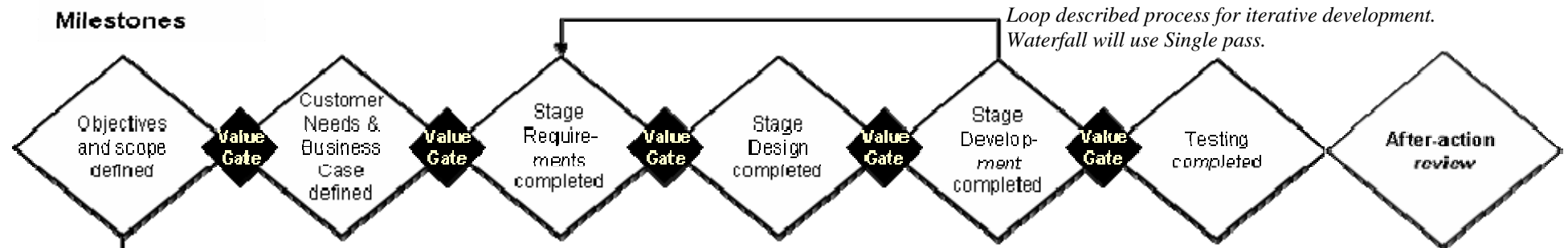
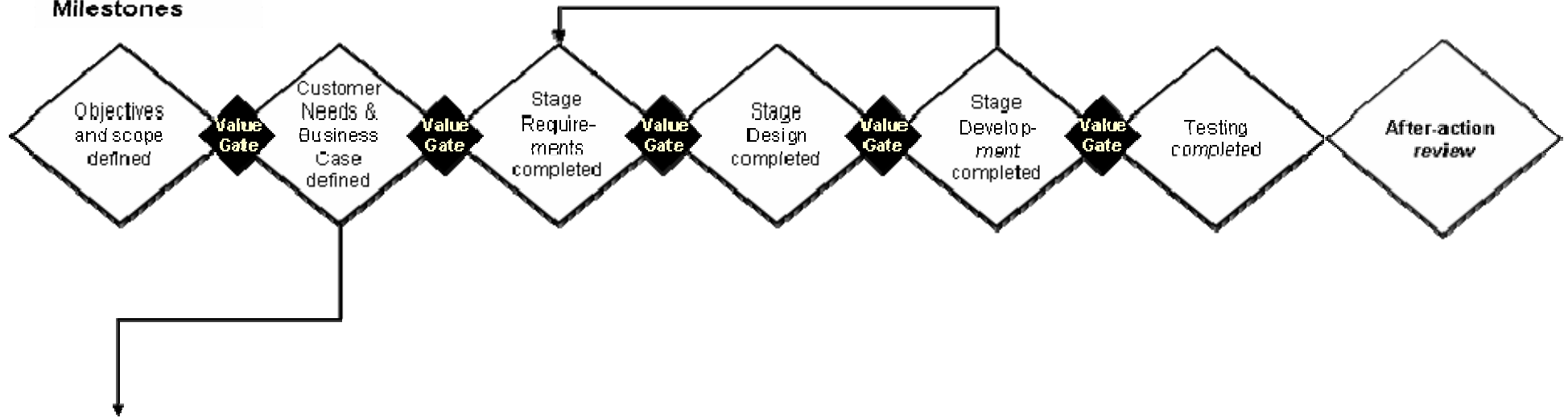


