





The second wave
Simplicity



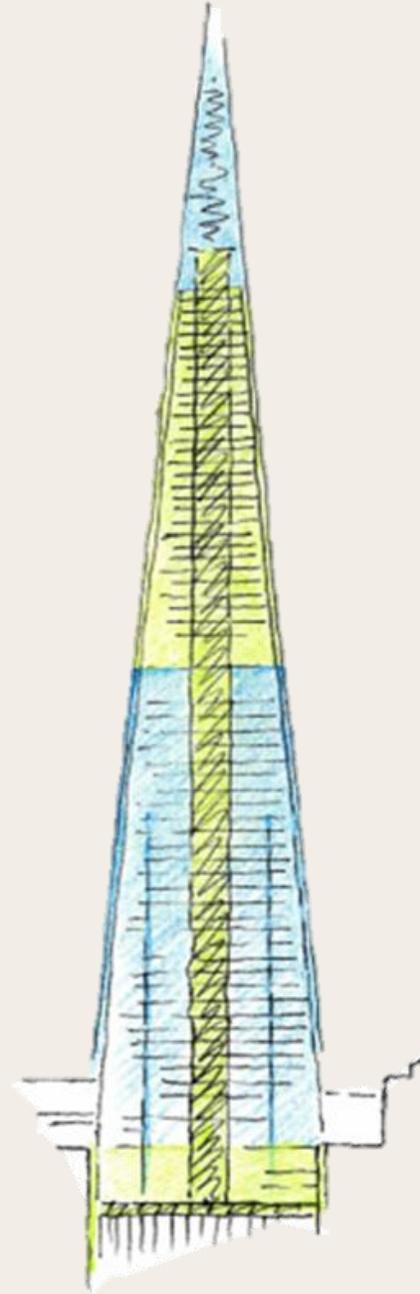
The fourth wave
Enriching the experience

The first wave
Icons

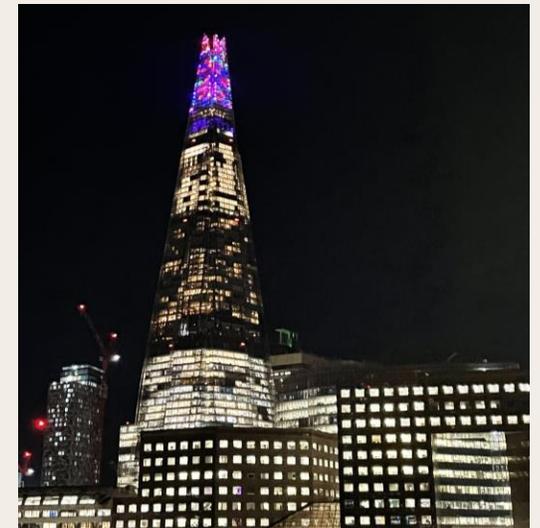
The third wave
Sustainable high rise



The first wave:
making shape work for you



BTW – more than a building

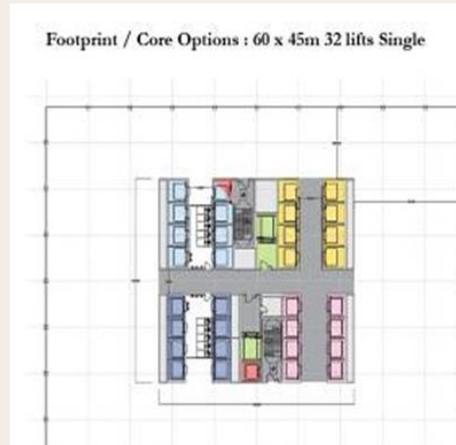
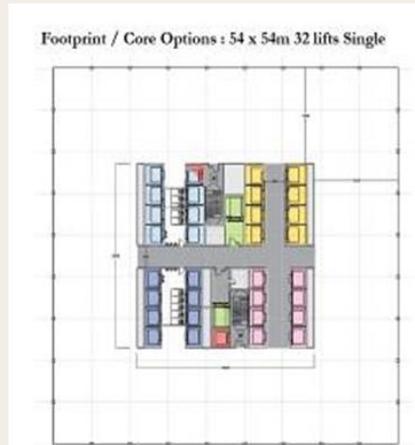


