



Managing Value, risk, Uncertainty and Requirements in the Appraisal {strategic} Stage of UK Construction Projects

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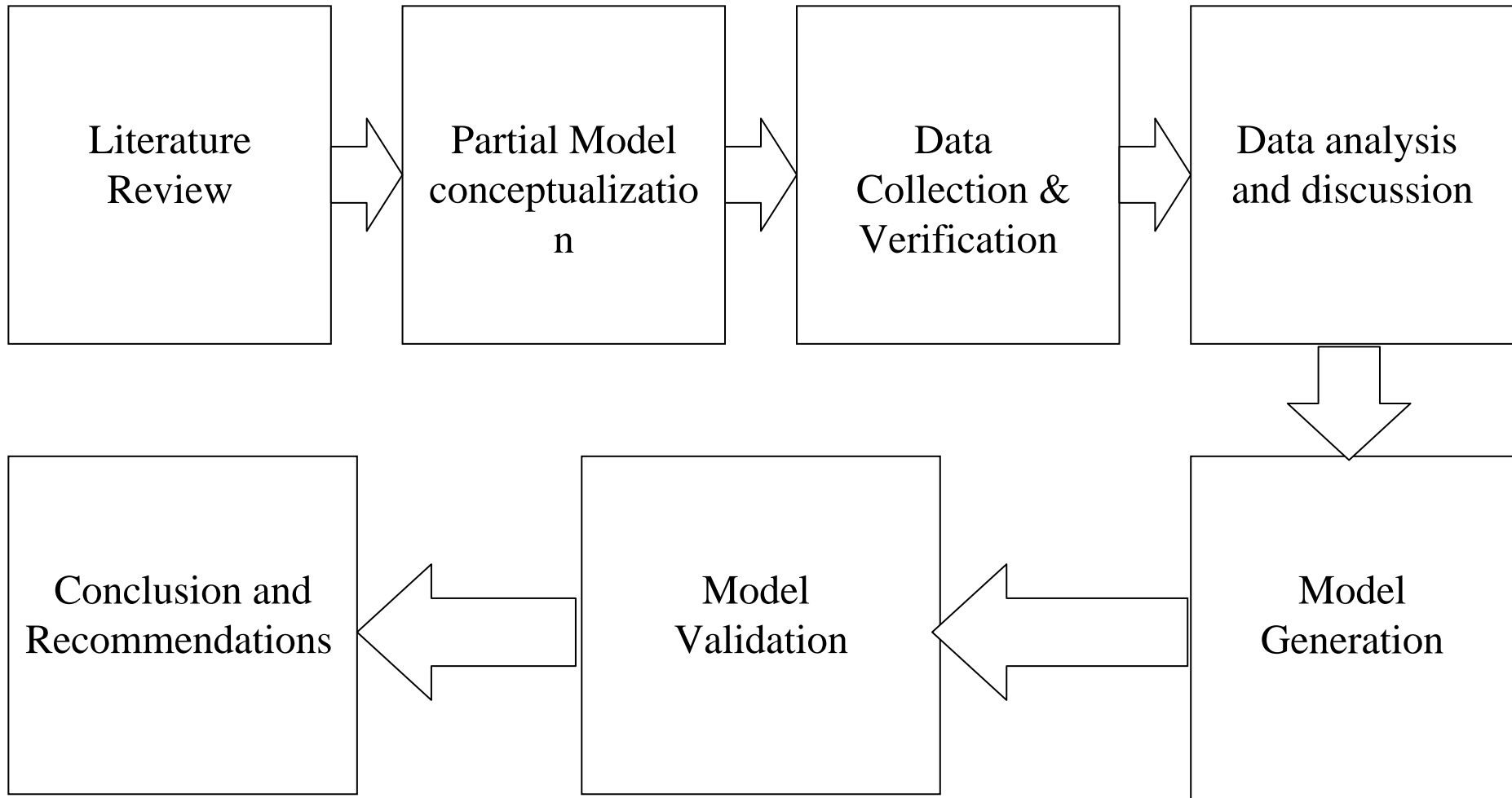