# “Hypothetical” Software Development Process



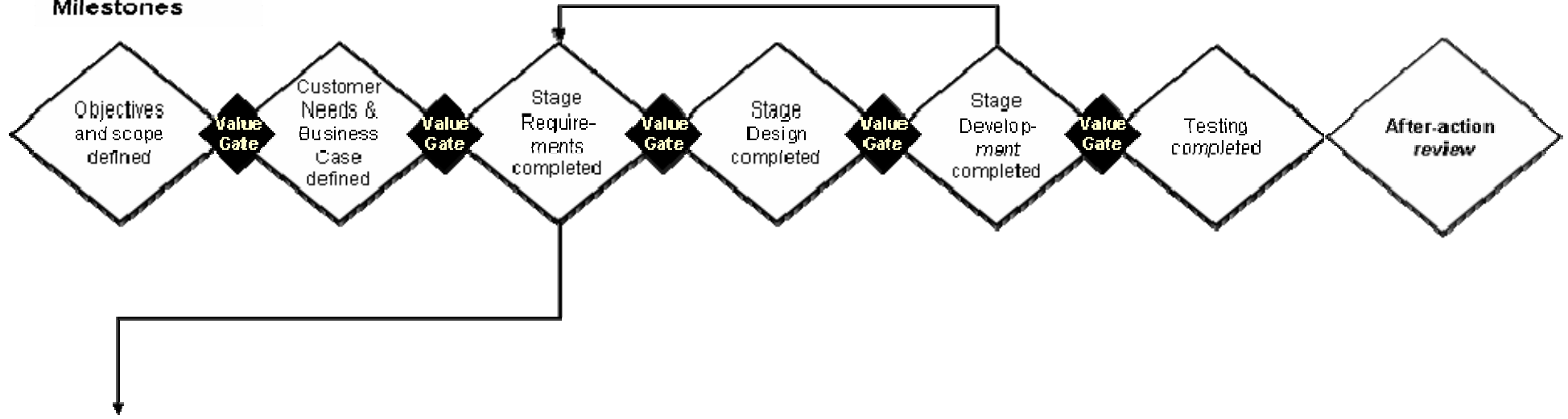
Phase	Need	Tool / Technique	Outputs
<b>Initiation and planning</b>	• Review of Strategic Benefit	Strategic Value Management Workshop	Consensus on SMART project objectives. Clarity about acceptance criteria Defined scope
	• Define Objectives		
	• Identify key deliverables		
	• Establish Business Requirements	Risk management	Business risk register
	• Review interoperability requirement		

**Milestones**



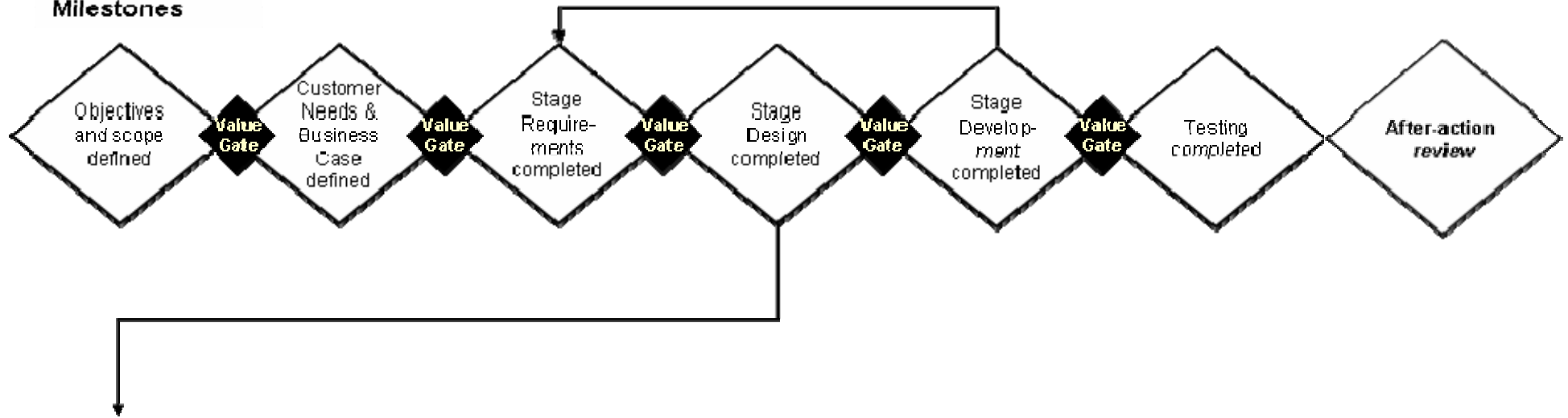
Phase	Need	Tool / Technique	Outputs
<b>Needs analysis and business case</b>	<ul style="list-style-type: none"> <li>Identification and quantification of customer needs</li> </ul>	Customer value Star	Clarity about the attributes of customer need Insight about the relative importance of product attributes to informs decisions about value
	<ul style="list-style-type: none"> <li>Formulation of functions to satisfy needs</li> </ul>	Function Analysis	Functional hierarchy Functionality aligned with key customer requirements and priorities.
	<ul style="list-style-type: none"> <li>Estimation of cost to deliver</li> </ul>	Cost to function analysis	Identified areas where value can be improved or cost reduced without reducing value
	<ul style="list-style-type: none"> <li>Cost/benefit analysis and business case</li> </ul>		
	<ul style="list-style-type: none"> <li>Business risk analysis</li> </ul>	Joint risk and value workshop	Explicit links between opportunity and risk

