

PRODUCT DEVELOPMENT ROUTE MAP

PHASE	NEED	TOOL/TECHNIQUE	OUTPUT
Planning	Determine required market position	Value proposition analysis	Definition of how customer value will be achieved and implications for internal structure, style and processes.
	Consider strategic options	Strategic choice	Selected option based on value and risk
	Determine performance/cost targets	Value Planning – comparative VA, technology option selection	Benchmark of current best performance and cost to function and selection of optimum new technology based on customer value proposition
	Customer requirements	Value profile and Functional Performance Specification	Statement of desired attributes and their relative importance. Structured design and process brief.
	Concept development	VE involving key suppliers	Concept matching requirements and functional input to system FMEA
Product Design and Development	Review design options to select best fit with design brief	Value profile and risk assessment	Option that best meets customer needs
	Review product design and associated process proposal to optimise performance and cost	VA and risk assessment involving key suppliers	Improved design and process to achieve best VfM and focus/functional input to FMEA
Process Design and Development	Determine process requirements	Functional performance specification	High level requirements – see above
	Review overall process system	Process VA and value stream mapping	Identification of low process efficiencies
	Review selected activities	Process VA and selected others (eg.CTQ,Root cause analysis, DoE)	Optimised activities meeting performance requirements at lowest cost
Product and Process Validation	Confirm product meets requirements Confirm operations process is capable Dual loop learning	Benefits evaluation Lessons Learnt Evaluation	Statement of extent that required benefits are met and resulting value index Lessons learnt and action plan to institutionalise learning
Production	Improve value for money – improve performance, quality or reduce cost throughout value stream	Supply chain based VA	Improved product – see developing suppliers for more detail.

