

The UK's MMC Maturity Journey

Implications for Construction & Homebuilding Sector

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5th October 2023
Housing Market Intelligence Conference



The Exam Question Has Not Changed, It Has In Fact Got More Urgent – How Do We Protect Against Declining Resiliency?



resilience

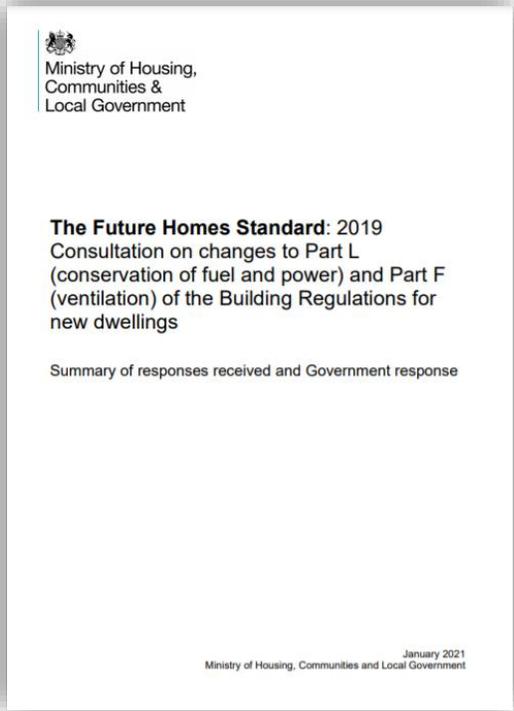
/rɪˈzɪliəns/

noun

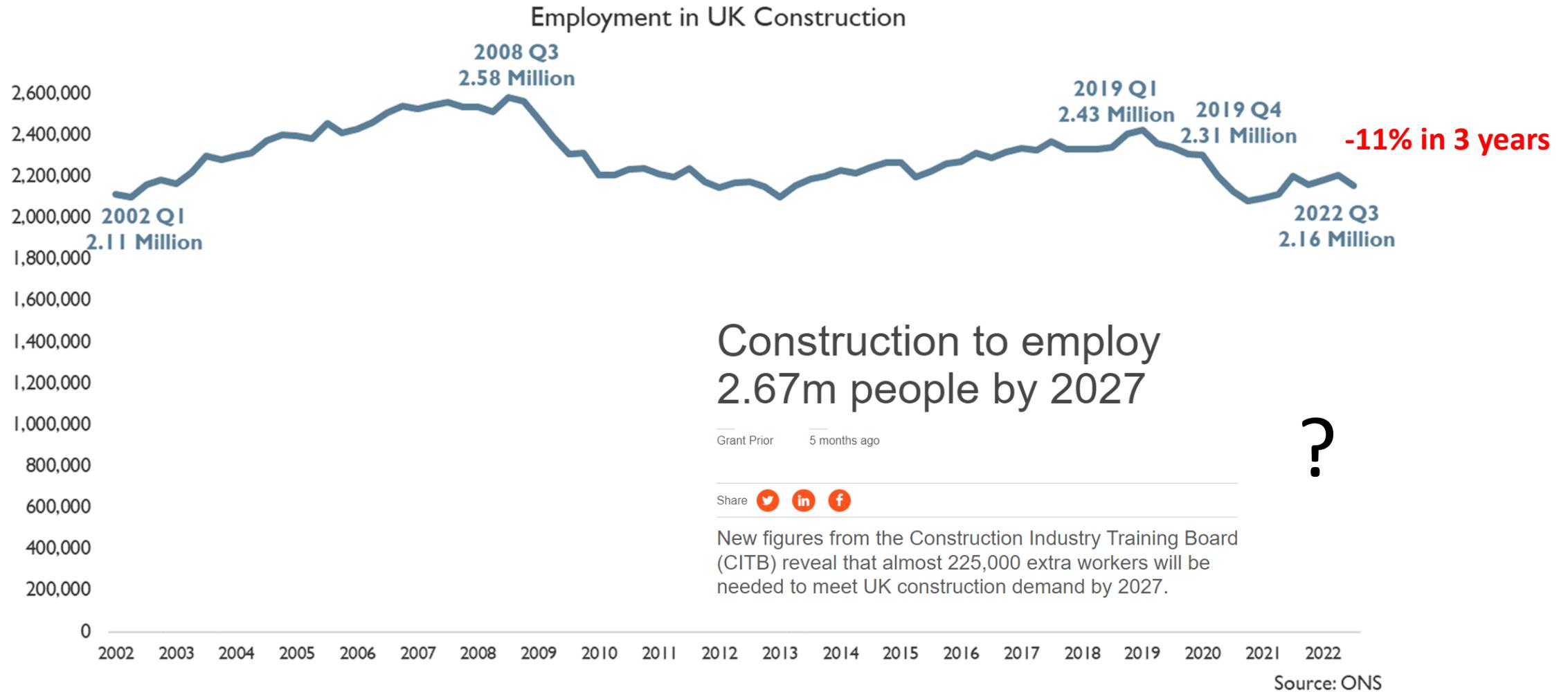
1. the capacity to recover quickly from difficulties; toughness.
"the often remarkable resilience of so many British institutions"
2. the ability of a substance or object to spring back into shape; elasticity.
"nylon is excellent in wearability, abrasion resistance and resilience"



