



Development of Collaboration in Planning: What can Construction Project Management Learn From other Fields?

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Agenda



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- ❖ Why Construction Planning?
- ❖ Current Issues with Construction Planning
- ❖ Research Questions
- ❖ What we did
- ❖ What we found
- ❖ Learnings for Construction Project Management
- ❖ Conclusion, Contribution and Future Research

Why Construction Planning?



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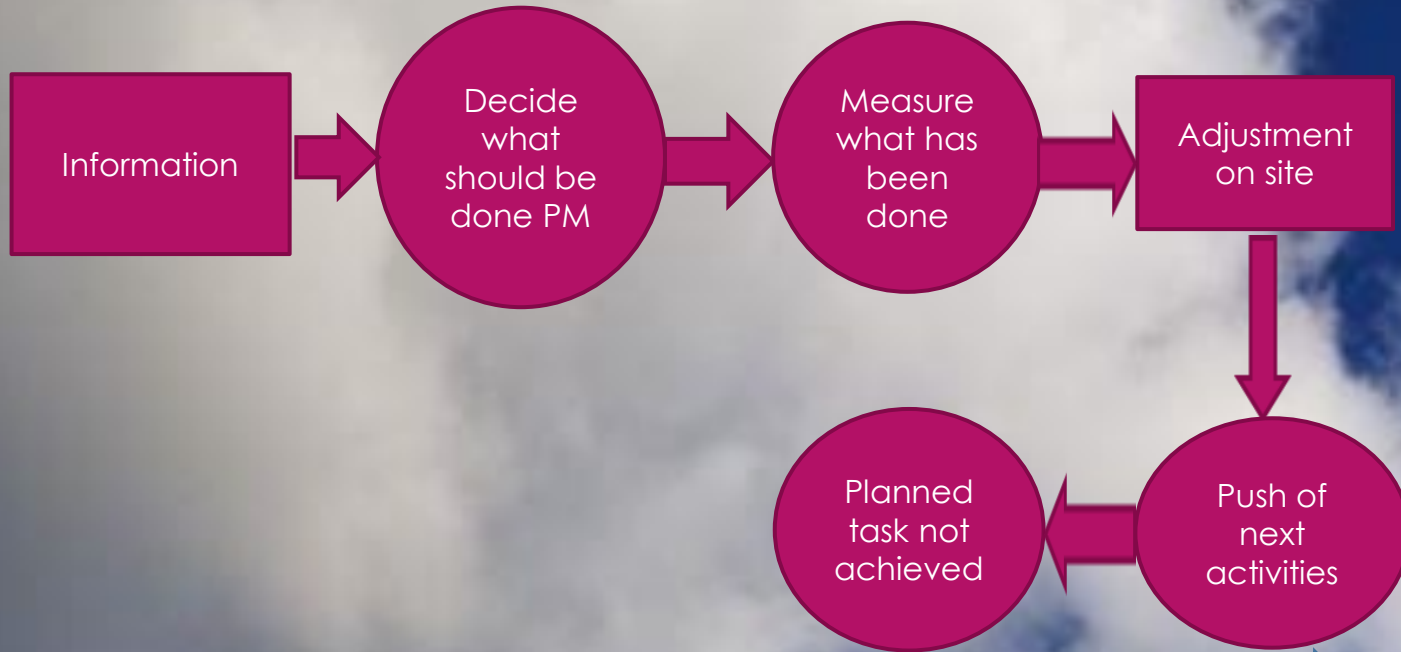
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- Planning is an essential undertaking in construction project management
- Construction project managers spend a third of their time in planning and coordination.
- However, only 54% of activities are achieved weekly as planned (Ballard and Howell, 1998).
- But why?



Current Issue with Construction Planning



- Planning is viewed as a scientific discipline
- Plans are based on contract
- Durations are based on assumptions
- Planning decisions are left with the planner
- Hayek, 1945

However, literature shows that urban planning, software design and lean are adopting collaborative approach in planning.



Research Question 1:

How has collaboration in planning evolved in the fields of urban planning, software design and lean construction?

Research Question 2:

What can construction project management learn from this evolution?

What we did?

