

Building 2020 - people, performance and viability of construction for society

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Academics and Pontification.....

- Literally the form of government in the Vatican city
- Literally “To perform the functions of the Pope”
- Does Pope Francis know how to fix construction in NZ?
- Let’s give it a go....

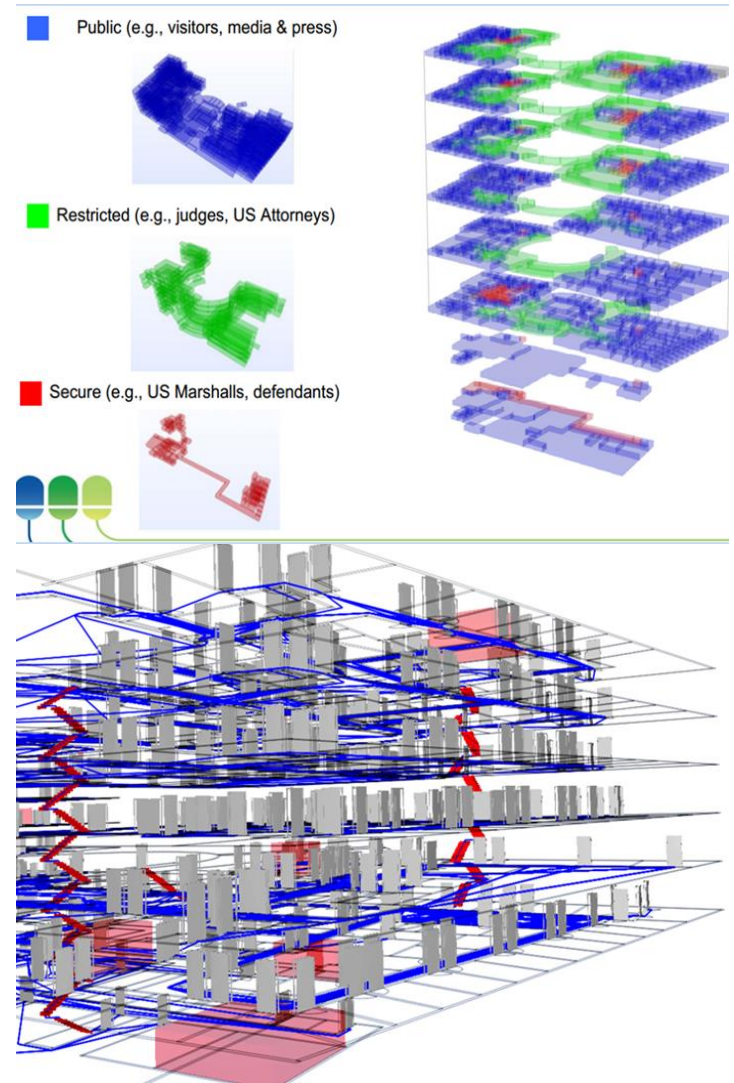


2020 approaching rapidly....

- Nearly at the end of the second decade of 21st Century
- Latham, 1994 “Constructing the Team”
- Egan, 1998 “Rethinking Construction”
- Two decades after Egan
- 15+ years after CIC equivalent reports
- CCG / Constructing Excellence born of the Latham / Egan Agenda
- So what has changed?
- I mean REALLY?