Aims:

- Firstly, to investigate the appraisal stage of UK construction projects including strategy, portfolio and programme levels to clarify their relationships as there is confusing among them in the literature.
- Secondly, provide a framework that integrates VM, RM, UM and ReqM within that stage and use them as one technique in order to increase confidence in decision-making under uncertain conditions as well as increase value for money

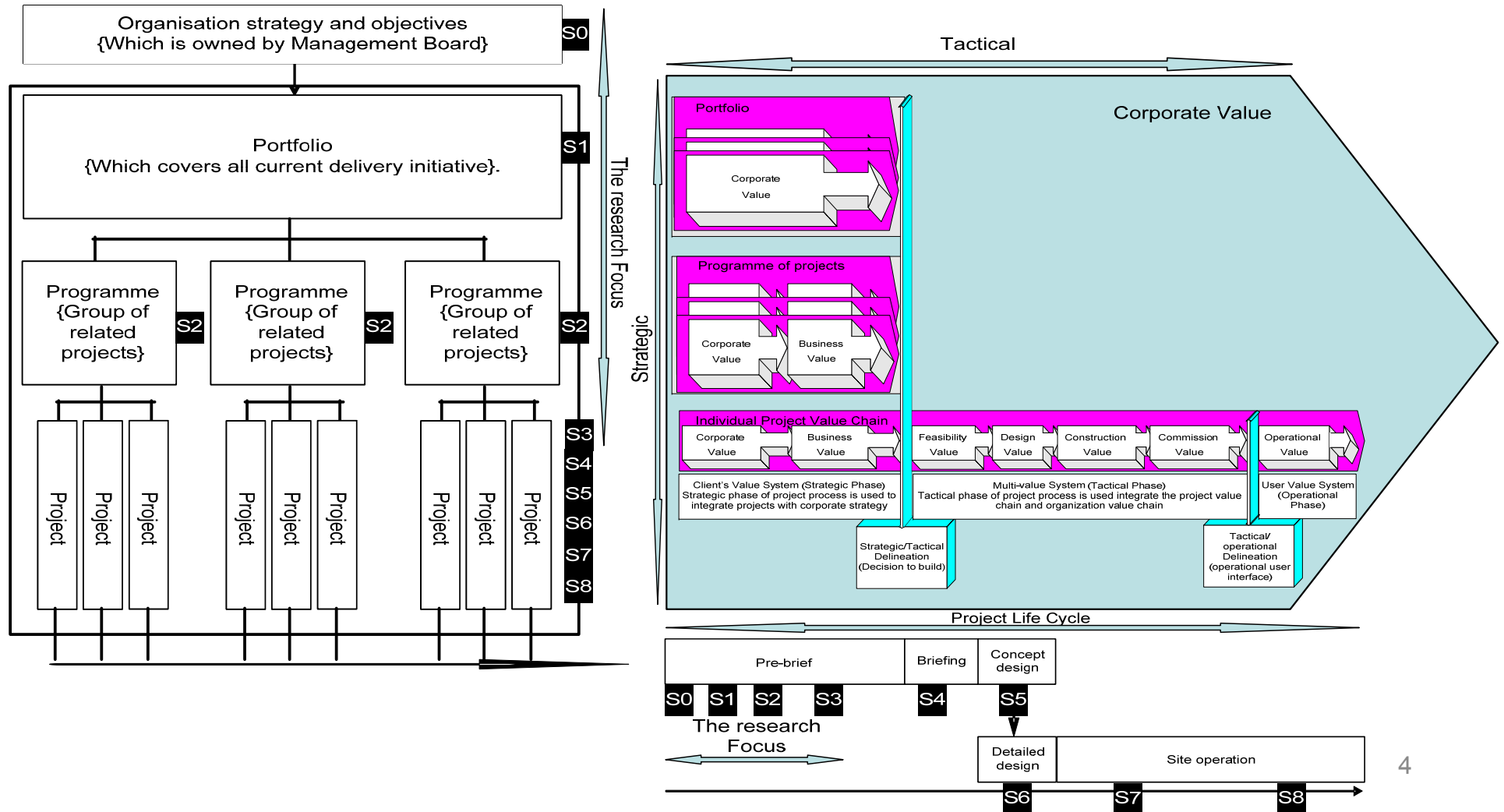


Research Approach





Initial Conceptual Model of the Research





Strategy:

- The plan of actions, which identifies resource allocation and other tasks by considering the environment constraints in order to help the organisation to achieve its goals and reach its vision. {Adapted from the literatures}

Strategic Management:

- Defining of the future target and assigning resources to match this target through decisions and actions to formulate and execute strategies which will produce a competitively superior fit between the organisation and its environment in order to achieve its goal and deal with changing situations and the challenges of the business environment. {Adapted from the literatures}



Portfolio:

- The total collection of programmes, projects and other work within an organisation which are categorised together and represent a comprehensive picture of the organisation's commitment of programme and project resources and investment.

{Adapted from the literatures}

Portfolio Management:

- The selection and management of an organisation's whole set of programmes, projects and other work in order to achieve the organisation's strategic objectives considering resources limitations. {Adapted from the literatures}



Programme:

- The group of related projects which contribute to a shared higher order objective to be managed together in a coordinated way to gain more benefits and provide better control that cannot be gained if the projects are managed separately. {Adapted from the literatures}

Programme Management:

- The co-ordinated management of group of related projects in order to provide more benefits and meet changing business needs. {Adapted from the literatures}



Whole Life Value:

- The evaluation of the costs and benefits of an investment over its duration by considering the stakeholders' interests. {Dallas, 2006}

Project Value Chain:

- The project value chain is a series of inputs and outputs which offer value to the client, producing its aligned. {Bell, 1994}
- It is a series of value adding activities that have their own origins and appear from the client's business need. {Male, 2003}



Value Management {VM}

Value Management:

- It is the process in which the functional benefits of a project are made explicit and appraised consistent with a value system determined by the client. {Kelly et al. 2004}

VM Timing:

- VM in Construction is usually done within project level.
- There is a consensus on Pre-brief Study, Brief Study, Concept Design Study, Detail Design Study, Site Operation. {Male et al., 1998b}

VM Job Plan:

- The generic process: Pre-study {Orientation and Diagnostic} → Study {usually workshop and it includes information, creativity, evaluation, development, action planning, workshop report} → Post-study {implementation}.



Risk Management {RM}

Risk Management :

- The process of planning, identification, analysis, response and monitoring and controlling risk to increase opportunities and decrease threats. {PMI: Project Management Institute, 2004}

RM Timing:

- It should be done at all organisation's level.
- It should be done in all key stages in the project life cycle and particularly in the appraisal stage.

RM Formal Process:

- Pre-workshop {risk planning, risk information}, workshop {introduction, identification, qualitative assessment, quantitative assessment}, Post-workshop {risk modelling, risk response, risk report, risk monitor and control}.



Requirements Management {ReqM}

Requirements Management:

- The process of capturing, analysing, and testing the documented statement of stakeholder and user wants and needs. {APM: Association for Project Management, 2006}

ReqM timing:

- It should be applied during the project life cycle and particularly in the appraisal stage.

ReqM process:

- Requirements elicitation, gathering and capturing; Requirements organising, categorizing and prioritizing; Requirements analysis; Formatting and documenting requirements; Requirements validation and verification; Tracking and managing requirements changes.



