



# The Future of Construction

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[ March 2023 ]



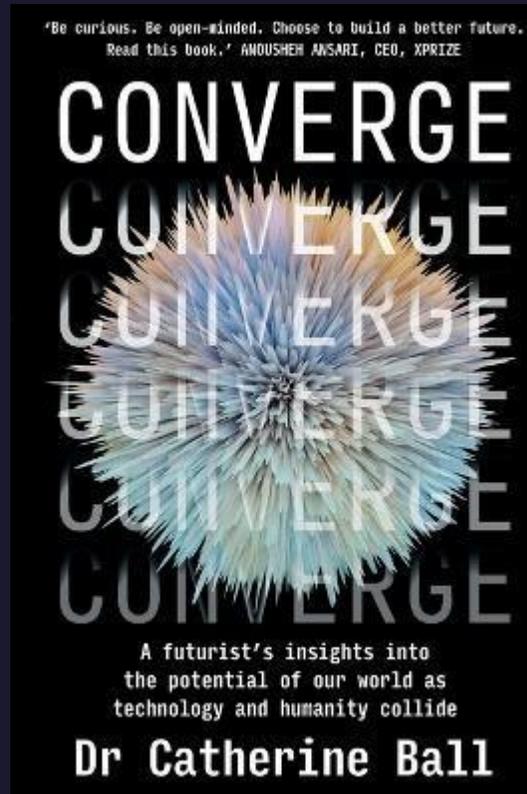
The Future =



# The Future = Research



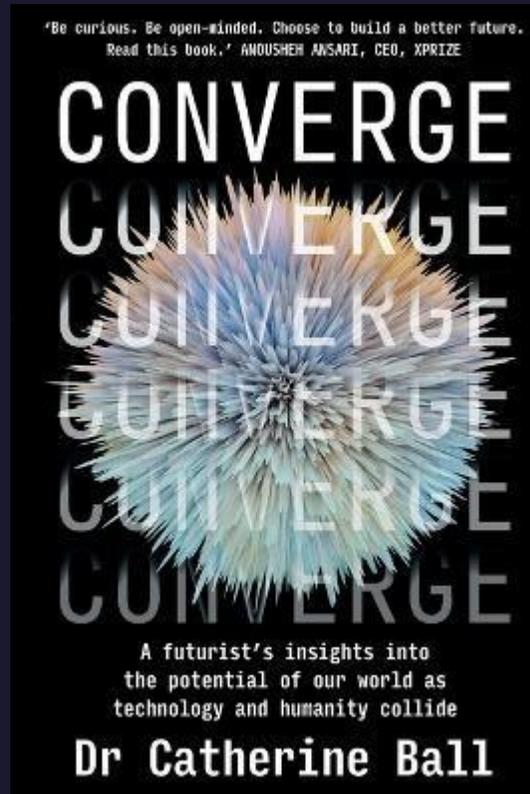
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# The Future = Research + Imagination



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**An optimistic study on life as we know it, and the decade ahead.**

**CONVERGE**

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CONVERGE

A futurist's insights into  
the potential of our world as  
technology and humanity collide

I am a human 3D  
printer: I make people.  
I am a creator and  
consumer, a resource  
user.  
I am a scientific  
futurist.

The future is  
interconnected.  
The future is powered  
by purpose.  
The future is an  
incredible place.



Dr Catherine Ball

# The future is convergance



## COMBINE

- Fast combining, evolving + hybridising technologies.
- Patterns + predictions touted as prescience or foresight.
- Human applications of technology.

## DIVERGE

- To think like futurists...
- Allow our brains to dream of what the future might be...
- Without the constraints of the current reality holding us back.

## PAY IT FORWARD

- Keep an eye on where we are going.
- Our current global economic systems place value on things our grandchildren will have to pay for.
- Our planet can't sustain this.



# A reminder

“We don’t inherit  
the planet from  
our parents, we  
borrow it from  
our children”



# Future of our digital community

Six trends that will shape the  
future of construction  
technology



**1. 3D Printing**



**2. Robotics**



**3. Augmented Reality (AR)**



**4. Internet of Things (IoT)**



**5. Artificial Intelligence (AI)**



**6. Sustainable Construction**



# 1. 3D Printing

3D printing technology is revolutionising the construction industry by allowing builders to create complex structures with less waste and at a lower cost. With 3D printing, construction professionals can produce building components, parts, and even entire structures with unprecedented accuracy and speed.