Technology – IT in Construction

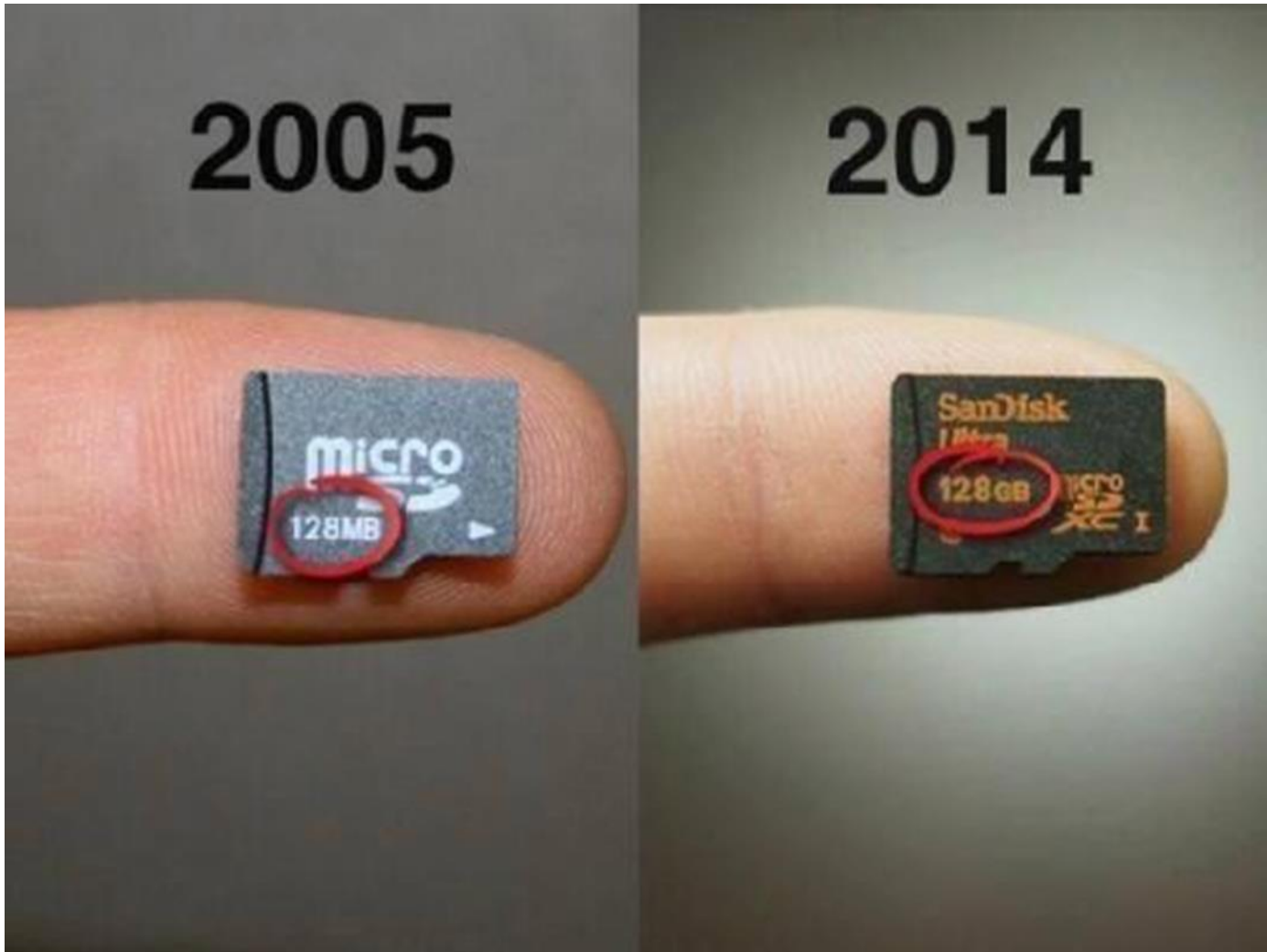
- Increasing demand for BIM
- Computation power crucial to success
- Investment is critical to success
- When to invest?
- What technology to invest in?
- Are there any BETAMAX 2.0 out there....?



Technology – can we win?

- "I think there is a world market for maybe five computers." -- IBM, 1943.
- "Where a calculator on the ENIAC is equipped with 18,000 vacuum tubes and weighs 30 tons, computers in the future may have only 1,000 vacuum tubes and weigh only 1.5 tons." -- Popular Mechanics, 1949
- "I have travelled the length and breadth of this country and talked with the best people, and I can assure you that data processing is a fad that won't last out the year." -- The editor in charge of business books for Prentice Hall, 1957.
- "But what...is it good for?" -- Engineer at the Advanced Computing Systems Division of IBM, 1968, commenting on the microchip.
- "640K ought to be enough for anybody." -- Bill Gates, 1981

Moore's Law



But what does IT mean?

- In short no easy answers to the IT question
- NZ construction historically under invested
- BIM capacity minimal compared to international peers
 - UK
 - US
 - Canada
 - Japan
 - South Korea etc
- Any technology is a quick fix for now – not a permanent solution
- Should we invest? Yes.
- Will it be the ‘right’ (i.e. perfect) solution? No.
- Need to overcome structural deficiencies in NZ construction

People and Skills

- Massive gap
- Lack of interest in construction careers
- Female / minority lack of interest
- 6% GDP
- Employs >250,000
- Added value low compared to total workforce
- Why would you join the construction industry?
- Would you recommend construction as an option for son/daughter/niece/nephew
- If not why not?



People and Skills

- From MBIE in July 24th “Skills Action Plan”
<http://www.mbie.govt.nz/info-services/building-construction/skills-innovation-productivity/action-plan-to-address-skills-shortages>
- “Targeted engagement sessions in Auckland, Christchurch and Wellington, enabling stakeholders to have their say on the Action Plan, have been completed.”
- “Feedback from the sessions is now being reflected into the final design of the Action Plan, which is expected to be discussed by Cabinet at the end of August.”
- Long story short, hmmtmm. And so what?
- Anyone remember the Productivity Research Action Plan?
Anyone see something come from it?
- But on the up side we are spending \$250m on planting trees

Products – where next?