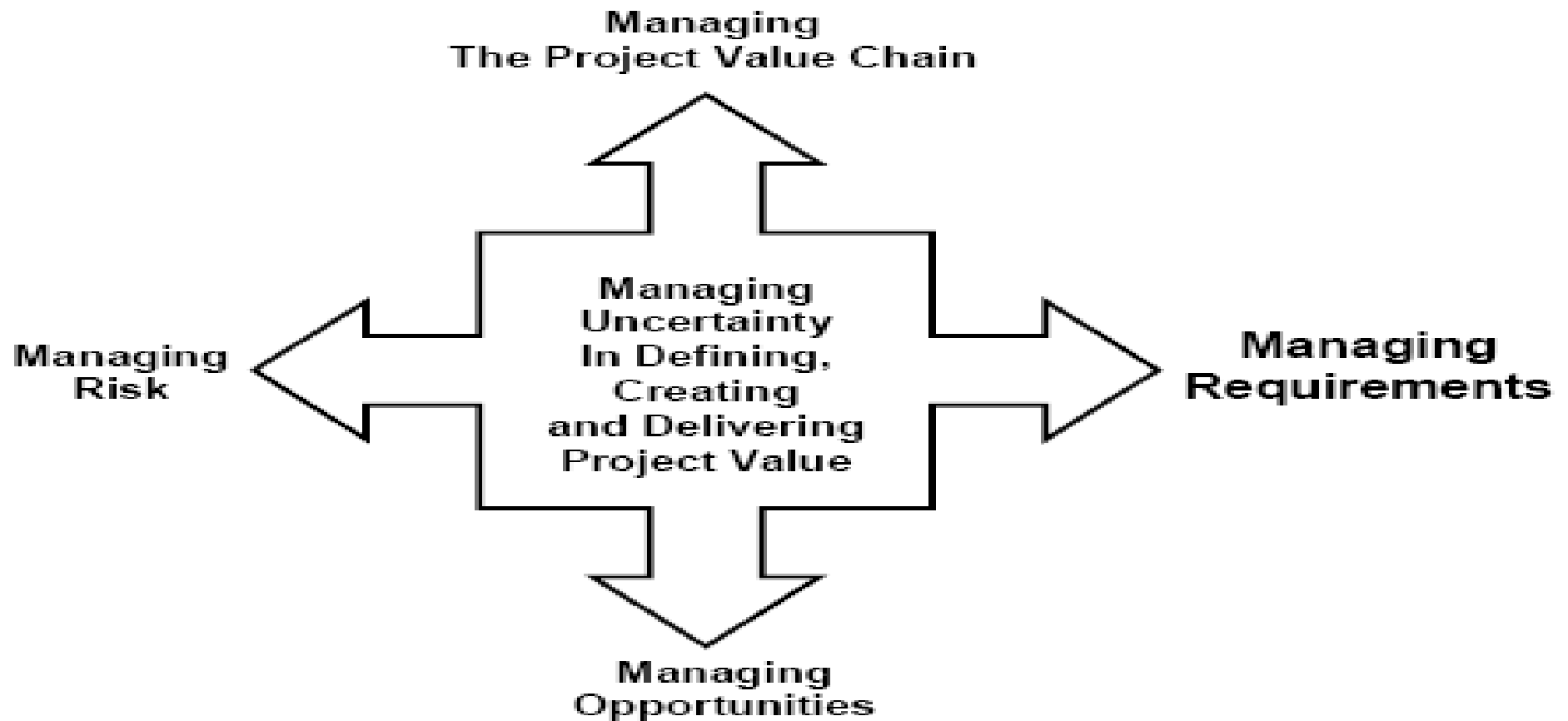
Uncertainty Management {UM}

Uncertainty Management:

- It is the umbrella of integrated value management and risk management. {Smith, 2003a ;Ward and Chapman, 2003 }
- Uncertainty is decreased through the ongoing management of requirements, value and risk.
- It will be considered as an umbrella or an envelope for integrating and managing requirements, value and risk.

