

THE FUTURE OF MANUAL LABOUR

Commercial Construction Test Case



30 STORIES IN 15 DAYS

THINGS I NOTICED

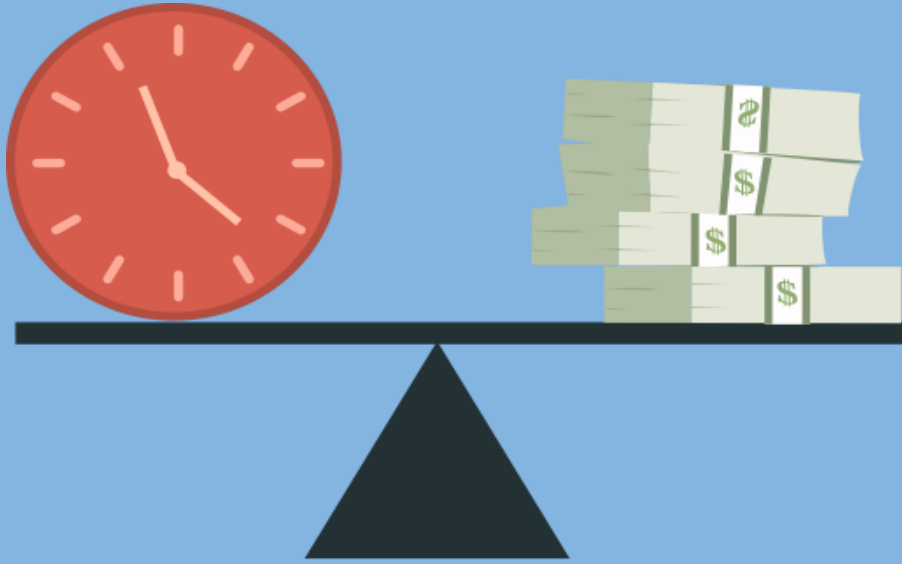
**50% LESS MANUAL LABOUR
PREFABRICATION
PROCESS INNOVATION**

&

IT'S HAPPENING NOW

BUT NOT YET ON THIS SCALE IN AUSTRALIA

THE NATURAL TIPPING POINT



The market always takes care of itself.

When manual labour gets to a cost benefit tipping point, innovative solutions are embraced.

It's ultimately replaced with:

- 1. Multi-skilled labour at reduced volumes**
- 2. Knowledge labour – design, planning, BIM (Building Information Modelling)**

THIS IS NOT NEW IN AUS!



Autonomous mining trucks

MINING

MANUFACTURING



Car manufacturing

CONSTRUCTION



IS NEXT



WHO HERE KNOWS THE COST OF A CARPENTER ON A UNION EBA IN BRISBANE?

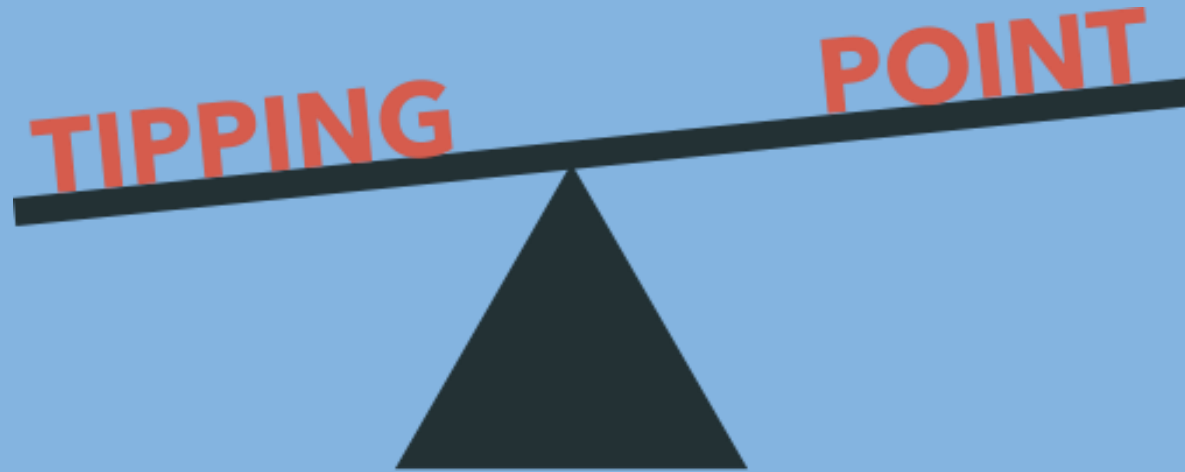
\$185,000 pa

55 HOUR WEEK

26 RDO'S NOT INCLUDING HEIGHT OR SITE ALLOWANCE

**I wonder what our wonderful nurses, teachers,
ambulance officers think of this?**

SO WHERE IS THE TIPPING POINT IN COMMERCIAL CONSTRUCTION FOR MANUAL LABOUR?



