

Surrey Property Exchange 12 April 2021

2021 – Modular's Moment

Elaine New, - Director Bildoo Ltd

BiLDOO

On a mission to help solve the UK housing crisis

Founders and directors

Elaine New
CFO



Elaine New – CEO / CFO
MA (Cantab) ACA
LSE/AIM CFO - Experienced
NED

Barry Hawkins
CTO



Barry Hawkins –
Projects Director

Elaine has a proven and successful track record within the financial and accountancy arena holding CFO roles in the retail, film and property sectors where she raised funds and helped float organisations on Aim and NASDAQ. Barry has spent his career in the construction industry from a trades background progressing into senior management and leadership roles with T1 main contractors.

Elaine and Barry came together in 2016 to pool their respective experience and passion to change the way we finance and deliver new homes that fully utilise MMC.

Today's Presentation

- **State of Our Nation**
- **Modern Methods of Construction (MMC)**
- **Bildoo**
 - **All about us**
 - **Business Strategy**
 - **What we do and How we do it**
 - **Current Projects**
- **Questions**

...There is a better way.

The State Of Our Nation

UK Housing Market is in Crisis – Quality and Delivery

The Government committed to building over **300,000 new homes per annum**,

- 2017-2019 a total shortfall of 221,978 homes. 26% behind target in a two-year period.
- Zoopla stated house building in 2020 **30% down** on 2019 despite Gov initiatives

With the homes that have been built traditionally,

- 51% of home-owners in England reported experiencing major problems with their new property.
- 41% of new home-owners would rather live in an older property

Source: Shelter, YouGuv, NHBC

...There is a better way.

The current situation is not sustainable

60%



OF NEW HOMES ARE BUILT
BY JUST 10 COMPANIES



1/3 OF MILLENNIALS WILL
NEVER OWN THEIR OWN HOME

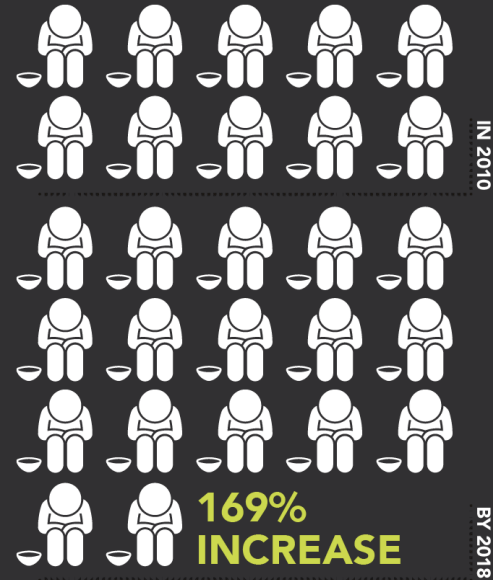


ONLY 43% OF NEW
HOMES APPROVED
BY PLANNING IN
THE PAST 5 YEARS,
HAVE BEEN BUILT!

Had they delivered on
every approved
planning application
since 2010,
developers could have
built an extra 236,170
homes every year!

HOMELESSNESS

IS INCREASING QUICKLY



Holding back change

Long build cycles, land banking, trade shortages and surge pricing are holding the provision of much needed homes back.

...There is a better way.

Summary of the challenges in UK housing

RICS 2018 report - stated traditional constructionis characterised by

- low productivity and variable quality
- Output lagging behind target, and slim margins for builders.

Based on unstable foundations for the construction sector to operate and invest in.

Farmer Report “ Modernise or Die”, (trades & raw materials)

- skills crisis in mainstream construction/decrease of 20-25% in the workforce over next decade
- exacerbated by Brexit, as one in eight UK construction workers are foreign,
- In addition, the weakening pound has increased the cost of imported materials, with some 20% of bricks and brickmaking components imported, mostly from the EU.

... There is a better way

BILD[^]OO

Summary of the challenges in UK housing

- Acute housing demand /market failures -cost, quantity and quality encouraging the industry and government to look at Modern Methods of Construction (MMC) as a solution.
- Government now including MMC in all major housing strategy announcements
- BUT PLEASE NOTE:-
 - Only 7.5% of new homes between 2017 - 2019 used “pre-fabricated” or modular elements.
 - UK is lagging behind Japan at 15%, Germany at 20% and Sweden at 84%.
 - UK still has the “pre-fab” stigma

... There is a better way

Modern Methods of construction (MMC)

Modern Methods of Construction- several types



1. Volumetric construction

Three-dimensional units which are fully fitted out off-site



2. Pods are used in conjunction with another construction method.eg bathroom or kitchen pods



3. Panelised systems

Panels with timber or light steel framing, structural insulated panels (SIPS) or crosslaminated timber (CLT)



4. Sub-assemblies and components

Larger components incorporated into new homes. They include roof and floor cassettes, prefabricated chimneys, porches and dormers.