The second wave: it started with a KISS

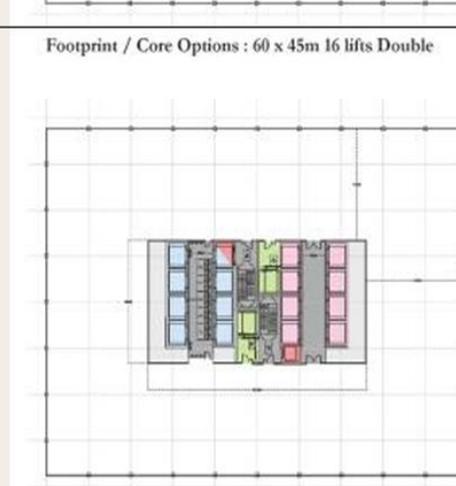
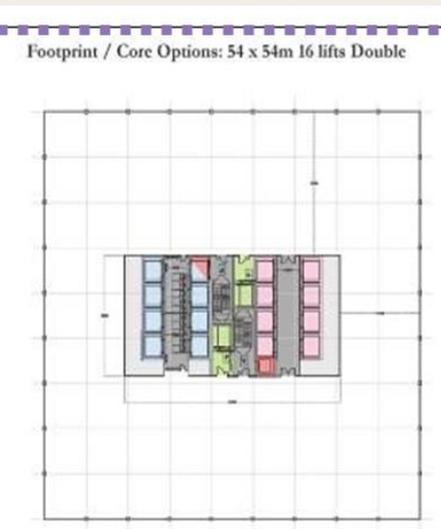


Halving the cost! (almost)

Single Deck Lifts



Double Deck Lifts



It's been done before!

8 Canada Square London, UK

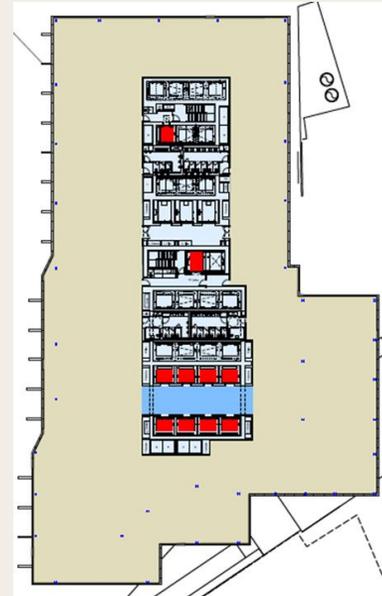
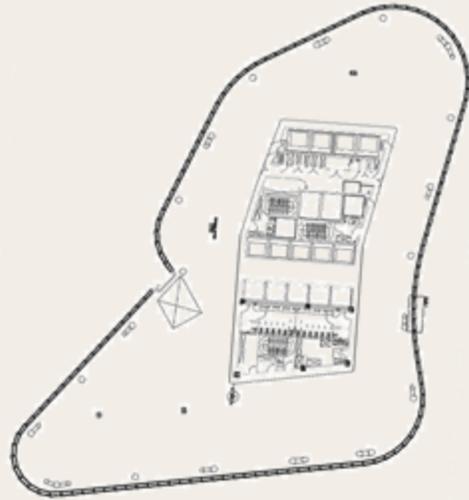
Client: Canary Wharf Group, Qatar Investment Authority