Regulatory & Financing Burdens Increasing – Build Quality & Process Improvements Being Forced Onto An Increasingly Stressed Workforce



The Workforce Decline Is Increasingly Showing Itself – There Might Be A Short Term ‘Mirage’ As Output Falls in 2023/24 But The Prognosis Is Worrying



We Have A Human Capital To Manufactured Capital Ratio Problem



Labour Scarcity Is Insidious: Productivity Quagmire Means We Need To Prepare For Paying More For Less

Inflation 'adds £23bn to annual construction output costs'

15 FEB 2023 | BY TIM CLARK

Some bricklayers now earning OVER £125,000 due to shortages as industry bosses fear government target of 300,000 new homes a year will be missed unless more are trained

- Some senior bricklayers are earning £2,500 a week due to brickie shortages

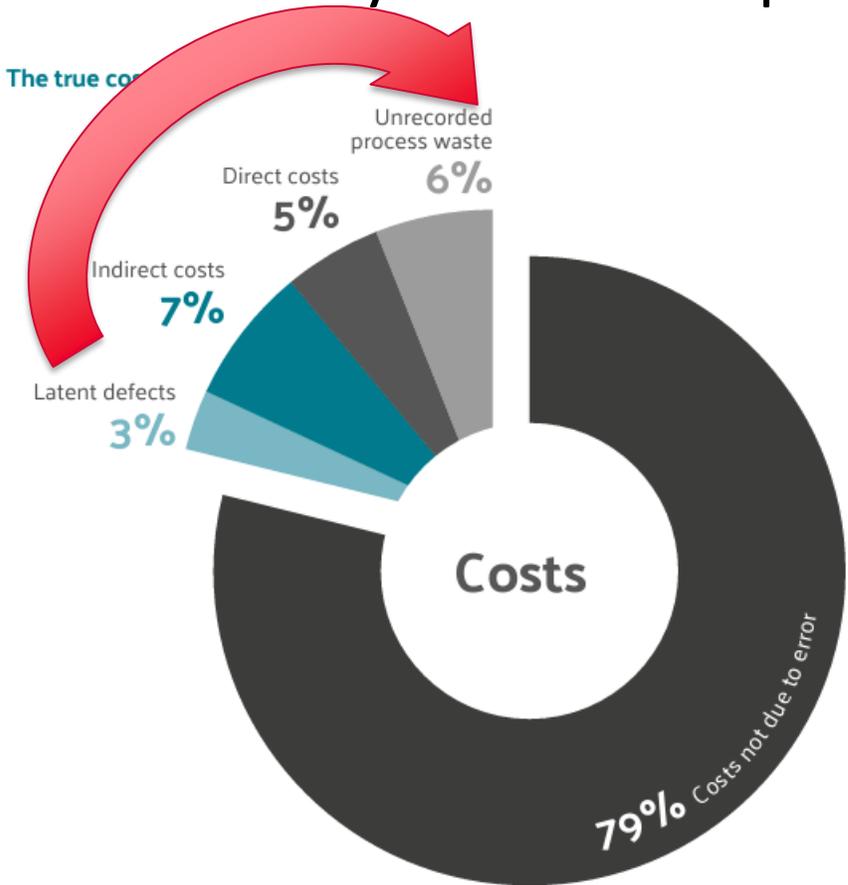
The ONS said output per hour worked among the Square Mile's banks, brokers and insurers contributed a 0.4 percentage point contraction to the overall productivity figures.

Construction staff notched the biggest gains, adding 0.7 percentage points to the total.