IT'S ARRIVED

However it will not be overnight

CASE STUDY 1

BACK TO THE FUTURE: STEEL

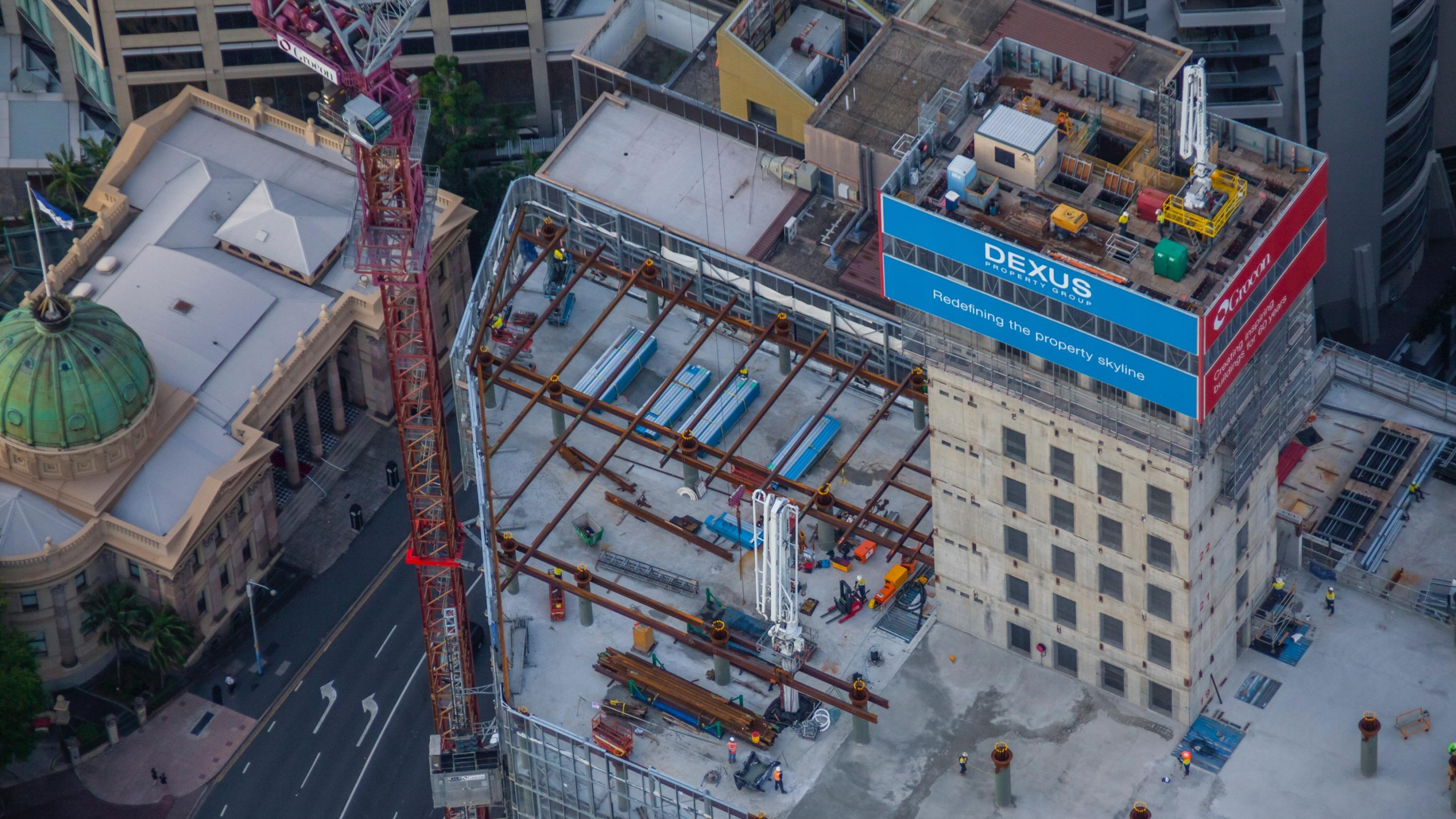


WHY?



Offsite mechanised pre-fabrication
replacing \$145k pa manual workers

Significantly reduced cost through
reduced industrial action



DEXUS
PROPERTY GROUP

Redefining the property skyline

Crocon
Creating inspiring buildings for 60 years

CASE STUDY 2

PRE FAB: STAND UP WALLS



WHY?



Same material cost but
total cost reduced due to speed,
safety and less industrial trouble

CASE STUDY 3

MODULAR: PLUG AND PLAY



WHY?



Floated in from China for half the price of building on site with manual labour

WHY DO IT HERE?

**THIS DOES
NOT MEAN
THAT.....**

**THERE WILL
BE NO MANUAL
LABOUR**



HOWEVER

**Like in many other “old Australian Industries”,
there will be considerable less and;**

**It will be multi-skilled supplemented by knowledge
workers – designers, innovators, BIM**

IN CONCLUSION



1. The market always takes care of itself
2. As it has in many other Australian industries...
3.when manual labour gets to a cost benefit tipping point, innovative solutions are embraced
4. It's happening in construction now
5. It's in its infancy
6. But it is only going to accelerate
7. The successful companies of the future are embracing it now



How many of us have our head buried in the sand pretending it's not going to happen to our industry ?