Type: Adaptive Reuse, Mixed-Use

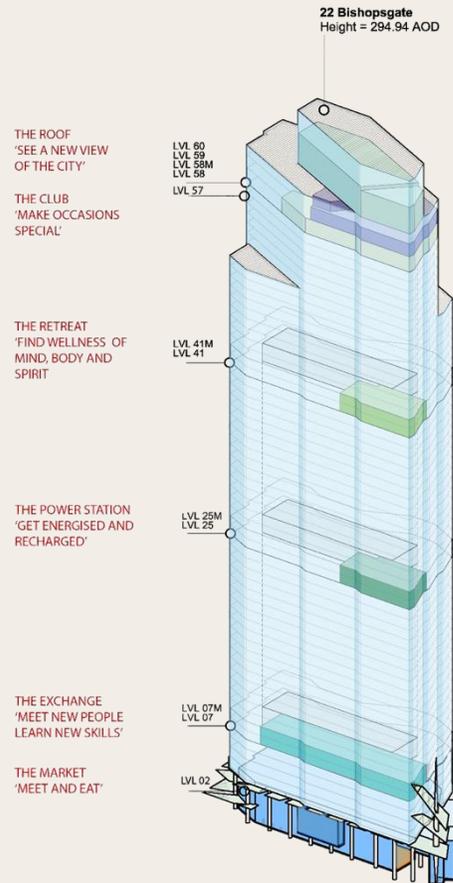
Size: 102,200m² / 1,100,000 ft²



Putting it into practice



Redirecting money



The third wave: dual currencies

	Project 1	Project 2	Project 3	Project 4	Project 5	Project 6	Project 7	Dovetail Stage 3 (Secant Scheme)	Project 9	Project 10	Project 11	Project 12	Project 13
Project Status	Cost Plan	Procured	Cost Plan	Cost Plan	Cost Plan	Cost Plan	Built	Cost Plan	Cost Plan	Cost Plan	On Site	Cost Plan	Built
GIA (ft²)	575,783	421,508	266,194	1,274,299	654,511	1,072,409	179,176	693,054	1,518,593	1,358,942	363,367	373,701	99,211
NIA (ft²)	365,800	280,867	177,488	853,558	432,036	635,987	127,573	437,283	1,038,749	820,683	244,126	230,200	72,636
Nett:Gross Efficiency	64%	67%	67%	67%	66%	59%	71%	63%	68%	60%	67%	62%	73%
Wall:Floor Ratio	0.47	0.43	0.49	0.35	0.43	0.42	0.48	0.33	0.44	0.44	0.36	0.72	0.69
Opening windows	No	Yes	No	No	No	Yes	No	Yes	No	No	Yes	No	Yes
Façade Rate (All in incl. BMU, etc.)	£1,628/m²	£1,916/m²	£1,523/m²	£1,858/m²	£1,653/m²	£2,057/m²	£1,676/m²	£2,377/m²	£1,623/m²	£1,651/m²	£2,839/m²	£1,373/m²	£1,971/m²
Location	City South	City	West End	Midtown	City	City	City	City	City	City	West End	City	City
Floors (above ground)	34	24	19	48	37	46	10	24	54	64	10	32	11
Basement Levels	2	2	2	3	3	5	1	3	3	5	2	5	0
BREEAM Rating	Excellent	Outstanding	Outstanding	Outstanding	Outstanding	Outstanding	Excellent	Outstanding	Outstanding	Outstanding	Outstanding	Outstanding	Outstanding
Nabers	N/A	5	5	5	5	5	N/A	5	5	5	5	N/A	N/A
Well	Gold	Platinum	TBC	Platinum	Platinum	Platinum	Gold	Platinum	Platinum	Platinum	Platinum	Platinum	Platinum
Carbon Target	NK	600	NK	600	TBC	945	NK	600	NK	600	760	NK	NK
Carbon Actual	NK	600	NK	800	TBC	NK	NK	668	NK	865	961	NK	NK