CRITICAL LITERATURE REVIEW:

Planning theory & theorist

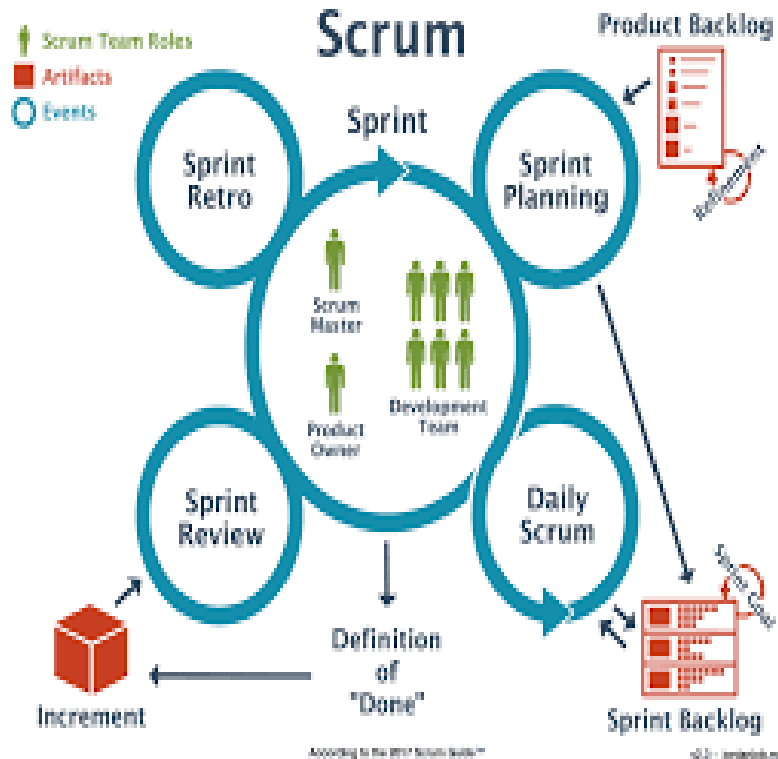


Communicative
Planning
Theory

Sager, Tore

Note: This is not the actual book cover

Software design and planning

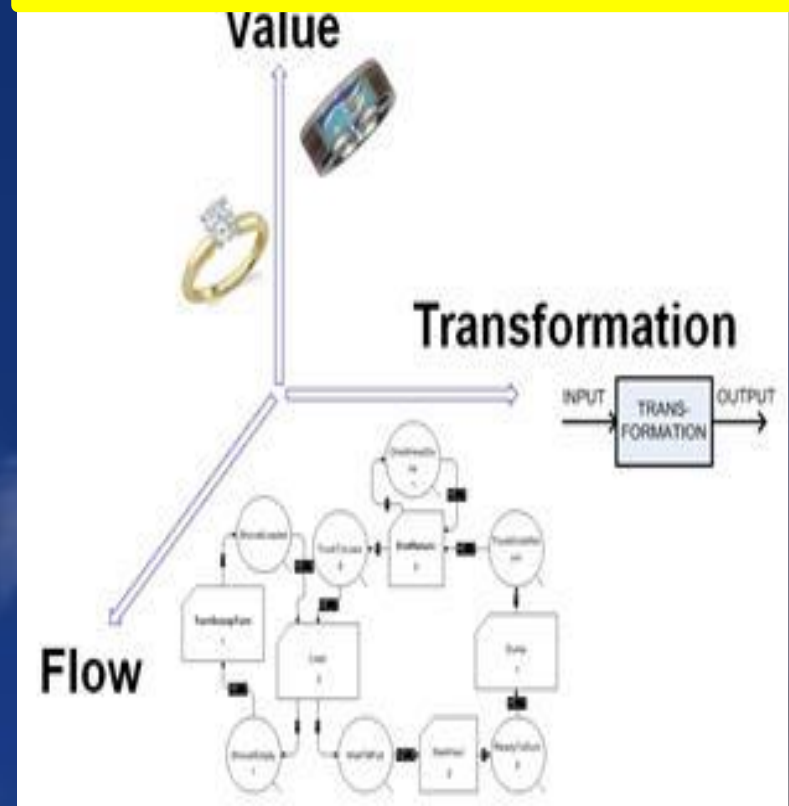


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Lean construction



What we Found

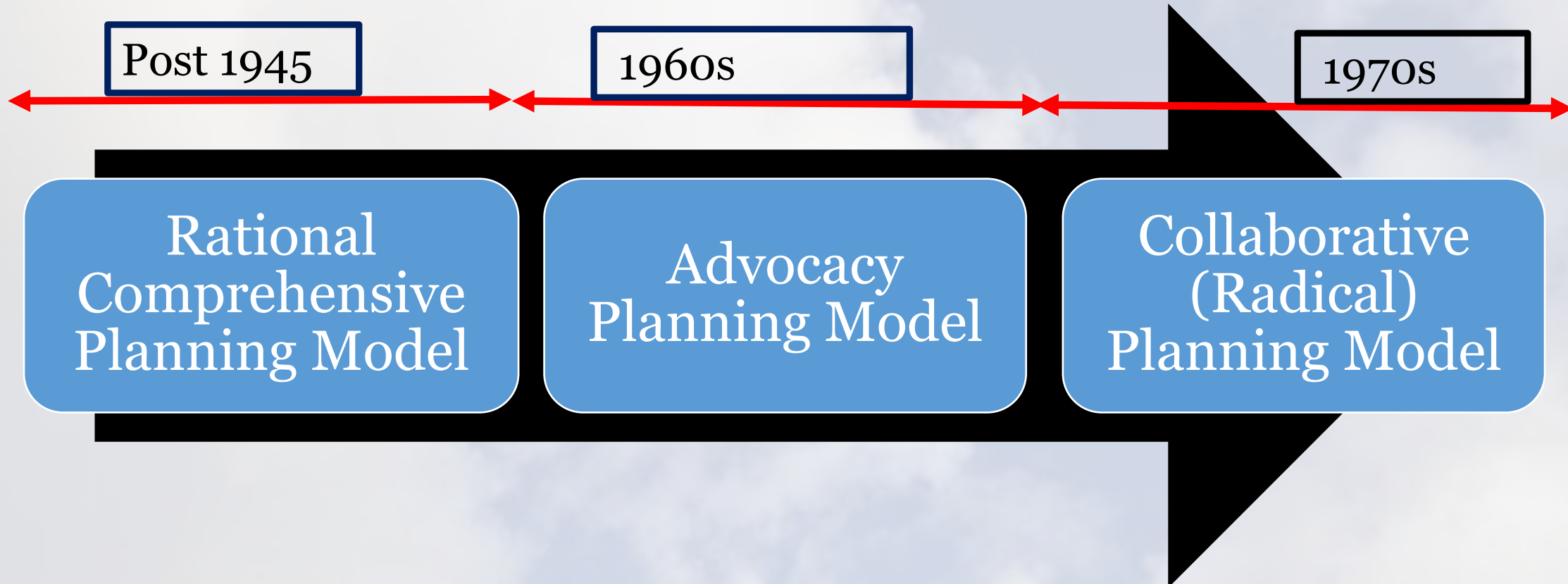


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- ❑ The technical and scientific approach to planning was also prevalent in urban planning in USA after the world war II.



What we Found



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More collaborative

Waterfall Process Model

Iterative Process Model

Agile Process Models

Learning for Construction Project Management



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Learning:1

- The technical approach to planning is not germane to the construction industry alone rather, it exists in various disciplines.

Learning:2

- The successful adoption of collaborative approaches in other knowledge areas shows that the construction industry could move from its current technical approach to a more social approach that encourages collaboration

Learning:3

- Construction project management should accept that planning has two elements; the technical element and social element which should be integrated and without the social element the technical element may fail.

Learning for Construction Project Management



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Learning:4

- The current theory of construction project management, which is essentially ‘management-as-planning’ (the Transformation view) alone, cannot provide adequate resources that can be used to develop collaboration in construction planning.

Learning:5

- However, integration of the concept of management-as-organising and the ‘Flow’ and ‘Value’ view can provide resources that people can utilise for the smooth running of the production (construction) system and should be encouraged.

Conclusion & Contribution



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- ❑ The study conclude that construction project management should not be crucified for its current un-collaborative approaches but should supported through collaborative social behaviour and technological platforms such as BIM and digital twin to become more collaborative.
- ❑ This study brings new insight and opens a new debate on how collaboration could develop in construction project management by using existing evidence from other fields.





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Thank you for your attention
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We look forward to questions.