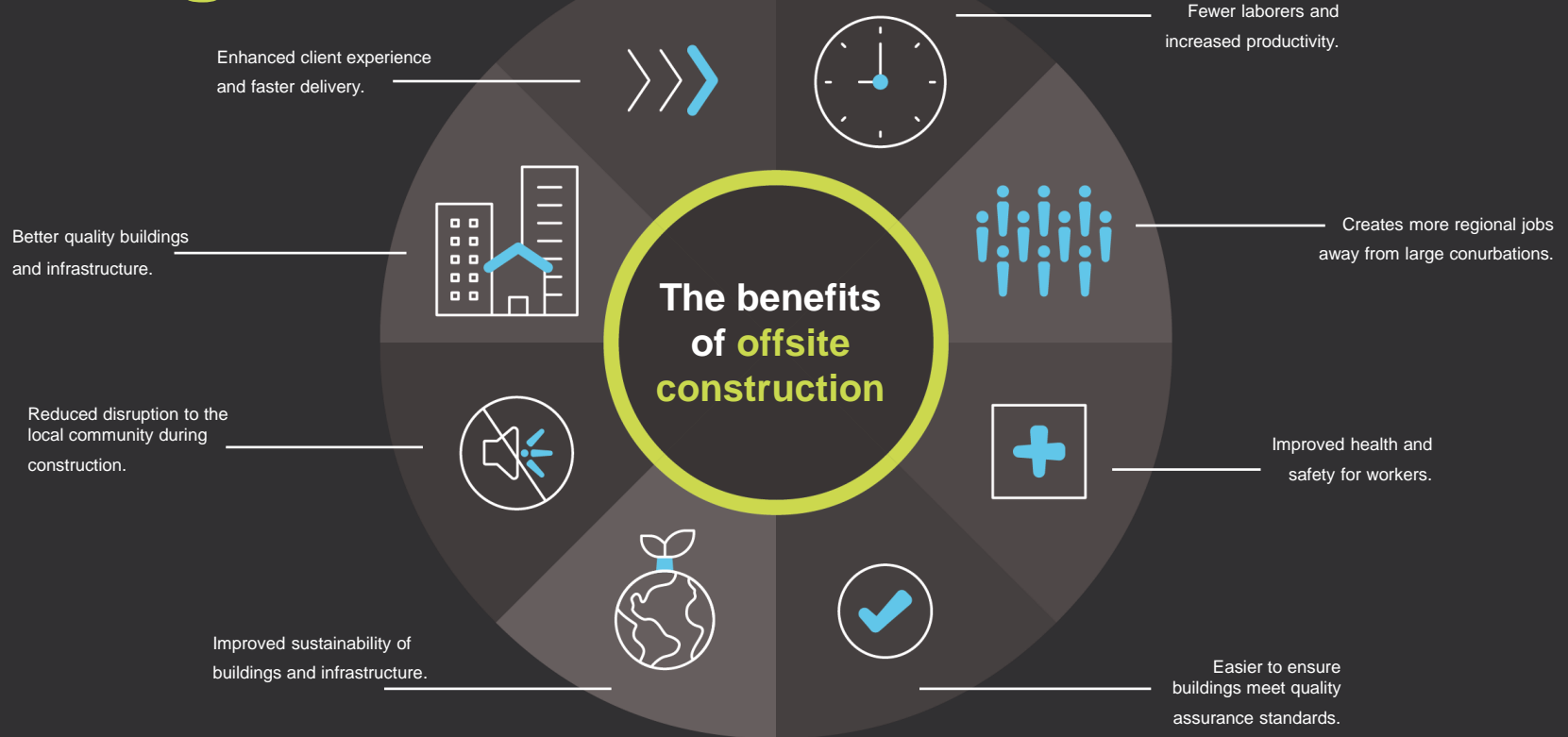
5. Site-based MMC

Innovative methods of construction used on-site. They include thin joint blockwork and insulated formwork

Benefits of MMC

- Eco-friendly
- Sustainable materials/construction methods eg solar panels/ground source heating/rainwater collection systems
- Cheaper to run - addresses fuel poverty and can be off-grid
- Mass production standardised design => efficiency and greater quality control => cheaper
- Speed as foundation and modules can be built in parallel
- Fewer builders required as built offsite => helps with trades shortage
- Performance can be closely monitored through digitisation and manufacturing.
- Continuous cycle of improvement from design, manufacture, build, management and back into design.