SHELL & CORE COSTS - UPDATED TO Q2 2025 BASE DATE														
	£/sqft GIA													
Project	Project 1	Project 2	Project 3	Project 4	Project 5	Project 6	Project 7	Project 8	Project 9	Project 10	Project 11	Project 12	Project 13	
SHELL & CORE Substructure	40	22	43	30	21	45	36	54	22	40	51	61	18	
Frame, Upper Floors & Stairs	74	76	62	88	95	89	57	80	127	108	76	102	123	
Roof & External Landscaping	11	7	8	9	11	6	7	11	4	3	11	6	26	
External Walls/Windows/Doors	75	83	77	64	71	89	82	82	70	73	114	106	126	
Internal Walls & Doors	14	20	26	16	17	17	37	20	23	15	33	14	26	
Finishes & Fittings	30	27	24	31	29	27	35	21	33	31	41	33	43	
MEP Installations	86	109	104	111	96	94	119	116	111	97	82	86	89	
Lift Installations	16	22	21	24	31	26	10	20	20	35	16	39	13	
Preliminaries, OHP, D&B Risk	94	99	99	98	97	90	125	87	88	105	115	123	138	
Design Reserve/ Contingency	22	14	23	25	33	24	0	20	24	24	27	28	0	
TOTAL SHELL & CORE £/ft²	462	479	487	496	502	507	508	512	524	530	567	596	601	
OTHER Cat A Fit Out - £/sqft GIA	48	52	43	49	49	27	44	45	51	39	Excluded	37	71	
Other Fit Out	0	0	0	2	0	6	0	2	3	13	Excluded	0	1	
Demolition	8	11	28	0	9	4	23	11	8	5	22	13	4	
Utilities - Incoming	8	3	6	7	7	9	8	12	7	6	9	8	6	
Utilities - Diversions	0	0	0	0	0	Included	0	10	0	0	0	0	0	
External Works	8	7	15	7	4	2	6	5	1	5	3	6	1	
Other	2	3	0	2	0	0	0	7	0	0	0	1	0	
	536	556	579	562	571	555	589	604	595	598	601	662	684	
CAT A Cat A Fit Out - £/sqft NIA - Built	77	81	101	75	75	0	72	73	73	71	Excluded	75	101	

The third wave: sustainable high-rise



The Dovetail Building

Whole life carbon

- Openable windows
- Optimised window/wall ratio through parametric analysis
- Chilled slabs and active thermal mass
- Thermal store
- Heat rejection to adjoining estate
- GGBS in concrete
- Hi-star steel
- Aluminium from hydro sources
- IBMS systems to monitor energy performance

Wellbeing

- Majority of plant in basement
- Elevated fresh air provision (20 l/s/p)
- Green terraces on every floor + green walls + planters
- Generous communal spaces
- High quality cycle facilities
- Visual link to staircases on floorplates
- Intelligent IP addressable floor tiles linked to BMS

Efficient use of materials

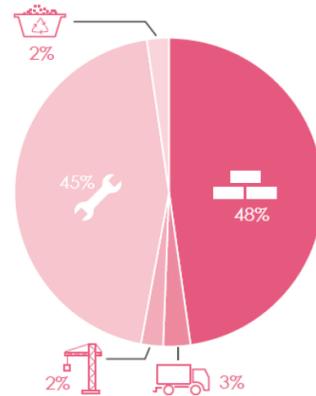
Carbon in construction

What does “good” look like? LETI Guidelines for Embodied Carbon

Embodied carbon

Focus on reducing embodied carbon for the largest uses:

-  Products/materials (A1-A3)
-  Transport (A4)
-  Construction (A5)
-  Maintenance and replacements (B1-B5)
-  End of life disposal (C1-C4)



Average split of embodied carbon per building element:

- 48%** - Superstructure
- 17%** - Substructure
- 16%** - Façade
- 15%** - MEP
- 4%** - Internal finishes

Reduce embodied carbon by 40% or to:

<600
kgCO₂/m²
Area in GIA

LONDON
ENERGY
TRANSFORMATION
INITIATIVE



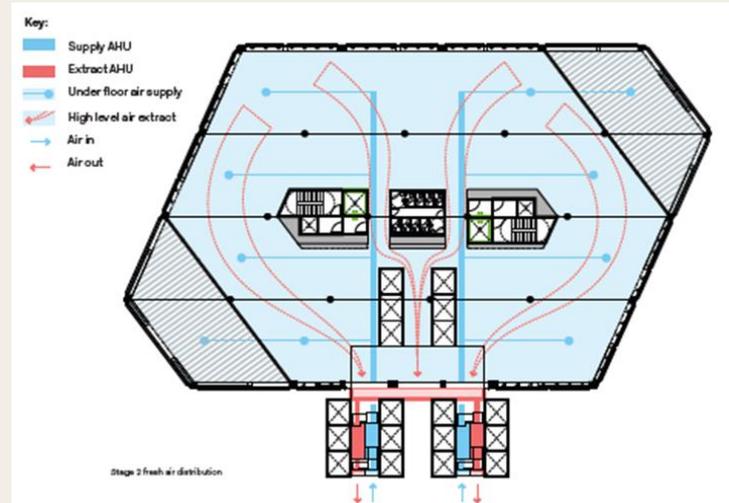
The fourth wave: enriching the experience



