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# IMPLEMENTATION OF AGILE PROJECT MANAGEMENT IN CONSTRUCTION

Danish Sabeel

# AGENDA

Introduction

Best Practices in Agile

Case Studies

Benefits and Challenges of Agile

Conclusion

Recommendation

# INTRODUCTION

- originated in software development Industry
- Flexibility, Adaptability and Stakeholder Collaboration
- Iterative development
- Responsive to Change
- Challenges in Construction Industry: Scope Creep, Delays, Budget Overruns



## Best Practices For AGILE



## BEST PRACTICES

- Communication and collaboration among stakeholders
- Self organizing and cross-functional teams
- Delivering in incremental segments / iterative approach
- Continuous testing and client feedback.

# CASE STUDIES

## USA's Construction Industry

- Reliant on traditional PM practices.
- Resistant to change
- Improve stakeholder collaboration.
- Regular communication
- Led to more dynamic and responsive PM approach
- Increased adaptability, client satisfaction and transparency

## Macau's Construction Industry

- Empirical methods without structured project management.
- Lack of adaptability
- Assess effectiveness of Agile: efficiency, waste, communication.
- Study suggested Hybrid approach.

## Iraq's Construction Industry

- Challenges: quality, schedule variances, cost overruns and low productivity
- Agile can effectively address these issues
- Provide framework for more efficient, adaptable and client focused project management in developing countries.

# BENEFITS

- Increased flexibility and adaptability to changes
- Enhanced client collaboration
- Improved risk management
- Improved team productivity and morale
- Better quality control
- Faster project delivery

# CHALLENGES

- Resistance to cultural and organizational change
- Integration of Agile with existing processes in construction
- Training and skill development
- Client and stakeholder involvement
- Managing communication and expectations
- Intensive documentation and approvals are needed
- Construction project bound by physical and logistical constraints



## CONCLUSION

- Agile methodologies provide significant benefits over traditional project management.
- Benefits: adaptability to change, client collaboration, improved risk management and high team performance
- Challenges: resistance to change, integration with existing process, skill development, scalability, documentation required.
- Agile in construction requires a tailored approach emphasizing gradual change management, innovative adaptation of Agile principles, and effective communication strategies.





# RECOMMENDATION

- Iterative Planning
- Enhanced Stakeholder Collaboration
- Empowerment of cross functional teams
- Adaptation of Agile framework
- Continuous risk management
- Training and skill development
- Hybrid (Agile-traditional) model
- Client and stakeholder engagement
- Documentation and compliance
- Tailored risk management for construction
- Implementing digital twins



# THANK YOU

Danish Sabeel

[danishs@bu.edu](mailto:danishs@bu.edu)

+1 (617)-671-4442