## 2. Robotics

Robotics technology is changing the way construction sites operate, from autonomous vehicles to robotic assistants. These machines can help with tasks such as excavation, transportation, and heavy lifting, reducing the risk of injury and increasing efficiency.



### 3. Augmented Reality (AR)

AR technology is being used to provide immersive virtual tours of construction sites and to aid in the design and planning of structures. This technology can help construction professionals visualize and plan complex projects, reducing the likelihood of errors during the construction phase.



## 4. Internet of Things (IoT)

IoT technology allows construction professionals to monitor and manage a construction site remotely. This technology can help builders optimize processes, save time and resources, and improve safety.



## 5. Artificial Intelligence (AI)

AI technology is becoming increasingly prevalent in the construction industry, with its ability to analyse large amounts of data to improve decision-making, predict project outcomes, and enhance safety.



## 6. Sustainable Construction

Sustainable construction is becoming more important as we strive to reduce the impact of construction on the environment. The use of eco-friendly materials and techniques, such as green roofs and solar panels, can significantly reduce the carbon footprint of a building.



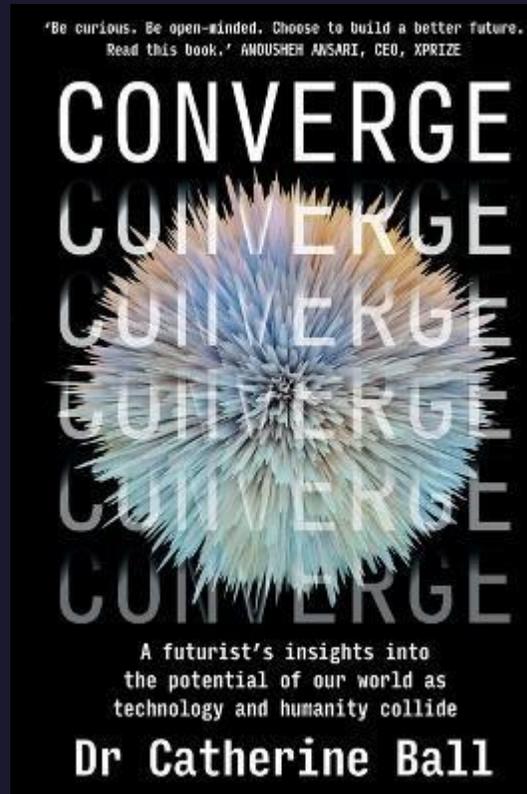
# Where to next?

In conclusion, the future of construction technology is exciting and promising. These innovations can help construction professionals save time, reduce costs, and improve safety while building structures that are more sustainable and resilient. By embracing these technologies, construction professionals can create a more efficient, safe, and sustainable future.

# The Future = Research + Imagination



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# A provocation

“At some point this century, we may be able to upload our physical selves digitally into a place beyond the confines of biology.

Could we grow bodies + download a copy of ourselves every now + then?

Could we edit ourselves + choose to change how we self-create?”

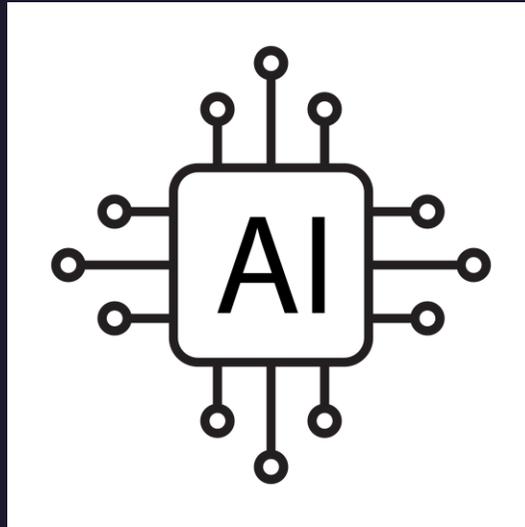
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# The Future = Research + Creativity