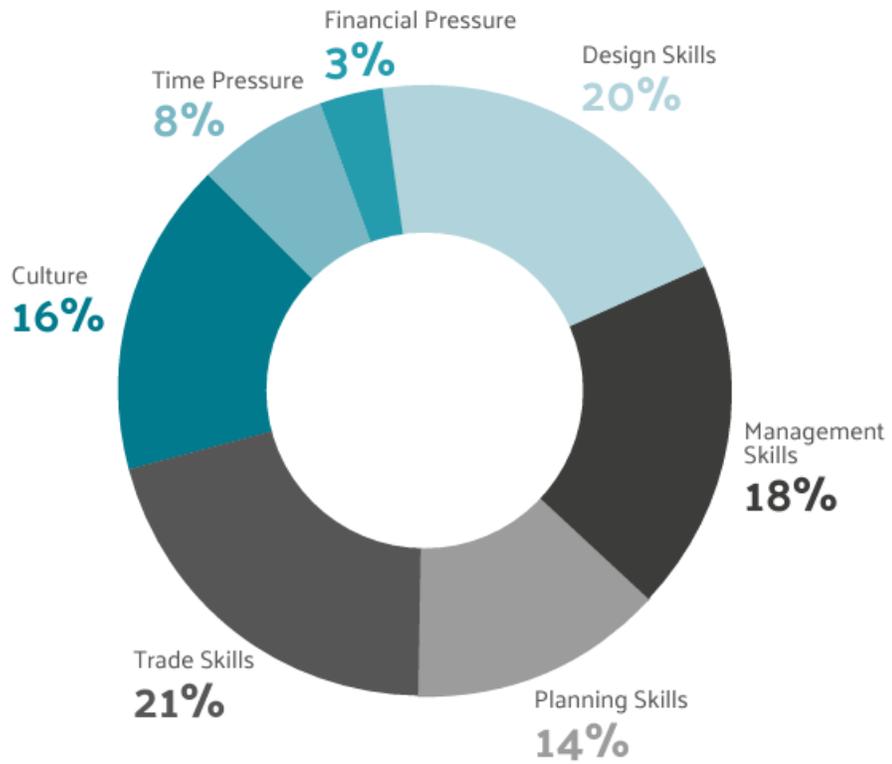
Against 10% total cost inflation – indicates absolute fall in productivity in last year!



Our Current Labour Efficiency Is Burdened By Waste & Error – 120+% Effort Needed for Every Unit Of Output – Competency Related



