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1. DESIGN SUPPLIER NETWORK ARCHITECTURE:

DEFINITION: Design the size, structure and composition of the supplier network to ensure the efficient creation and delivery of value to all enterprise stakeholders, focusing on the customer.

Diagnostic Questions	<ul style="list-style-type: none"> Does the size, structure and composition of the supplier network reflect the enterprise vision and make-buy strategy? Does the design of the supplier network reflect a proactive effort to balance in-house capabilities with supplier-based core competencies to optimize the creation and delivery of best value? Are cross-functional commodity teams established for streamlining and selecting suppliers? Is supplier process capability measured and effectively utilized?
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Lean Indicators	<ul style="list-style-type: none"> Structure and composition of supplier network are linked to corporate vision and strategy. Make-buy and strategic sourcing decisions are firmly grounded in integrated set of criteria reflecting strategic corporate objectives. Supplier network strategy reflects a differentiated strategy designed to maximize value creation. Core competencies are aligned throughout the extended enterprise.
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Potential Metrics	<ul style="list-style-type: none"> Percent of direct suppliers selected on past performance or best value basis Ratio of total number of lower-tier suppliers to major suppliers Percent of direct purchase dollars placed to preferred or certified suppliers Percent of total end-product cost consisting of supplier-provided parts, components and materials Trends in the total unit cost of the enterprise's primary product (in constant dollars) Trends in the profitability of the supplier network (in constant dollars)
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Key Enabling Practices	Capability Levels					Scores
	LEVEL I TRADITIONAL	LEVEL II ADOPTER	LEVEL III PERFORMER	LEVEL IV REFORMER	LEVEL V TRANSFORMER	4.0

1.1 Assure supplier strategy linked to corporate vision, goals and objectives	<ul style="list-style-type: none"> There is little or no evidence of a supplier strategy linked to well-defined corporate vision, goals and objectives. Supplier strategy focuses mainly on reducing the cost of discrete procurement functions (e.g., order placement, invoicing, inventory management, materials handling). 	<ul style="list-style-type: none"> There is limited linking of supplier strategy to corporate vision, goals and objectives. Supplier strategy is seen as an enabler of improving cost and quality performance. There is very limited sharing of a common vision or commitment across suppliers. 	<ul style="list-style-type: none"> Supplier strategy is linked to corporate vision, goals and objectives. Supplier strategy is seen as an important enabler of improving competitive advantage. There is spotty sharing of vision and commitment across the supplier base. 	<ul style="list-style-type: none"> Supplier strategy directly reflects corporate vision, goals and objectives. Supplier strategy is seen as a crucial enabler of improving corporate competitive advantage. There is some shared vision and commitment across the supplier base. 	<ul style="list-style-type: none"> Supplier strategy represents a direct extension of corporate vision, goals and objectives. Supplier strategy is seen as a central core competence to enhance corporate competitive advantage. There is shared vision, goals and objectives throughout the supplier network. 	4
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1.2 Design supplier network based on strategic mapping of core competencies internally and across suppliers.	<ul style="list-style-type: none"> The design of the supplier network does not reflect a strategic mapping of core competencies internally or across suppliers. Mapping of core competencies is confined to internal manufacturing processes. There is little congruence between internal and external supplier-based core competencies. The supplier network is characterized by a large number of direct production suppliers and a hierarchical structure with multi-tiered top-down control and management. 	<ul style="list-style-type: none"> Supplier network design reflects limited consideration of core competencies internally and across specific suppliers. Mapping of core competencies internally and across specific suppliers focuses on discrete manufacturing processes. There is limited congruence between internal and external supplier-based core competencies. Limited recognition is given to concurrent design of products, processes and supplier network 	<ul style="list-style-type: none"> Supplier network design reflects some consideration of internal and current (or required) core competencies of selected suppliers. Core competencies of selected suppliers in defined technologies or manufacturing processes are documented. There is some congruence between current (or required) internal core competencies and those of selected suppliers. Some recognition is given to concurrent design of products, processes and supplier network. 	<ul style="list-style-type: none"> Supplier network design reflects an explicit consideration of current and required core competencies internally and across major critical suppliers. Internal and external core competencies of suppliers in key technologies are well defined. Core competencies internally and across suppliers are aligned. Recognition is given to concurrent design of products, processes and supplier network. Supplier network design is seen as an important enabler of corporate competitive advantage. 	<ul style="list-style-type: none"> Supplier network design reflects a proactive comprehensive strategic mapping of current and required core competencies internally and across the supplier network. Supplier network design strives to optimize portfolio of core competencies internally and throughout the supplier network. Products, processes and supplier network are designed concurrently. 	4
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<p>1.3 Select suppliers based on criteria optimizing core competencies internally and across suppliers .</p>	<ul style="list-style-type: none"> • Sourcing decisions are not linked to make-buy criteria based on evaluation of core competencies. • Supplier selection is based on a competitive, adversarial, process following a sequential multi-step procedure. • Suppliers are selected mostly on the basis of the lowest cost bid, reflecting the old maxim: "Three bids and a cloud of dust." • Multiple supplier sources are typically used for procurement of a given discrete item. • Supplier selection is made at the operating level, driven by lowest cost (price) considerations. 	<ul style="list-style-type: none"> • Sourcing decisions reflect make-buy criteria based on limited evaluation of core competencies. • Supplier selection is based on a competitive process weighing lowest cost bid and other criteria, where a relatively small percentage of contract awards are made on a past performance basis. • Multiple supplier sources are used for many discrete parts, along with selected use of dual sourcing and isolated use of sole sourcing. • Supplier selection is made at the facility or operating level focusing on reducing the cost of discrete purchased items. 	<ul style="list-style-type: none"> • Sourcing decisions reflect make-buy criteria based on evaluation of core competencies internally and across selected suppliers. • Some key suppliers are selected based on past performance and "best value," while a majority of suppliers of standardized items are selected using competitive bids. • Extensive multiple sourcing is used for highly standardized items, along with some dual sourcing and selected use of sole sourcing. • Dual sourcing is used for mature high-volume parts, while sole sourcing is used for selected complex high-technology specialty items. • Supplier selection is made by procurement organization, focused on reducing total program or product cost. 	<ul style="list-style-type: none"> • Sourcing decisions reflect make-buy criteria based on a thorough evaluation of core competencies internally and across major critical suppliers, focused on delivery of best value to the customer. • A relatively high number of major critical suppliers, and some subtler suppliers, are selected on the basis of past performance and "best value." • Multiple sourcing is used for standardized items, while dual sourcing is used for some technologically mature high-volume parts and sole sourcing is used for some complex high-technology components. • Supplier selection is made by enterprise-level cross-functional teams focused on delivering best lifecycle value to the customer. 	<ul style="list-style-type: none"> • Sourcing decisions reflect make-buy criteria based on a comprehensive evaluation of current and required core competencies internally and across suppliers, focused on creation of best lifecycle value for all stakeholders. • A majority of major critical suppliers and many subtler suppliers are selected on the basis of past perf. and "best value," focused on value creation. • Multiple sourcing is used for highly standardized items, while dual sourcing is used for selected technologically mature high-volume components, and sole sourcing is limited to selected complex high-technology subsystems. • Supplier selection is made by enterprise-level cross-functional teams focused on value creation for all stakeholders. 	<p style="text-align: center;">4</p>
<p>1.4 Segment suppliers into differentiated categories based on their relative strategic importance in creating value</p>	<ul style="list-style-type: none"> • Little evidence of an attempt to develop a differentiated procurement strategy. • Little or no effort made to segment suppliers into different categories, in terms of their relative importance and related criteria. 	<ul style="list-style-type: none"> • Limited effort is made to classify direct suppliers into different groups for the purpose of developing differentiated procurement strategies. • Supplier strategy is largely aimed at reducing transaction costs at program (product) level. • Direct suppliers grouped largely into such categories as major teaming partners and all others. 	<ul style="list-style-type: none"> • Direct suppliers are grouped into different categories for evolving differentiated procurement and supplier integration strategies. • Supplier strategy is aimed largely at reducing transaction costs at the business unit or enterprise level. • Supplier segmentation criteria consider a number of factors, such as relative economic importance and degree of criticality of procured items in terms of overall program (product) cost and performance 	<ul style="list-style-type: none"> • Direct suppliers are grouped into different categories on the basis of formalized supplier segmentation criteria for developing procurement and supplier integration strategies. • Supplier strategy is aimed at reducing internal and external coordination costs at the enterprise level. • Supplier stratification and segmentation criteria employ formalized methods considering such additional factors as transaction frequency and volume, and degree of complexity of purchased components. 	<ul style="list-style-type: none"> • Highly-differentiated supplier integration strategies and practices are implemented, based on formalized stratification and segmentation of the supplier network. • Supplier strategy is aimed at minimizing coordination costs and creating value. • Supplier stratification and segmentation criteria reflect such additional factors as mutual economic dependence and technology clockspeed. 	<p style="text-align: center;">4</p>

