



**WESTERN SYDNEY**  
UNIVERSITY



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Centre for  
Smart Modern Construction

# THE JOINING UP CONSTRUCTION CONVERSATION

**Developing Smart Modern  
Construction Enterprise Typologies  
for the 21st Century Construction  
Futures**

## PhD Candidate: Priyadarshini Das



## Supervisory Team



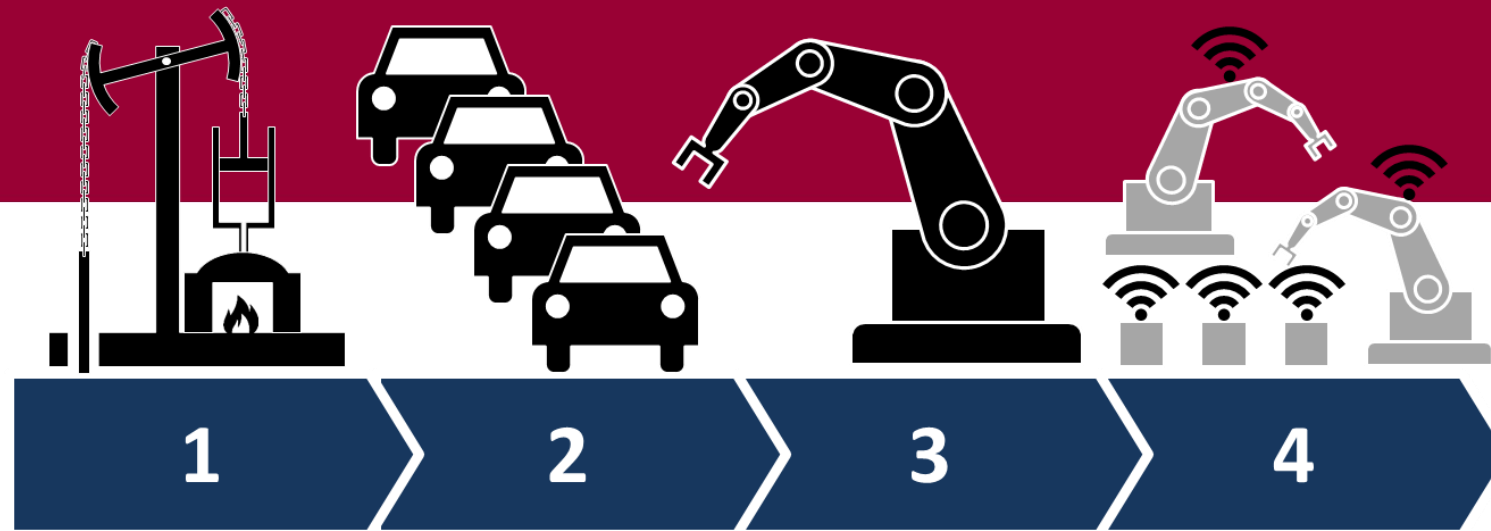
**Prof. Srinath Perera**



**Dr. Sepani Senaratne**



**Dr. Robert Osei-Kyei**



Are we **ready** for the **4<sup>th</sup> Industrial revolution?**



Integration

# Smart Modern Construction (SMC)

## Smart

Fintechs using mobile devices, Integrated building software packages

BIM (3D to nD), Virtual Reality & Augmented Reality

Robots, Drones, IoT applications, 3D printing

Digital signatures, digital records, digital twins, digital legacy models etc

## Modern

Industrialization (prefab, panelised, volumetric & hybrid construction)