Distribution of spend to reduce error

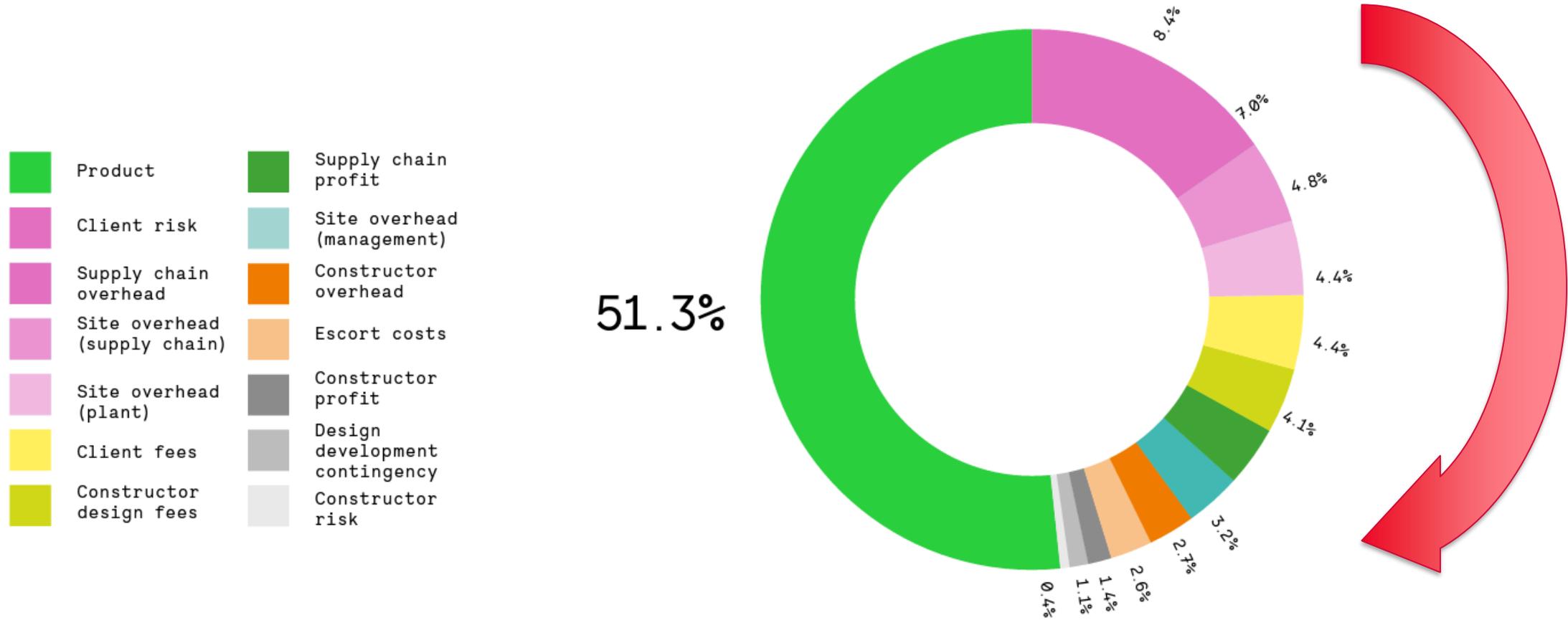


Source: Get It Right Initiative

This Is All Lost Opportunity To Improve Margins & De-Risk Delivery



Construction Also Has A Major Sub-Contract Generated Transactional Waste Problem: <50% Of Total Cost Is Net Labour & Materials



Source: Internal government construction analysis, 2017.

Gross Cost To Net Value Add In Construction Is Shockingly Poor



Continued Poor Construction Productivity & Competence & High Prices Now Risks Undermining Public Sector Value For Money Tests For Infrastructure Spend

Rishi Sunak pushes to axe northern HS2 rail line ahead of Tory conference

Euston, we have a problem: unbuilt HS2 station racks up £289m in design fees

Press release

PM confirms £3.7 billion for 40 hospitals in biggest hospital building programme in a generation

The Prime Minister confirms that 40 hospitals will be built by 2030 as part of a package worth £3.7 billion.

More major road schemes face the chop

25 NOV 2022 | BY COLIN MARRS

More major road projects face cancellation due to inflation and poor oversight, according to a report by a government spending watchdog. The National Audit Office identified a £3.3bn increase in the cost of planned investment into the strategic road network for the period between 2020...

Budget for 40 new NHS hospitals faces real-terms cut of £700m, say Lib Dems

Capital budget of £12bn a year to shrink to £11.7bn, putting Tories' claim 40 hospitals in England will be built or renovated in doubt

School Budgets: Impact of Inflation

Volume 717: debated on Monday 4 July 2022

All Of This Indirectly Impacts The Housing Market!



We Need To More Incrementally Change The Process & The Resource Allocation In Housing Development



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Certain Types Of MMC In UK Has Struggled To Build Economic Resilience In The Last Few Years....And In Certain Instances Has Also Failed To Technically Execute

Urban Splash's modular spin-off falls into administration

Legal & General halts new production at modular homes factory near Leeds

Group tells staff it will let most of them go, as it considers options for loss-making factory

L&G modular homes hit by mould problems

Ilke Homes files administration notice

Ilke Homes: Yorkshire modular construction firm dubbed 'the future of housebuilding' which received £30million in Homes England funding to be prosecuted for health and safety offences



MMC Adoption Is Happening Though But More Incrementally And Primarily Through Existing Players Not New Disrupters

Vistry set to reverse Countryside's decision to pull out of modular after takeover inked

JRL snaps up stricken modular housing firm

Housebuilder Hill snaps up collapsed offsite firm

Persimmon invests in industry-leading modular house builder TopHat

Homes builder Taylor Wimpey creates timber frame manufacturing hub at £60 million logistics park in Peterborough

Barratt ramps up MMC homes target to 30% by 2025

Weston says first MMC homes will start rolling off production line by spring

Cala acquires Taylor Lane Timber Frame to bolster sustainable construction practices

By Joey Gardiner | 16 January 2023



Full Volumetric Modular in Residential Is Struggling To Land In The UK Market – Focus Is Being Turned To ‘Kits of Parts’ And Multi-Category ‘Hybrid’ MMC