**Milestones**



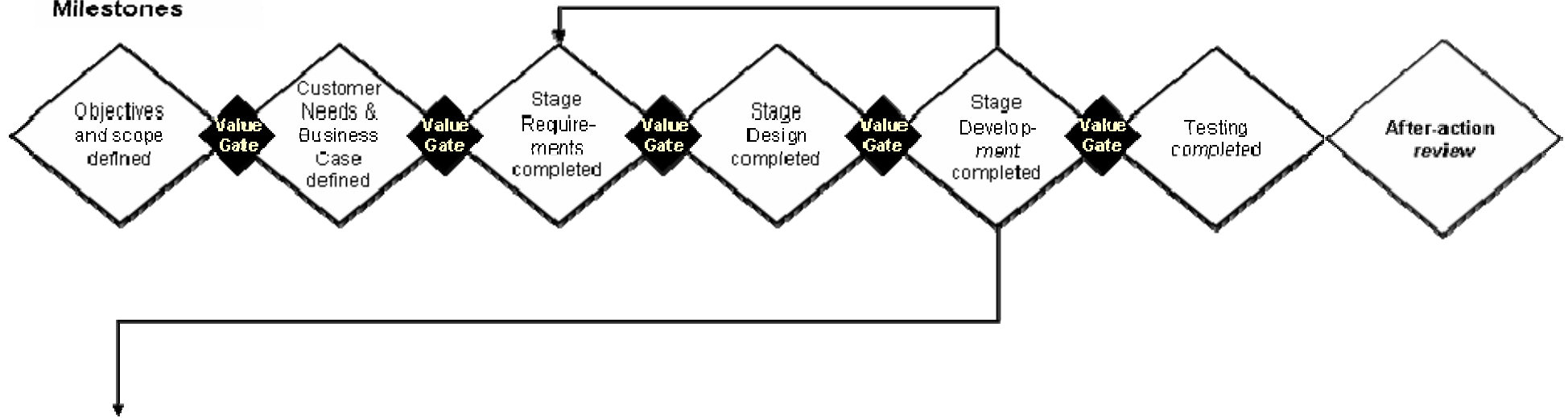
Phase	Need	Tool / Technique	Outputs
<b>Requirements gathering</b>	• Detailed requirements gathering	Decomposition of FAST	Conserves and clarifies functional associations
	• Documentation of requirements		
	• Requirements evaluation and version assignment	Function/value contribution	Quantifies and rationalises benefit analysis
	• Detailed stage planning		