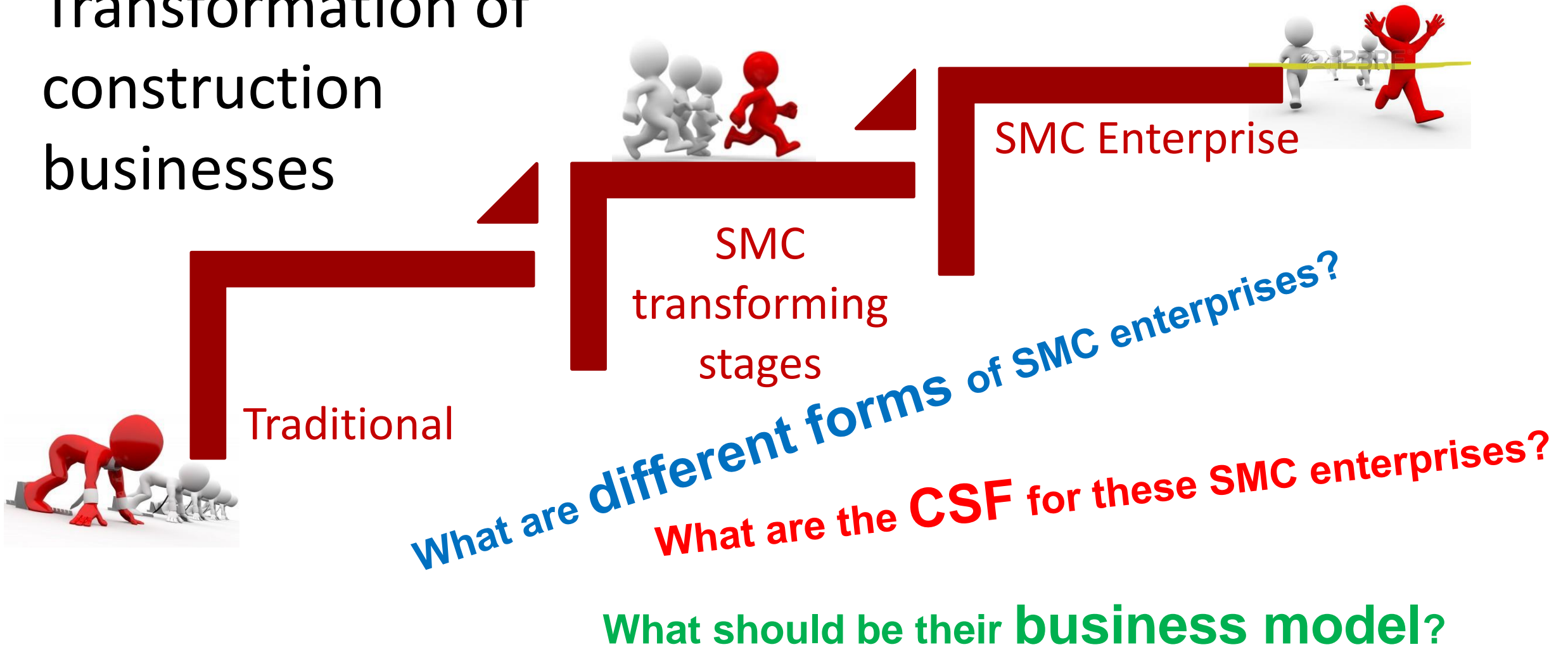
Internationalisation of projects

Design for Manufacture and Assembly (DfMA)

Innovative on-site construction methods

SMC could be defined as construction that embraces smart technologies and modern construction to develop innovative and performance enhancing construction products, systems and processes.

# Transformation of construction businesses

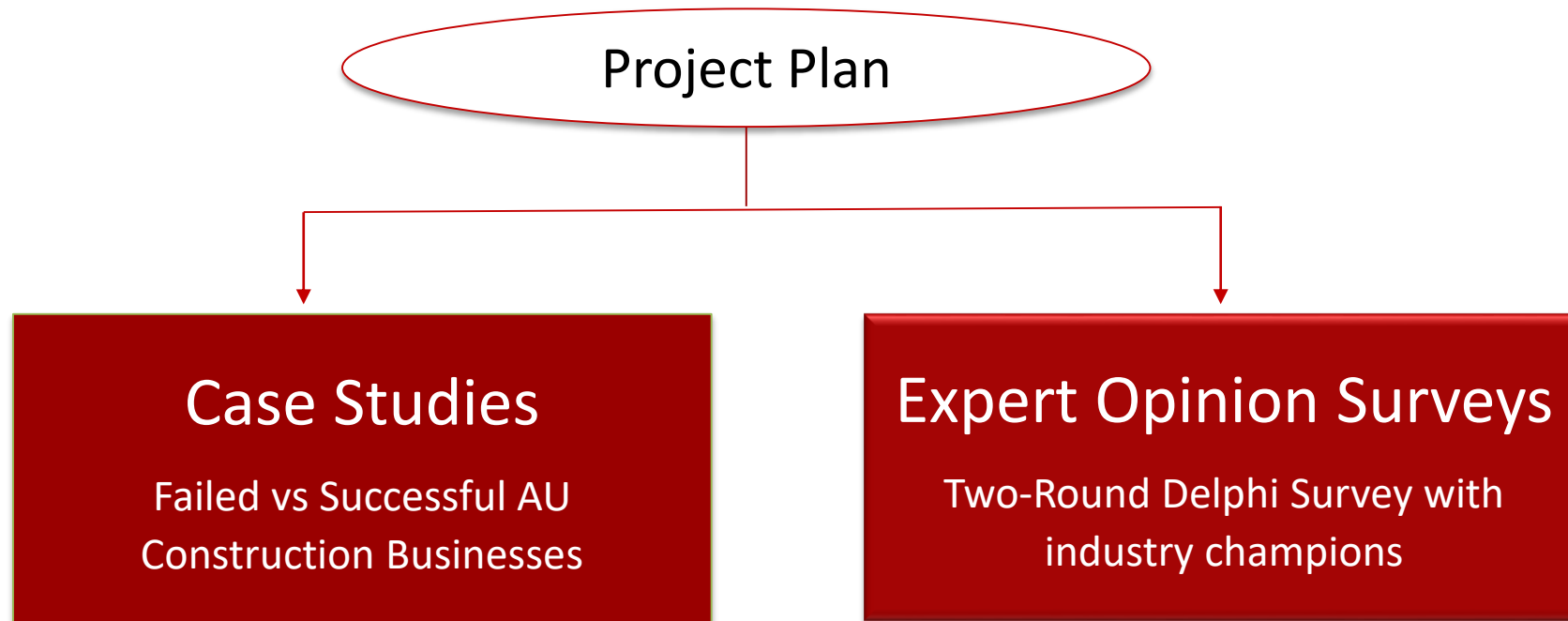




## □ Aim

- Develop SMC Enterprise/Business Typologies for the 21<sup>st</sup> Century

## □ Method



# Expected Research Outcomes & Benefits to You!



OUTCOME

- Types, Characteristics and CSFs of SMC enterprises
- Value propositions of SMC enterprises
- Frameworks and models



BENEFITS

- Gain competitive advantage over peers
- To attract investments
- Develop business plans
- Create formidable customer base



Do you  
want to  
be left  
behind

OR  
join-up  
SMC era?

With the findings of this research project, we could  
guide you towards the journey of transforming to

**Smart-Modern Construction Enterprises**  
in the 21st Century Construction Futures!

*Thank You!* <sub>8</sub>



# DEVELOPING SMART MODERN CONSTRUCTION ENTERPRISE TYPOLOGIES FOR THE 21ST CENTURY CONSTRUCTION FUTURES