Tangible benefits- Bildoo



Homes England Flyer



On-site construction time can be **REDUCED BY OVER HALF.**¹



265,000 EXTRA HOMES could be built in the next ten years if 1/3 of new homes used MMC²



MMC is a key **PERFORMANCE INDICATOR** for Homes England³



NEARLY 40% OF HOMES currently under construction are build-to-rent for which MMC is ideally suited⁴



Enables up to **FOUR TIMES AS MANY HOMES** to be built with the same on-site labour.



MMC is well suited to using Local Development Orders which can be determined in **28 DAYS.**

¹ <https://www.nao.org.uk/wp-content/uploads/2006/11/mmc.pdf>

² Arup calculation


³ <https://www.gov.uk/government/publications/homes-england-strategic-plan-201819-to-202223/homes-england-strategic-plan-2018-to-2023#achieving-our-plan>

⁴ <https://www.bpf.org.uk/media-listing/press-releases/building-boom-uk-build-rent-housing>


Market segmentation

MMC 'must' be seen as one of the key solutions to delivering more new homes.


However, capacity is required. 100,000 homes will need circa 200 manufacturers each with a capacity of 500 homes per annum.



**Target of 300,000
per annum
and 1.5 million
by 2022.**



**Under 7.5% of
homes built in
the UK between
2017-19 used pre-
fabricated
or modular
elements.**



**During 2017-19
only 378,022
homes were built
out of
600,000 targeted -
63% achieved.**



On a mission to help solve the UK housing crisis

2021

Executive summary

Bildoo are a specialist **developer and project delivery vehicle** with an experienced and motivated team with a passion to disrupt and drive change in the house building markets by fully adopting **Modern Methods of Construction (MMC)**.- improve quality and speed of delivery.

We work in **full collaboration** with our stakeholders we provide a full turn-key project execution plan combining

- optimised site selection,
- massing,
- design and architecture,
- planning support
- funding opportunities/exit solutions