**Milestones**



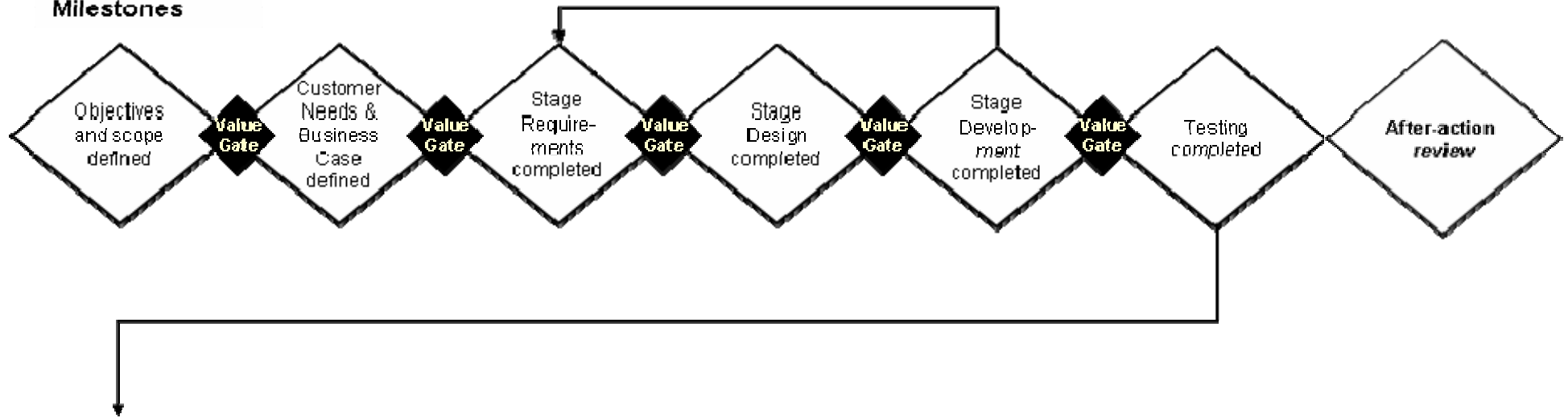
Phase	Need	Tool / Technique	Outputs
<i>Detailed design</i>	<ul style="list-style-type: none"> <li>System design</li> </ul>	Value Engineering workshop	Supports cost-to-function analysis and the generation of ideas to improve resource use
	<ul style="list-style-type: none"> <li>Documentation of requirements</li> </ul>		
	<ul style="list-style-type: none"> <li>Risk Analysis</li> </ul>	FMEA based risk evaluation	Clear plan to manage risks associated with system performance and robustness

**Milestones**



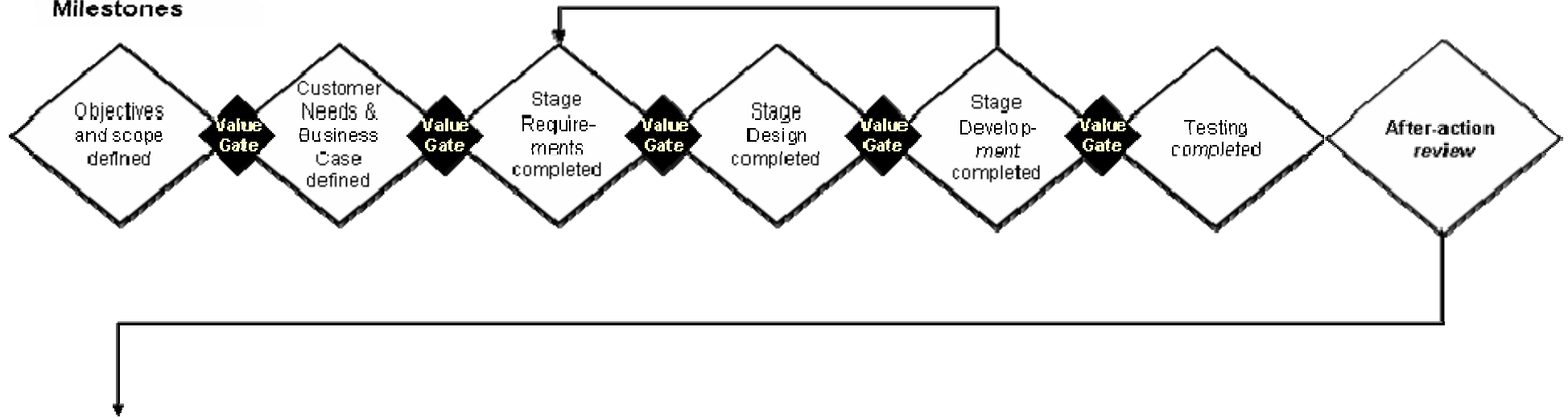
Phase	Need	Tool / Technique	Outputs
<i>Development</i>	• Development work		
	• Unit testing		
	• System assembly		

**Milestones**



Phase	Need	Tool / Technique	Outputs
<b>System testing</b>	• System testing		
	• Load and stress testing		
	• Debugging and performance improvement	Performance targets variance analysis	Identifies critical performance/cost misalignment and aids decision making

**Milestones**



Phase	Need	Tool / Technique	Outputs
<b>After-action review</b>	<ul style="list-style-type: none"> <li>Project review</li> </ul>	Value review	Focuses the review process on the value delivered and the causes of missed value targets
		5 Whys	Helps trace root causes rather than symptoms of problems