Flexible amenity spaces



Wintergarden





The second wave
Simplicity



The fourth wave
Enriching the experience



The first wave
Icons

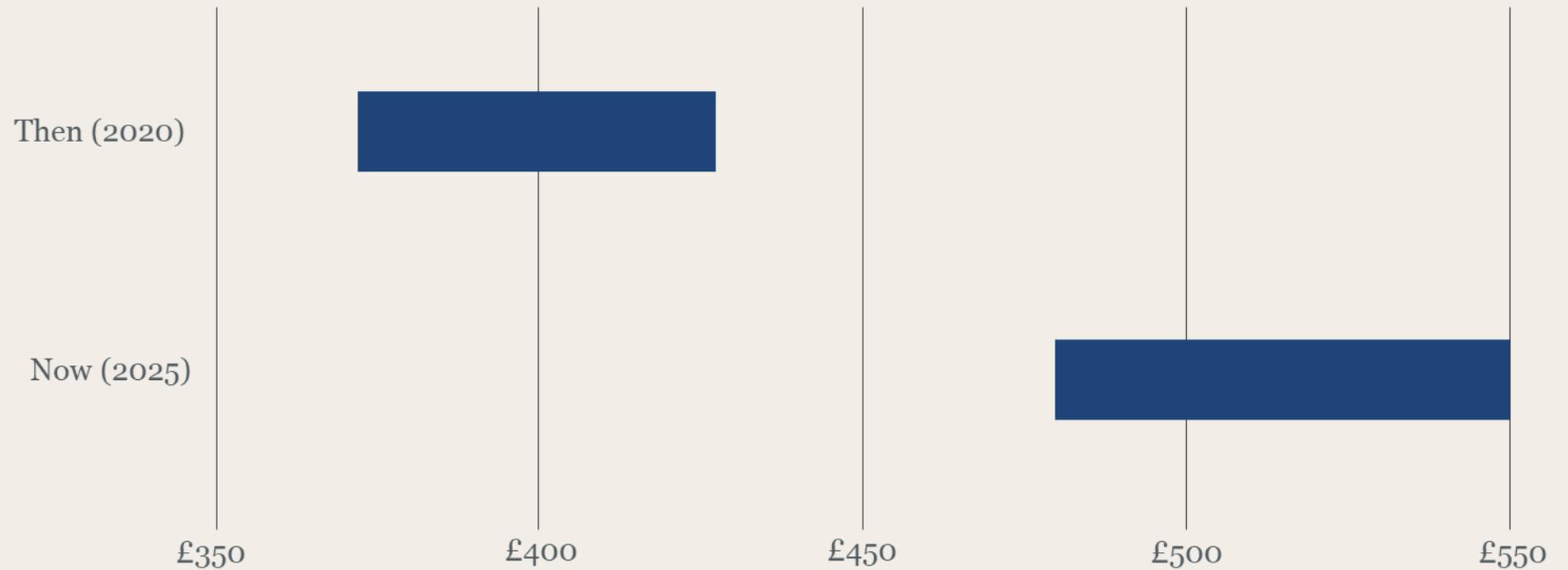
The third wave
Sustainable high rise

The fifth wave
Profit, planet, and people

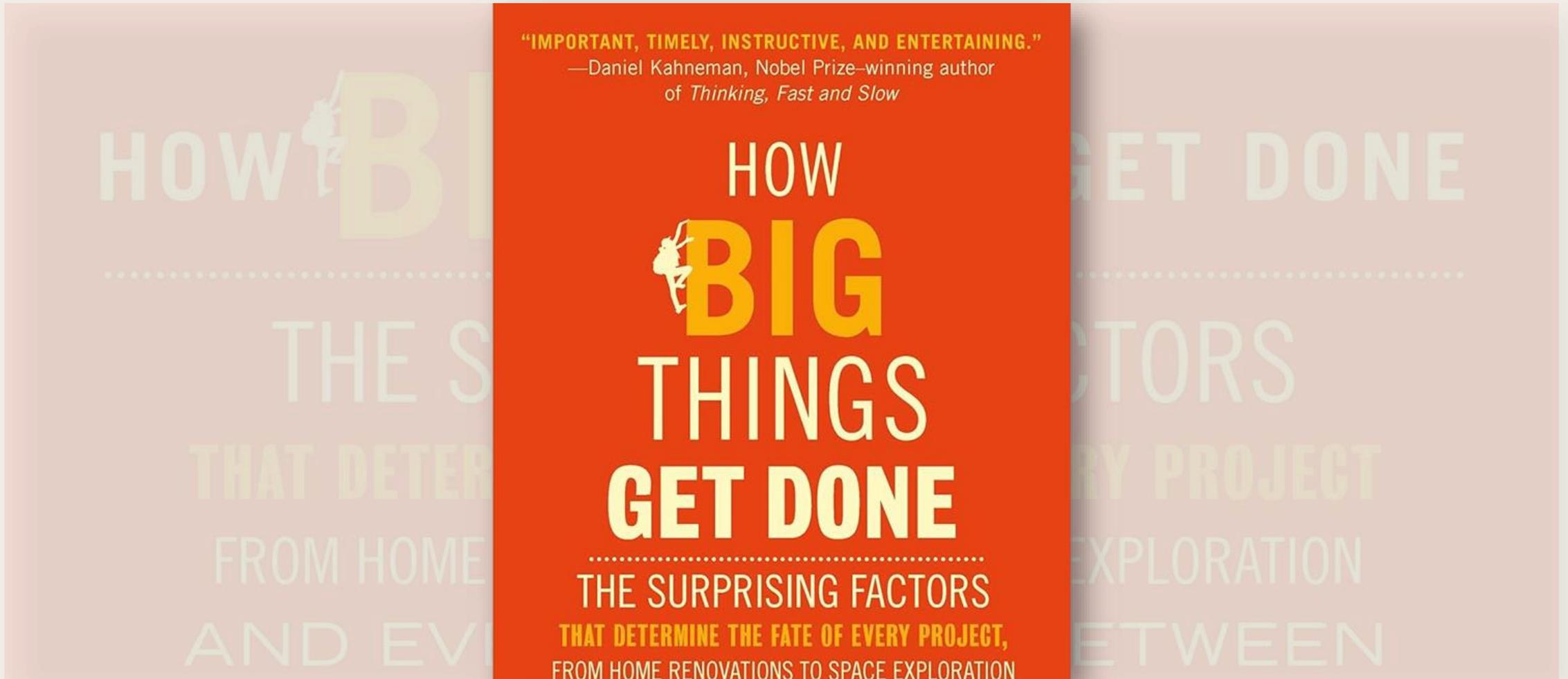


The fifth wave: unlocking viabilities

London office towers – Shell and core cost (£/ft² GIA)



Design is more than design



Complex projects can be simplified

“Projects don’t go wrong; they start wrong”

Bent Flyvberg

- Start with the WHY
- Get the team to optimise the concept
- Agree the plan before executing it
- Material efficiencies save cost and carbon
- Hone the details
- Make it buildable (time is expensive)
- Procure clearly and ‘sell’ the project
- Controls and people are equally important
- Collaboration is the most important thing

Though, life is always a compromise





Council on Vertical Urbanism

VerticalUrbanism.org