- 3D printing
- Advanced Materials
 - Timber
 - Concrete – advanced admixtures / wetting agents etc
 - Steel
 - Where next?
- Advanced systems
- Panelisation?
- Prefabrication?



KiwiBuild

- Everyone wants KiwiBuild to work
- KiwiBuild - \$2bn in funding
- Off plan purchases of existing developments
- New Ministry of Housing and Urban Development
- From MBIE: housing and urban policy functions / KiwiBuild Unit / Community Housing Regulatory Authority.
- From MSD: policy for emergency, transitional and public housing.
- From Treasury: Housing New Zealand (HNZ) and Tāmaki Redevelopment Company
- Modernising and building more public housing
- Reforming the tenancy laws to make life better for renters
- Setting minimum standards to make rentals warm and dry
- Adjusting the tax settings to discourage speculation
- Setting up an Urban Development Authority to lead large scale urban development projects
- ComCom investigation?

KiwiBuild


- 10 years to grow from 3000 to 6800 dwellings annually in Auckland (2007 – 2017)
- 2018 will see over 8000 Auckland in a year
- Now we need 120+% further growth
- Capacity, capacity, capacity. We are marginal (at best) to achieve within 3 governmental cycles.
- Can we attract external capital?
- Should we attract external capital?
- Can we offshore?
- Should we offshore?

KiwiBuild Good News/Bad News

- May 2018, 3,407 new dwellings were consented – the highest monthly number since 3,447 in June 2004.
- The 1,530 new dwellings consented in Auckland is the highest monthly number since 1,945 were consented in October 2002.
- Seasonally adjusted new dwellings rose 7.1%, following a 3.6% fall in April, and 13% rise in March.
- 17K dwellings needed annually in Auckland
- Circa 8k pa completed
- >100% more to achieve needs
- 7 or 8 years to achieve targets @ 10%pa growth
- 2+ electoral cycles to achieve current targets.

Housing Performance – The take away

- Actually only getting back to close to pre GFC capacity and consent levels.
- It will take – to reiterate – around 8 years to get to current demand levels
- Assuming no downturn as prices are depressed




Editorial: NZ needs to be ready for falling house prices

Trending Topics

- Climate Change
- New Zealand's Role in the World
- Politics
- Education

Tomorrow we will get a fresh update on the local housing market



Auckland house prices drop 2.2 percent as market cools

To: Anne Elliott
Property Advisor, 021 623 1234
www.greene.co.nz

Auckland house prices were rising at more than 30 per cent annually three years ago but now they're falling, down 2.2 per cent in the year to March 30, according to March data from the Real Estate Institute.

Commercial Performance: Procurement, Risk and Governance

interest.co.nz

Helping you make financial decisions

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HOT TOPICS: House prices | Interest rates | Mortgages

Home Property

'Poorly performing' Auckland projects blame tipping construction company over the edge

Posted in Property August 01, 2018 - 10:45am, David Hargreaves [Tweet](#)

Forward this page

Some "poorly performing" Auckland projects are blamed for tipping Ebert Construction into receivership.

Lara Bennett, John Fisk and Richard Longman PwC were on Wednesday evening appointed receivers to Ebert Construction Limited as a result of a resolution made by the Ebert Board of Directors to its bankruptcy.

A statement from the receivers said that Ebert's directors had advised that it and the company's newly appointed receivers should take action in the face of a

CreditWorks
The CreditWorks Group

26 More Building Company Failures As Market Heats Up

Alan Johnston | Creditworks | No Comments

In the last few weeks we have seen several Company failures in the building industry – two of which were representatives of the competitive franchise market.

A1 Homes in Hawkes Bay and Taupo went into liquidation, along with the (ex) Landmark Homes franchise. Debec Building Solutions Ltd (who exited the franchise in December only)

While it is not un-common to see building company liquidations at this time of the year (February in particular is traditionally the worst month for business failures) the question has to be asked why – in this buoyant building environment – is the failure rate starting to increase.

RNZ

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BUSINESS

NZ construction woes just beginning - UK expert

7:56 am on 7 March 2018

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Phil Pennington, Reporter

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Commercial Performance: Procurement and Risk

- Fletcher Building and Interiors
- Ebert
- Bagley & Blake Construction
- Etc
- Why the failure rate?
- What is the problem?
- What is going wrong?