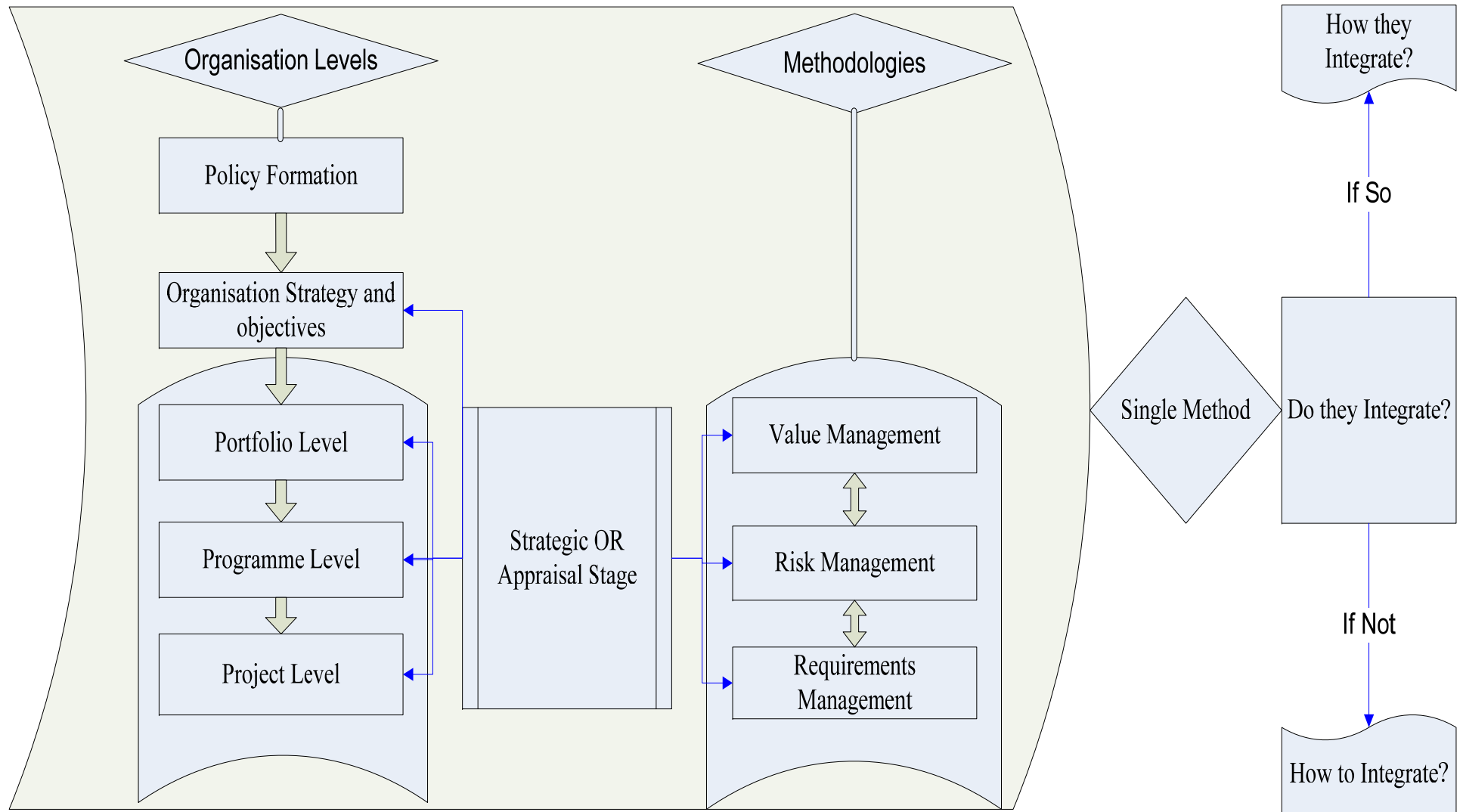


Managing uncertainty in project value {source: (Smith and Male, 2007)}