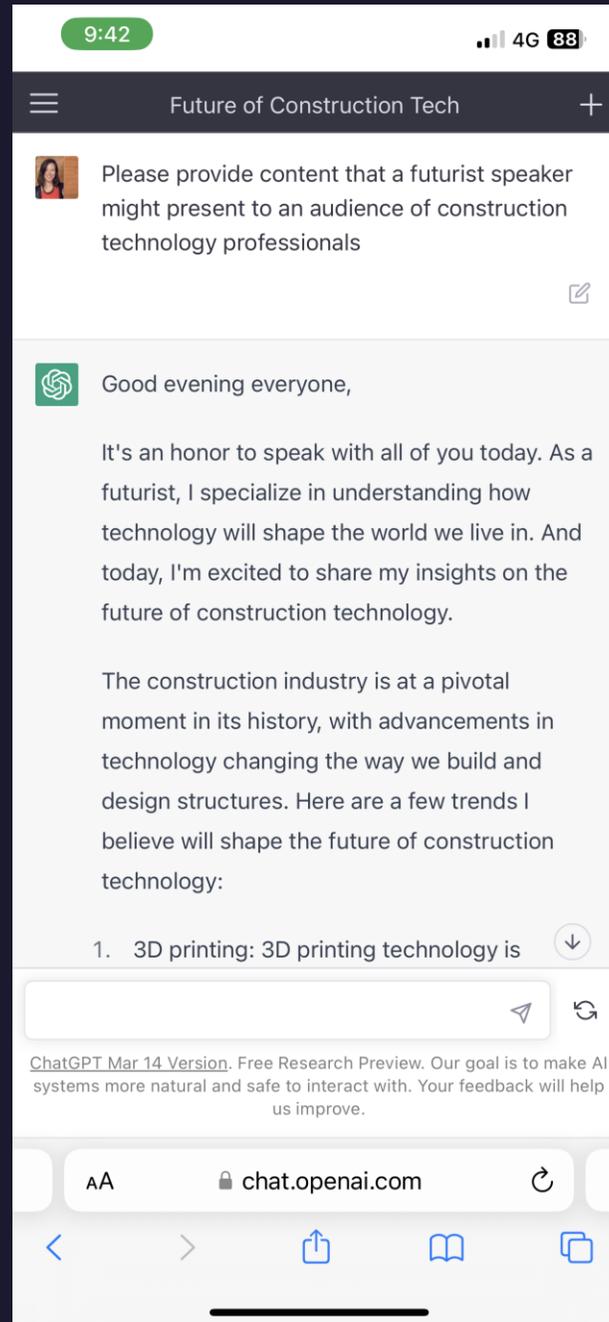
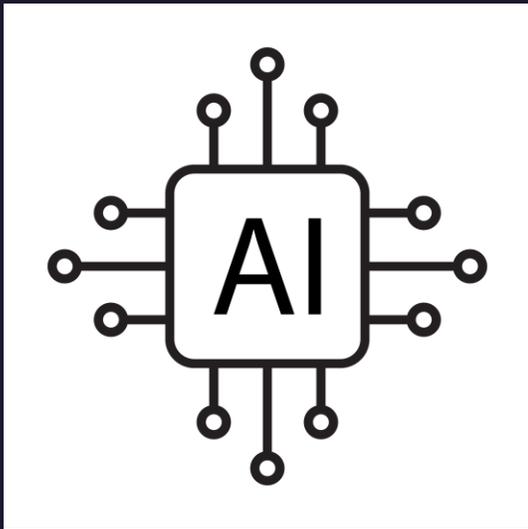


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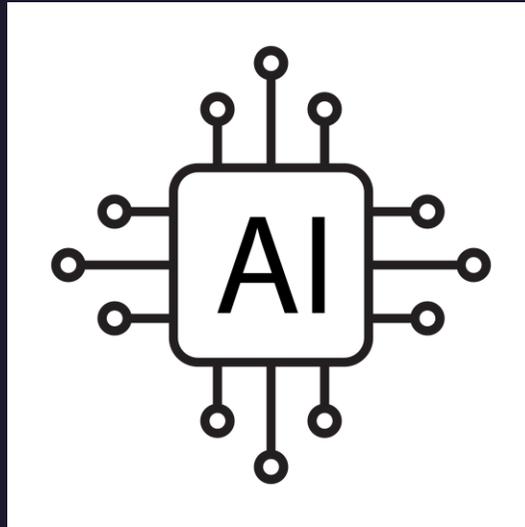