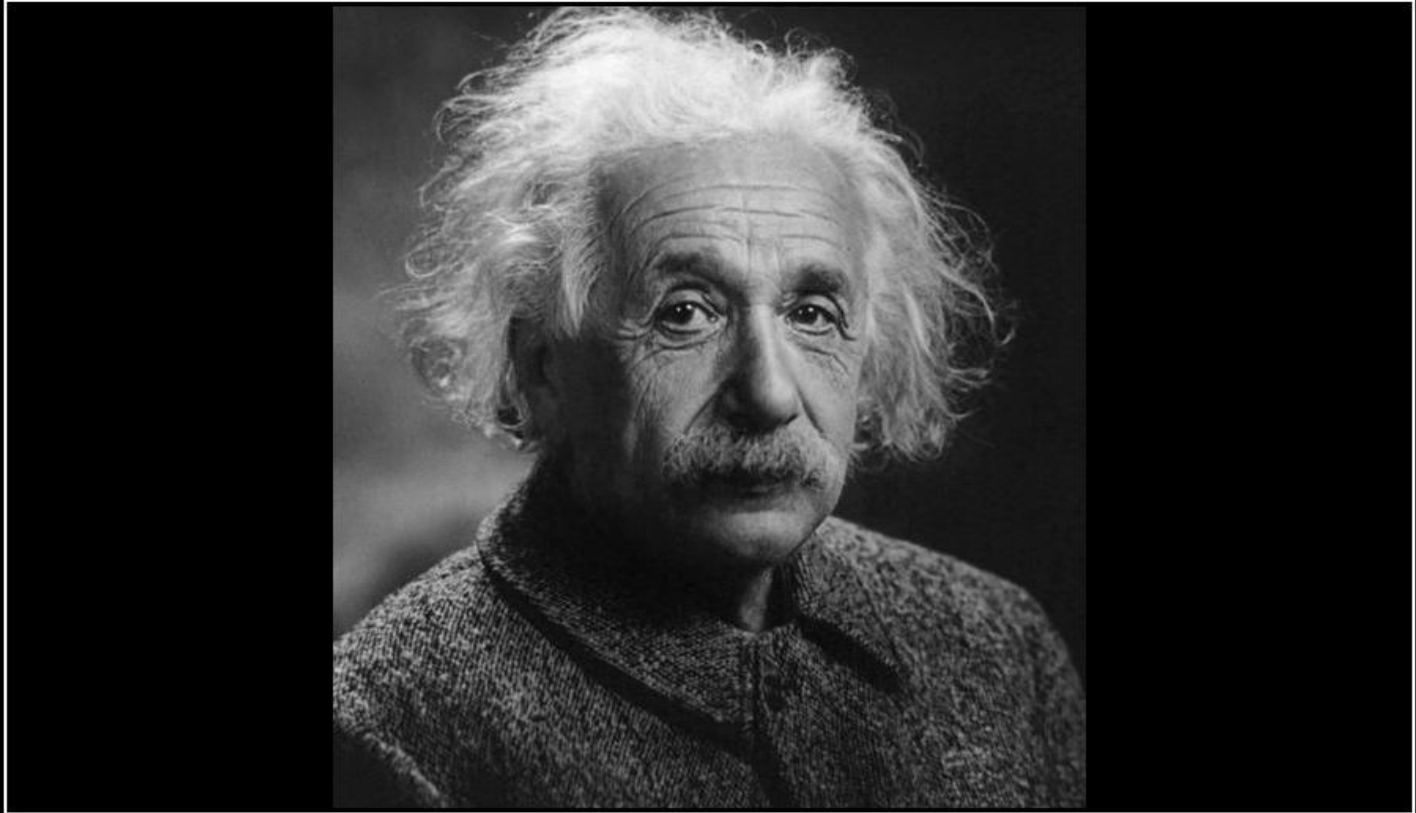
Does this sound familiar?

- Recent press statements:-
- [The company's fall] shows that dumb money knows know borders.
- The board: misguided or incompetent?
- Private failure is a public problem
- Do not end outsourcing because of this company
- The warning signs from their sins of omission
- Who was behind the 'recklessness, hubris and greed' that led to the demise of the government contractor?

Construction – Worth Building?

- So is building worth doing?
- Is it all in the ‘too hard basket’?
- Risk is extensively transferred to contractor
- Financial stress indicators ignored
- Contracted work has substantial provisional sums
- Need for bonds incorporated from outset?
- Clients accepting extended development times?
- Individual contracts have risk estimated on the basis of the contract – not the totality of the projects underway
- Against a margin of 4-5%???
- Rethinking of risk burden?

Final Thought



Problem Solving Requires New Approaches

"We can't solve problems by using the same kind of thinking we used when we created them." – Albert Einstein