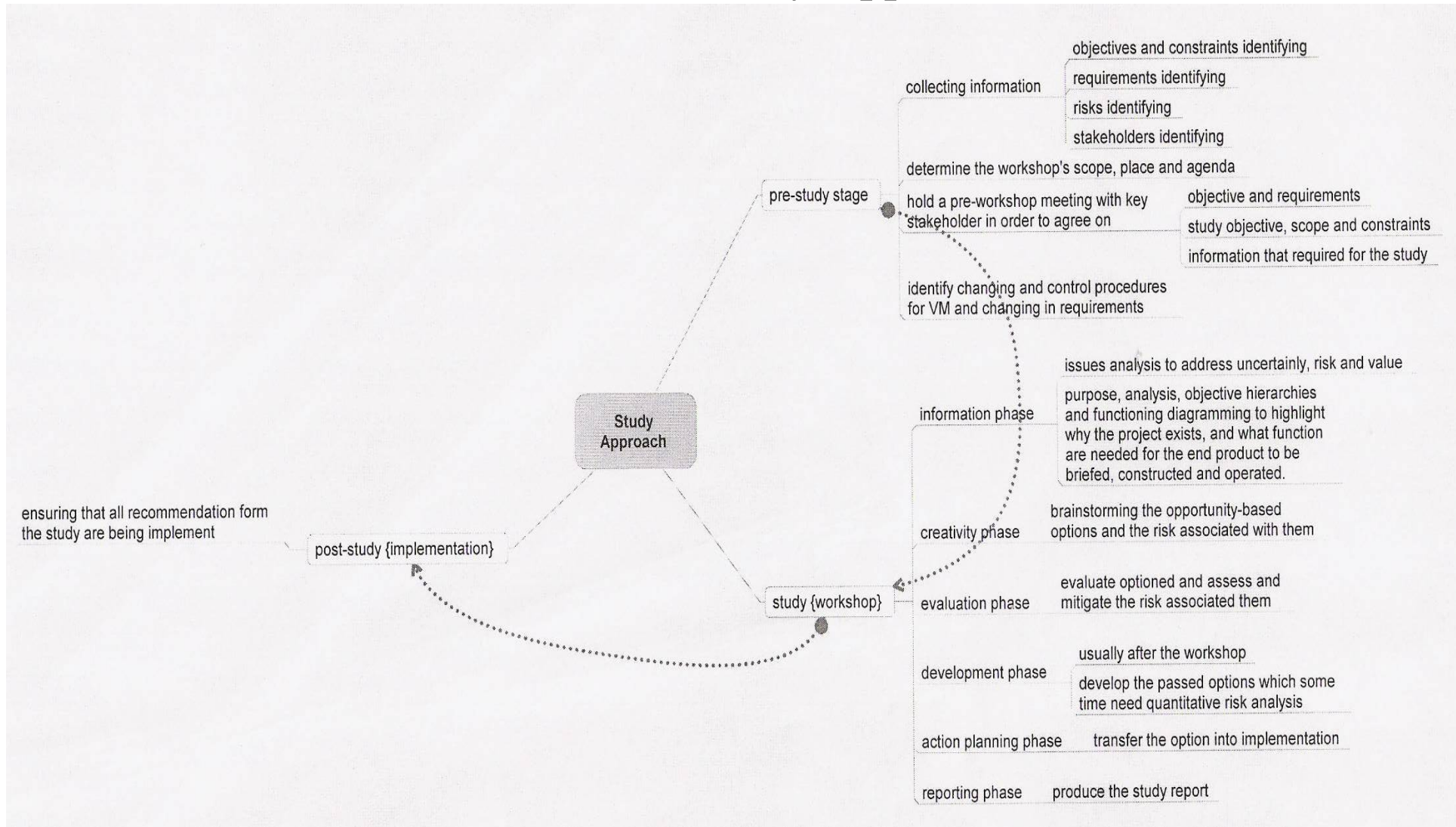


The Research Concepts Diagram





The General Study Approach





The Pilot Study Indicates that:

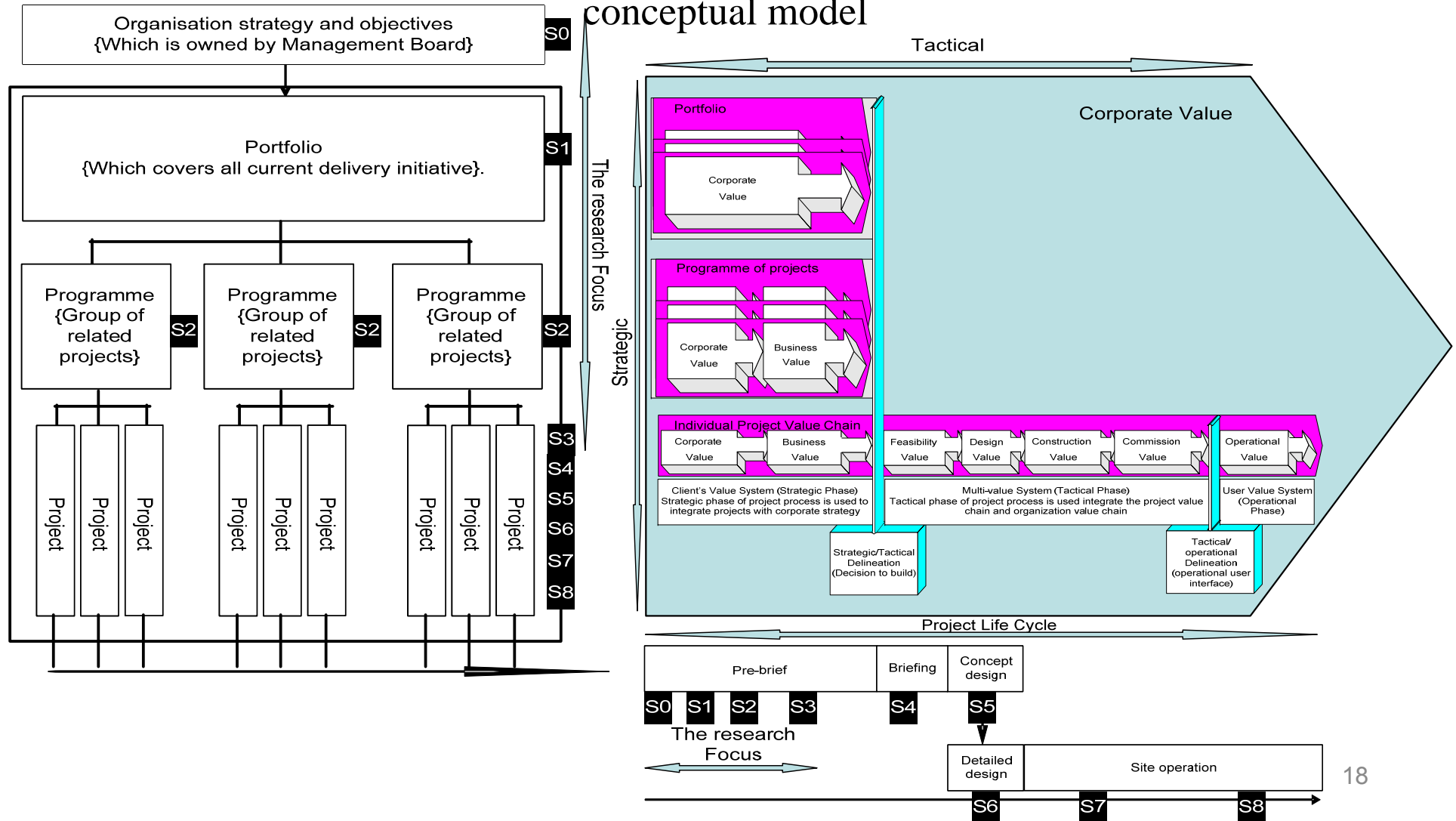
- Public, regulated private and non-regulated private sectors are different which will lead to 3 different models.
- The research should focus on one of them as it is very difficult to develop a general approach for all of them.
- Therefore, we have selected regulated private sector and the main study organisations were selected from this sector.
- This is because it is very structured and it tends to be a combination between the other two sectors.