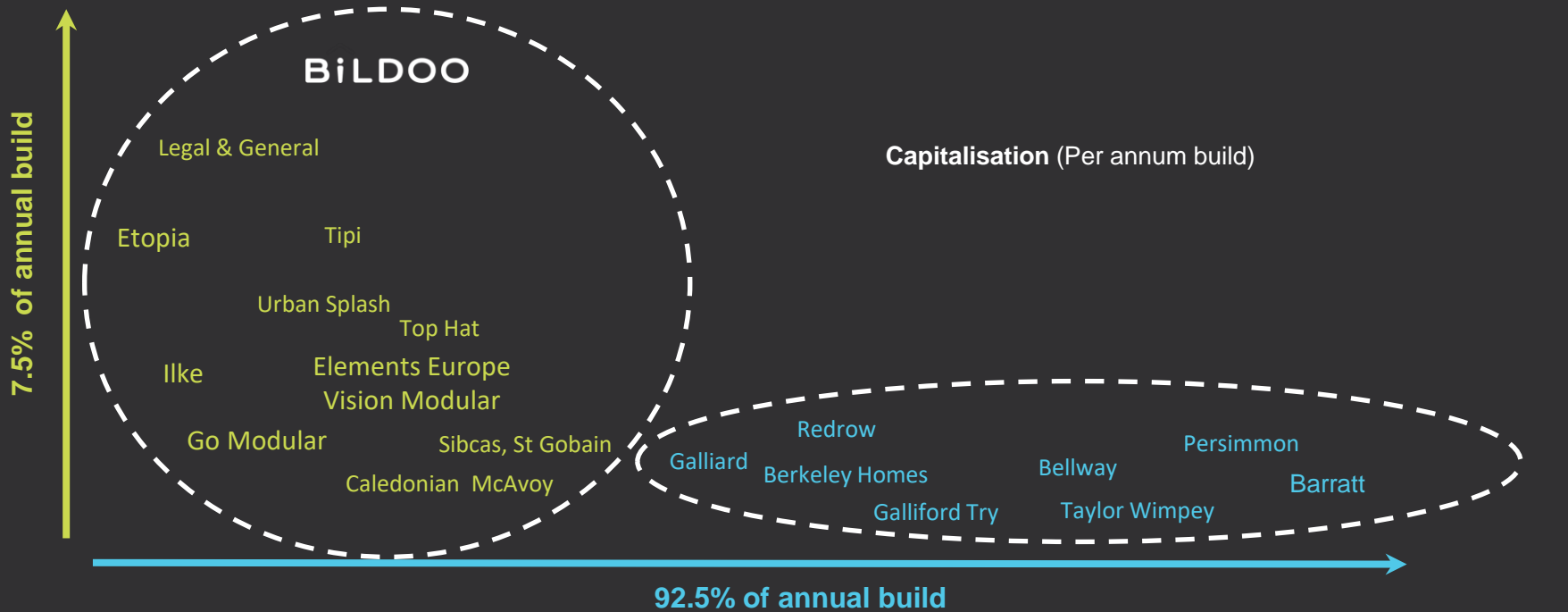
Our vision

- To help solve the UK housing crisis.
- Deliver homes **people want** to live in - within areas they want to live.
- Endorse **technology** that makes a home simple and economical to live in.
- To become recognised as a market leader in MMC delivery through “**doing not talking**”
- To establish both a Bildoo manufacturing entity and **manufacturing industry alliance**.

Why Bildoo?

- We are **experienced** in modular product development and delivery.
We provide end to end service with a long-established team of integrated specialist consultants.
- We offer a **flexible** range of solutions specific to customer needs.
- We are totally independent with our **unique product design**.
- **We aim** to **maximise best value** from a development opportunity.
- We focus on **quality and performance**.
- We achieve improved financial performance by **taking out layers and duplication**.

Bildoo competition



Bildoo Business Strategy

Aims and objectives

A 21st Century Solution

To **disrupt the norm** and drive change in how we design and deliver **superior quality** homes.

To drive real change through “the doing” by **harnessing modern techniques and technology** within the construction and manufacturing industries.

Product Focused

To develop a **standardised product range** in the form of a **pattern book**.

- maintains the design for manufacturing and efficiencies in procurement and production.
- BUT allows more flexibility in the design and architecture rather than a particular house type or style.

Our aims and objectives

Product Focused

PLEASE NOTE:-

Industry capacity is a fundamental risk,

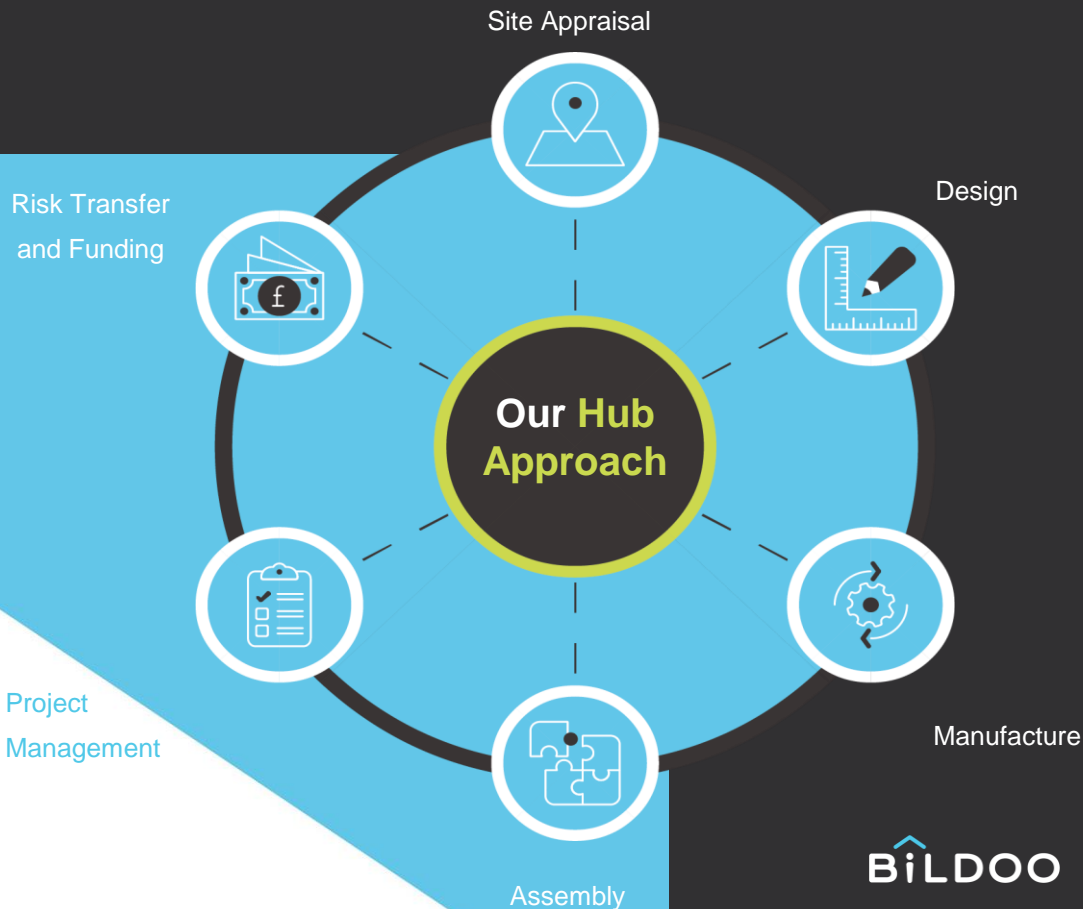
- in the short-term we have partnered with an established manufacturer to set up and run a dedicated production line focused on the Bildoo patterns.
- The medium to long-term aim is to establish our own central UK facility maximum of 2000 modules per annum (c.1000 homes per annum).
- ALSO create an industry manufacturing alliance to increase and flex capacity.