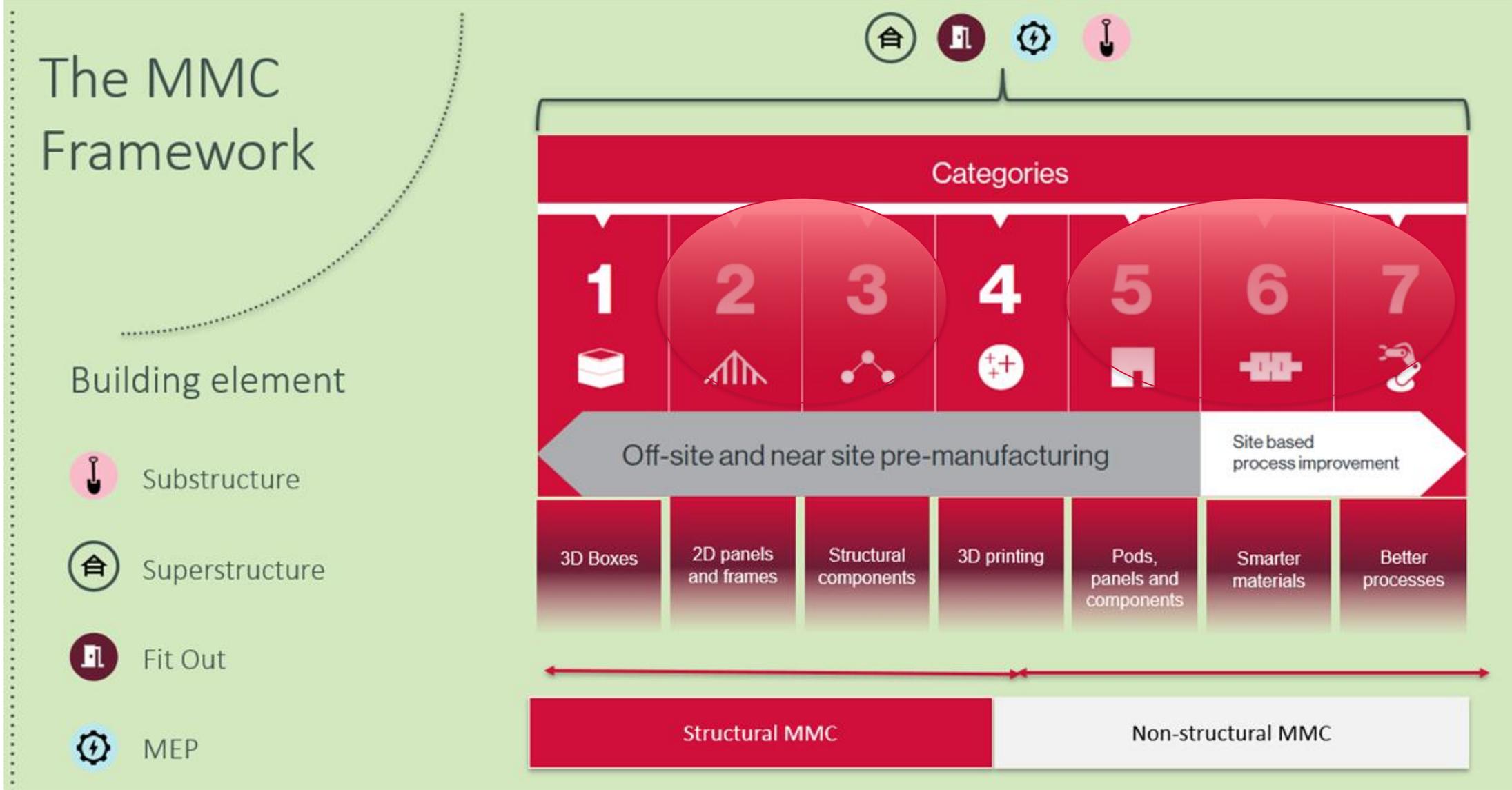
versus



Change Drivers Are Labour Market Concerns & Carbon Compliance



We Need To Think Beyond 'MMC = 3D Modular Buildings'



The Housebuilder Utopian Position – Adding Pre-Manufactured Value To Structure, Fabric & Internal Wet Areas Whilst Replicating Aesthetic And Still Making The Cost Equation Work



Labour Market Failure & Wage Inflation Will Eventually Get Us There – The Current Housing Cycle Will Delay Things Though



MMC Needs Technology To Make It Truly Scalable – ‘Building In A Shed’ Can Be More Inefficient & Expensive Than Site Work Unless You Optimise Manual Process!



