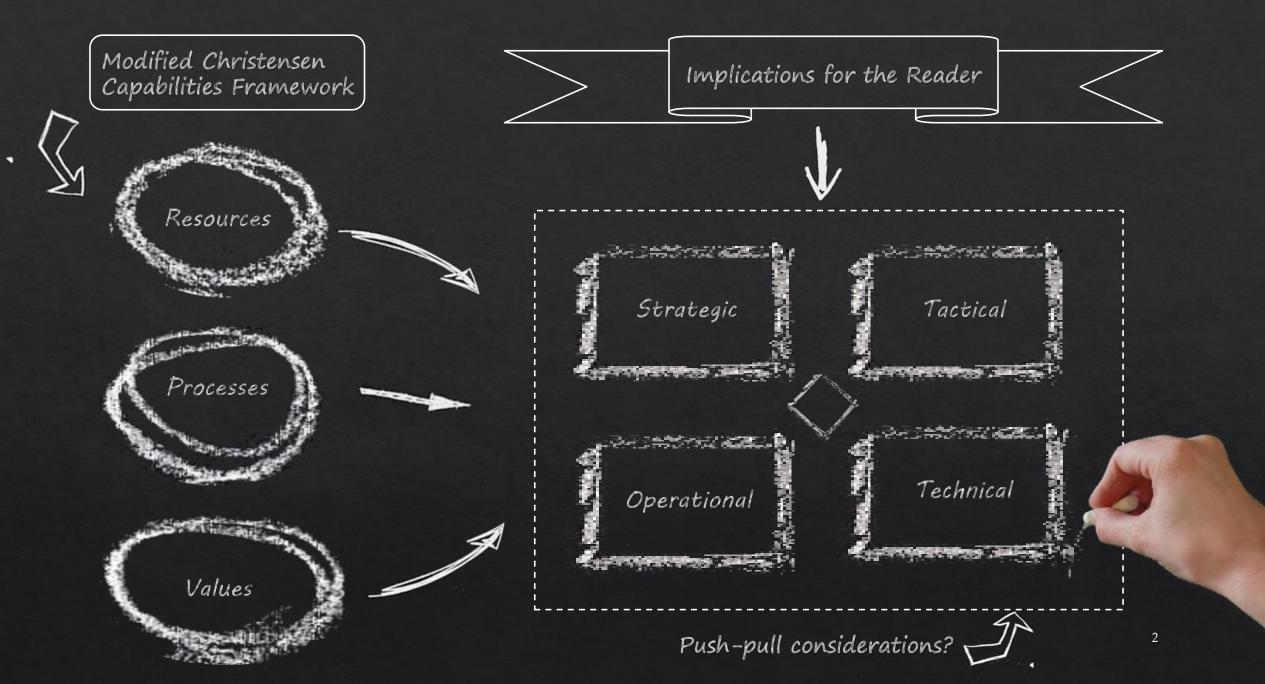
Proposed Book Framework

CIB TG90 Information Integration in Construction



Modified Christensen Capabilities Framework

This is the proposed chapter classification

□ Resources

This section of the book will cover areas related to the need for information integration for allocation, management and optimisation of resources. These resources can be human, economic or environmental (e·g· information integration for more productive workforce, social housing, sustainability and resilience, etc)

□ Processes

This section of the book will cover areas related to processes that are involved in the vertical and horizontal integration of information across the construction industry (e·g· integrated project environments, performance measurement, etc).

□ Added Value

This section refers to cultural and less tangible issues that related to information integration (e·g·leadership, learning, etc)

Book structure

- Introduction: Introducing the group, general topic, conceptual framework, and structure of the book.
- ♦ Section 1: Resources
- ♦ Section 2: Processes
- ♦ Section 3: Added Value
- Concluding chapter: drawing from sections 1,2 and 3 provides insight into overarching trends and the where to from here.