Views from the Fieldwork

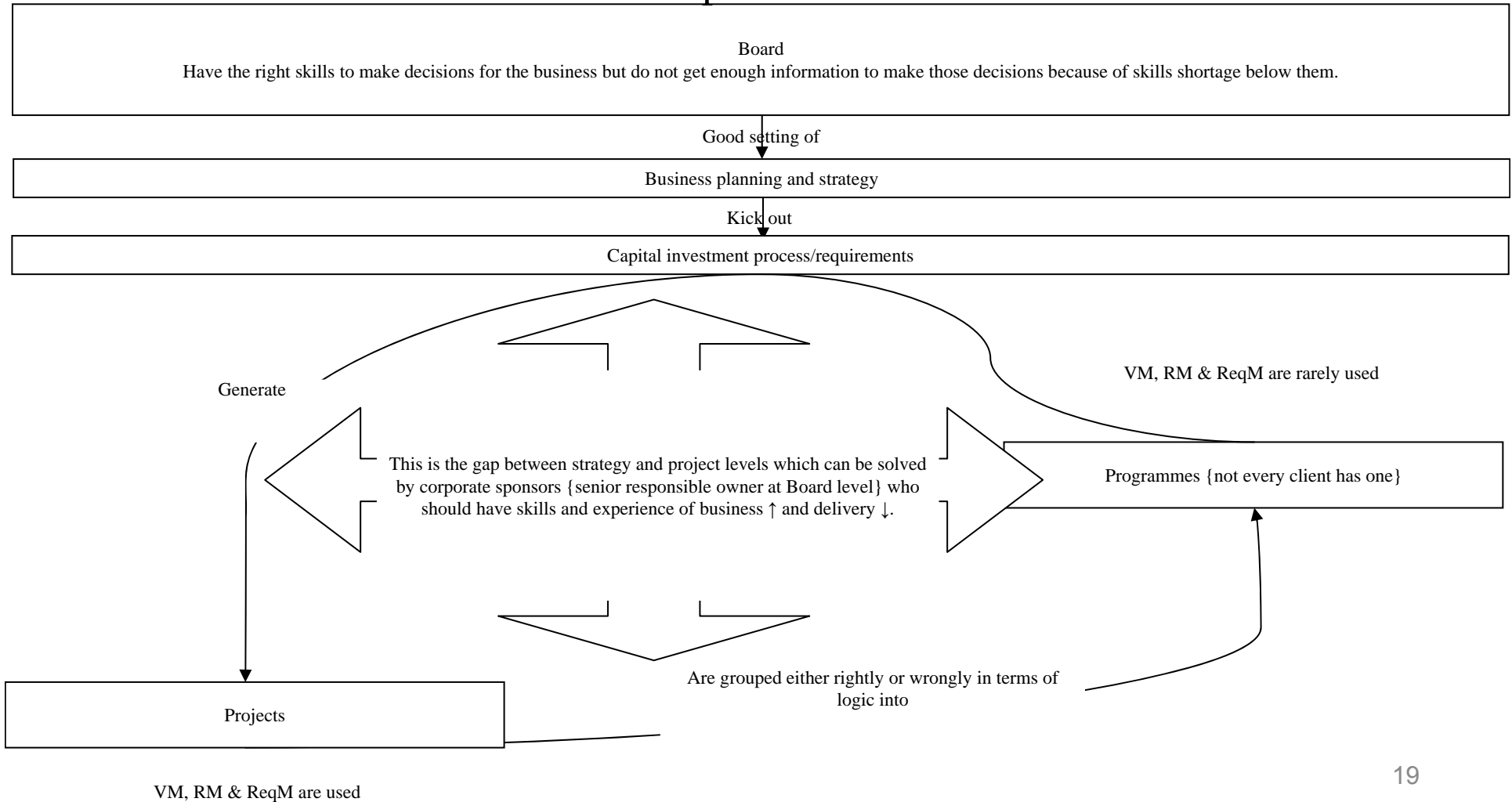


Client organisations provide **Top→Down** approach to manage projects similar to initial conceptual model





Consultants provide **Bottom→Up** approach to group projects different from initial conceptual model





Thank You