Technology and MSDs in Construction

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The Coming Storm?

There is an 80% chance that many construction jobs will be automated in the next 20 years.

Most construction jobs have a 75% chance or greater of being automated by 2050.
The Farsight Project

What Is The Future Of Jobs and Skills In Construction?
Ageing Population

Labour Force Participation Projections

The ‘working-age’ population stops growing here.

Source: Productivity Commission
I Could Watch It All Day…
Five Facts About MSDs in Construction

• 3x more frequent than in the general workforce
• 1.5x more frequent than in the blue-collar workforce
• Most commonly caused by overexertion
• 40% of cases take the form of back injury
• Each case results in 13 days off work (median)

Disability In Construction

Source: Arndt, V. (2005)

Construction Worker Disability Rates

Per 100k person-years

Age Group

625% increase
MSDs In Construction

MSDs Share of Construction Worker Disability

Source: Arndt, V. (2005)
Employers In Denial

44% of employers think the ageing workforce will have little or no impact on their business

Source: Chandler Macleod Group
produce more buildings and infrastructure with fewer, older, less efficient workers
Solutions
“You Don’t Have a Workforce Problem, You Have A Productivity Problem”

- Japan
Japan’s Population Problem

• By 2050, 50% of the population will be working age
• A quarter of over-65s are still actively in the workforce
• Average construction worker is 52 years old
• Workforce will be 44% smaller in 2050 than in 2000
25% of new houses in Japan are prefabricated
85% of work done in the factory

3-4 houses per employee annually
Less of this…

More of this…
Thanks