Chapters Organised According to Framework

Resources	Processes	Added Value
 ✓ Information integration in social housing planning and construction ✓ Information integration for urban sustainable resilience ✓ Information integration for asset and maintenance management ✓ Information integration and interoperability for BIM-based Life Cycle Assessment 	 ✓ IT support for contractor monitoring of refurbishment projects ✓ Construction Tacit Knowledge Discovery through Big Data Analyses ✓ Turning energy data into actionable information: the case of energy saving performance contracts ✓ Industrial bridge construction - Need for an integrated bridge construction process ✓ Experience with the use of commissioning advisor - from design to operation ✓ Implementation strategies and partnering approaches - execution models, procurement form/tendering, contract strategy, contract type and contract models ✓ Productivity and performance measurements/benchmarking, efficiency and effectiveness through the building process (or whole life cycle) ✓ A BIM-supported framework for enhancing joint planning in construction 	 ✓ Knowledge asymmetry in construction projects ✓ Changing construction: Four metaphors on knowledge and learning ✓ Embedding Construction Knowledge into Advanced Work Packaging ✓ Information integration in public procurement: the role of monitoring and client leadership ✓ Innovation in the construction industry through socio-technical approaches ✓ Value management and buildings with high adaptability - realising the value of the building through use ✓ A group support system for value management studies in construction

Chapter Structure

This is the suggested structure for each individual chapter. Titles do not need to be the same in all chapters and the specific structure will vary depending on the content. However, it is suggested that all chapters cover these topics:

- Background and Context
- Why is this topic important? Introduce basic concepts and historic context as well
- Role of information integration in this context
- What is role of integrating information in improving this process? How do you define information integration within this context (e·g· is it vertically within projects, horizontally across industry players, longitudinally across portfolios or government cycles, etc)

> Case studies

- These can be either exemplar case studies where information integration has been a key factor for success or case studies where lack of integration has been a factor for failure. This section should include methodology if applicable.
- Priority areas/action plans/ what next?
- Your message, what should the reader take away from all this, what should they aim to do in their daily jobs, how is this useful for future investments and planning?

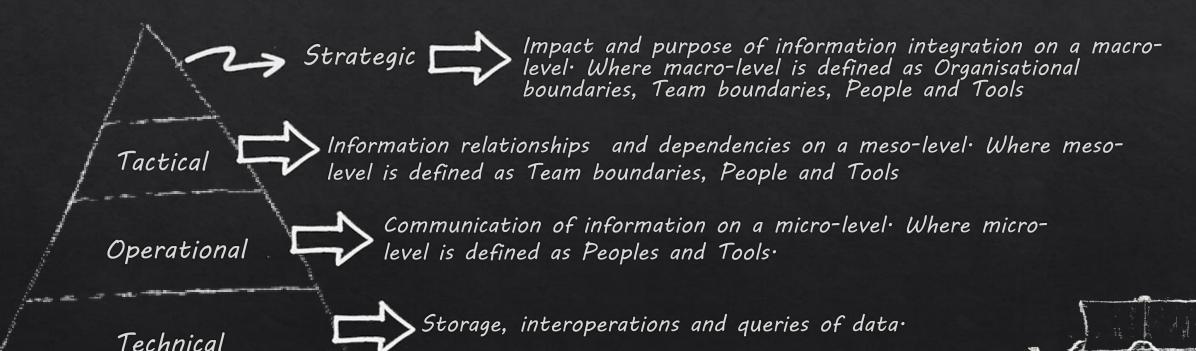
- > Concluding remarks
- Bibliography

Harvard style - please see our publishers guidelines



Implications for the Reader

These are four aspects that are encouraged to be developed by the chapters within their specific context.



Consider while Writing

- * Excellent studies or systems are often indifferent to practitioners.
- In order to explore more viable 'information integration' for researchers as well as practitioners, please consider practical issues in addition to theoretical achievement.
- * "Push" side as well as "demand" side suggested to be discussed together.

Issues	Measure	Example
Technology	Technical advances	New methodologies, Advanced algorithms, ICT
	Information coherence	Completeness, Accuracy, Integration efficiency
	Ease of use	User satisfaction
Practicability (Benefits)	Drivers	Specific requirements from changing biz environment
	Strategic advantages	Benefits to specific groups or organizations
	Economical effectiveness	Simple cost vs· benefit



GOOD