The Future = Digital + Humanity



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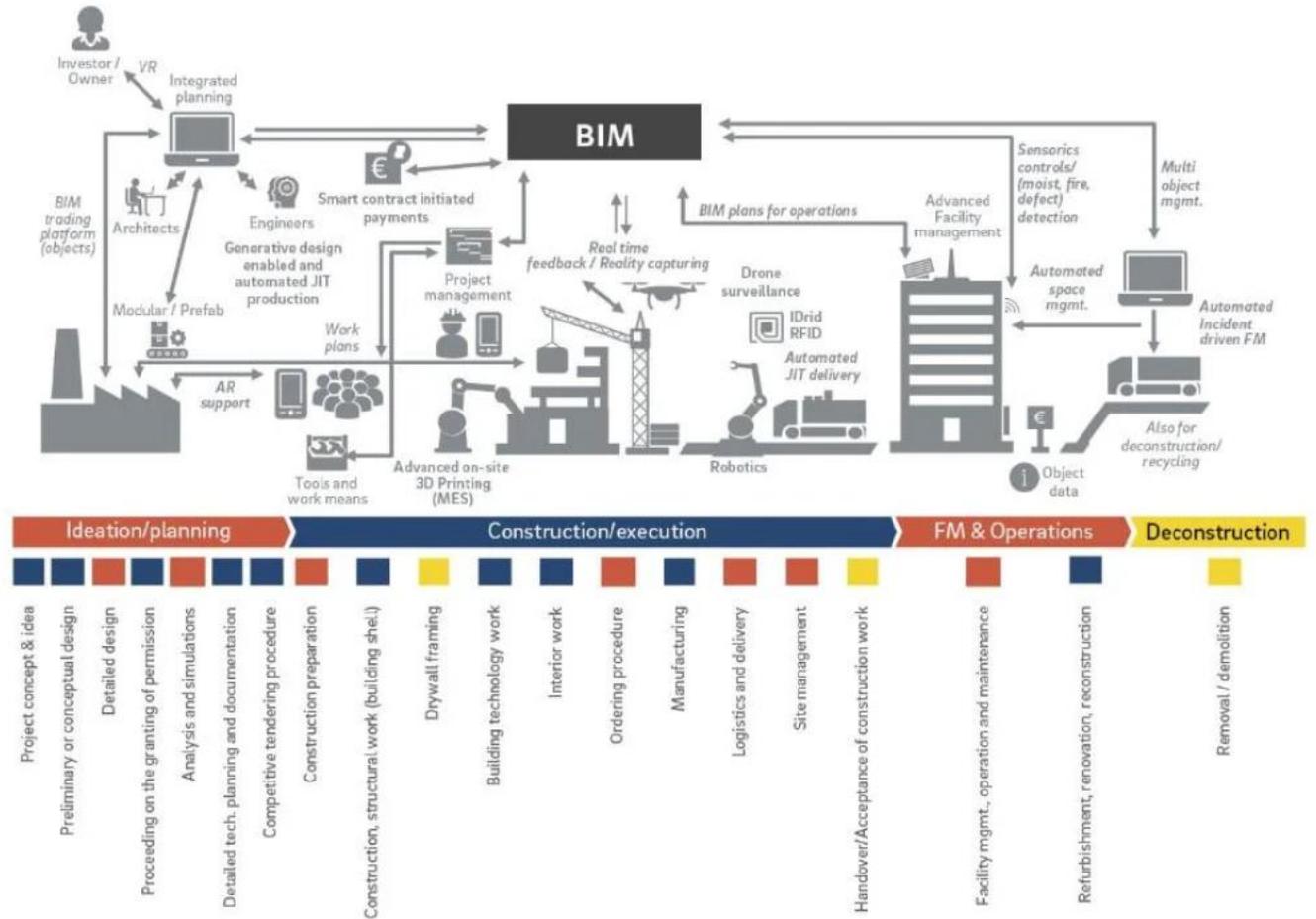


# Future of our digital community

What part will you play ?

# Digital...

AI with significant disruption potential along the value chain - BIM will be the digital backbone of the future of construction



AI disruption potential: High (Red), Medium (Blue), Low (Yellow)

# Humanity...

“In the face of an increasingly commercial + technology-driven world, we need to start doing things that only humans can do.

We are really good at creativity.  
We can develop ideas about the way we want to live our lives.

We don't want to sit like robots in front of our computers.

Let the robots do the robotic stuff, + let us be more human.”

Dr Catherine Ball



# Thank You Tena koutou

- Win Converge by Dr Catherine Ball
- Email [info@nziob.org.nz](mailto:info@nziob.org.nz)
- Tell us one thing about The Future
- Your name + postal address for snail mail