<p>1.5 Create internal organizational structures and basic infrastructure systems for efficient management of supplier network</p>	<ul style="list-style-type: none"> • Procurement is centralized into a materiel or purchasing organization supporting engineering and production operations. • One set of uniform processes and procedures govern procurement operations. • Procurement operations focus on discrete functions (e.g., order placement, inventory control, inspection procedures, materials handling). 	<ul style="list-style-type: none"> • Procurement is typically centralized at the enterprise level and serves as a service center supporting engineering, production and post-sale customer support functions. • There is limited integration between the procurement organization and engineering, manufacturing, quality, contracting and related functions. • Limited use of Electronic Data Interchange (EDI) focuses on routine exchange of business information with specific suppliers. 	<ul style="list-style-type: none"> • Procurement operations are typically centralized at the business unit level to achieve economies of scale in purchasing. • Matrixed relationships are established between procurement operations and key functional organizations (engineering, manufacturing, quality). • Basic EDI and related IT/IS infrastructure systems are developed to support enterprise's ERP system and to enable some capability for technical data exchange with selected. 	<ul style="list-style-type: none"> • Procurement operations (organized at the business unit level for large multi-divisional enterprises) are aligned internally and across major critical suppliers. • Matrixed relationships and incentives are put in place to align procurement operations across business units, programs (product platforms) and major critical suppliers. • Basic IT/IS infrastructure supports integrated ERP system, assures database commonality, and enables technical data exchange internally and across major critical suppliers. 	<ul style="list-style-type: none"> • Procurement operations (organized at the business unit level for large multi-divisional enterprises) are integrated internally and across the supplier network. • Matrixed relationships and incentives are created to integrate procurement operations across business units and programs (product platforms), as well as across the supplier network. • Basic IT/IS infrastructure systems are developed to ensure seamless information flow internally and across the supplier network. 	<p>4</p>
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