What We Do And How We Do It

How we work

We insource and outsource around the specific requirements and the experts we need for each individual project.

This approach typically means housing can be delivered at twice the speed whilst controlling costs and avoiding duplication.



The Bildoo team

- Bildoo Founders & Directors. (Elaine New/Barry Hawkins)
- Non-Executive Directors.
- Delivery Team.
- Specialist Consultants. -
Architects/Structural Engineers/MEP specialists/Planning consultants/Estimators/Principal Designers

Non-executive directors



Kim Hayward - NED

IBDO LLP Partner

- Early-Stage Mentor and Advisor Taking businesses to AIM IPOs, BDO International Liaison Partner, BDO's EMEA Board

Sourfire Ltd NED

- Advised on structuring & Company Formation, raised debt & equity funding

Enjoy Natural Foods Ltd

- Non-Exec Chair



Ian Zant-Boer - NED

CEO Growthdeck Ltd

- HNWI & Sophisticated Investor P2P platform

EMW Law LLP

- Snr Partner & Business Dev't

MK Dons Sports & Education Trust Ltd

- Trustee of Independent Charity



Simon Munns - NED

SD Capital Advisory Ltd

SPM Equity Ltd

- Founder & Owner, Investor Relations & Capital Introductions

Morgan Stanley International

- Executive Director

UBS

- Executive Director

Goldman Sachs

- Executive Director

Delivery team



**Barry Hawkins - Projects
Director**



**Nick Kendal - Projects
Manager**

Both Barry and Nick have spent a combined career of over 70 years in the construction industry on the front line managing and delivering major projects.

They both bring a huge wealth of experience along with their established and trusted network of specialist consultants, supply chain and support services.

Bildoo offer / products

- Consultancy – Project Process Map.
- Product – Pattern Book and how it works.
- Product Performance – Superior fabric performance - robust detailing and assembly
- Product Overview.- (cold rolled steel with SIPS infill)
- Factory Assembly.
- Installation.

Project process map



Pattern book

- 3 years perfecting and testing our product .
- The pattern book is our IP
- If you want to see more please talk to us about your specific requirements

elaine.new@bildoo.co.uk

barry.hawkins@bildoo.co.uk

Product performance

Bildoo's design philosophy is always to review and improve

- ensures the end user benefits from the reduced cost of ownership and quality.
- our superior fabric performance achieved through robust detailing and assembly
- unrivaled U-Values and Air Permeability, far exceeding building regulations and legislative requirements.
- We future-proof our designs wherever possible

The design and performance criteria take into account Bildoo's desire to move the design into a [passive house solution](#).

Product assembly



Product installation



Proof of Concept - Derby

BILDoo

Current Projects

- Derby - proof of concept bungalow – delivered
- Weybridge
 - JV with Richard Simmons
 - in planning
- West Wey Addlestone
 - JV with Richard Simmons
 - planning approval 12 May?
- Gloucester
 - planning for 115 units
- Nuneaton
 - planning for 44 units



Garden Suite Concept

Flexible interiors
COVID friendly



Sustainable exteriors











New Inn Bulkington - 44 over 55 apartments



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For Further Information

Please contact Elaine New 07799 691556/Barry Hawkins 07766 820108