versus



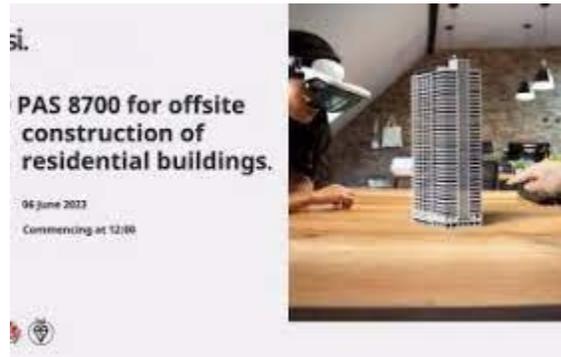
Little Evidence Yet In Cat 1 Market That Optimised Manual Processes In An Immature Sector Are Enabling An Automation Switch



Unfortunately Technical Accreditation & Regulatory Failure Plus Scaremongering Means Innovation Is Still Marginalised



Department for Levelling Up,
Housing & Communities



An Industry Productivity & Quality Shift Is Not Just About Digital, Factories & Robots, It Requires Fresh Investment In Human Capital – Existing & New

Industry Skills Plan

for the UK Construction Sector 2021 – 2025



The Size of the Skills Challenge - For every extra ten thousand houses we need approximately:



Including these roles over 30,000 new recruits are needed for 10,000 extra homes

Key
■ Directly employed
■ Sub-contracted
■ PRIORITY



Keeping talent in the industry



Improving routes into industry



Supporting apprenticeships



Identifying future skills needs



In conjunction with



Workmanship Failure Risk Is Proportionate To Site Labour Intensity. There Is A Basic Competency Gap Not Just A Skills Gap Across The Trades

New Home Quality Control's Top 20 Snags

A-plan
insurance
// a howden company

- Insulation missing in the eaves of the roof.
- Or insufficient insulation in the roof space.
- Fixing missing to brace roof construction.
- Electrics wired incorrectly.
- Plumbing with leaks.
- Fire cavity barriers missing or installed incorrectly.
- Fixings missing from bathroom fittings.
- Fire door margins not within tolerance.
- Holes penetrating the floor not sufficiently sealed if sealed at all.
- Cavity trays missing.
- Breaching of cavity.
- Insulation faults in porch ceilings.
- External brickwork poorly constructed.
- Handrails installed at incorrect heights.
- Soil pipe in roof space not leaving through roof via a vented tile.
- The durgo valve is missing.
- Access hatches missing for the maintenance of durgo valves.
- Weep vents missing on externals of building.
- External timber framed walls out of tolerance for plumbness.
- Incorrect DPC detail

Source: www.newhomequalitycontrol.co.uk



UK Government Needs To Give Clarity On Choice Between Relying On Cheaper, Imported Labour Or Developing A Domestic Solution

Visas for foreign construction workers in bid to fill UK job shortages

Sir Keir Starmer: Britain's 'immigration dependency' must end in CBI conference speech



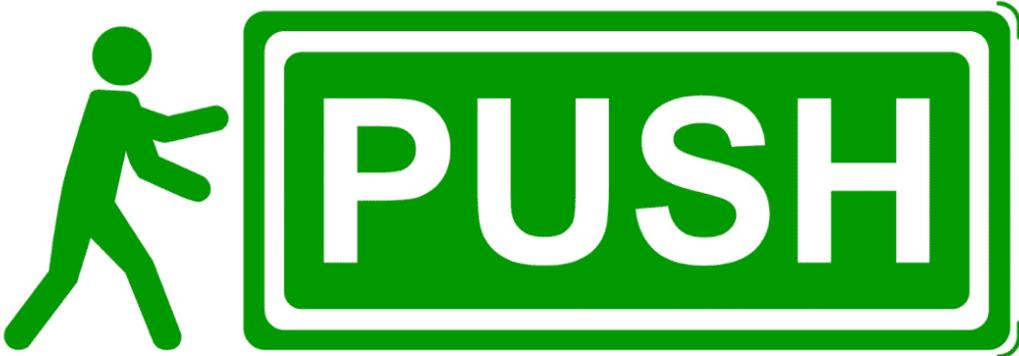
Construction pros call for immigration reform to fill surge of open jobs

A lack of political will has stymied efforts to tap foreign-born workers for a coming flood of public and private projects, according to industry advocates.

Published Oct. 18, 2022



Our Industry Has To Change And It Will – It’s Just A Matter Of How Quickly



- External ‘Shock’ Events
- Regulatory Change
- Public Procurement & Funding
- ESG Led Investment
- Lending & Insurance of Buildings

- Labour Market Structural Decline
- Changing Consumer & Societal Expectations
- Reputational & Business Trading Risk
- FOMO



