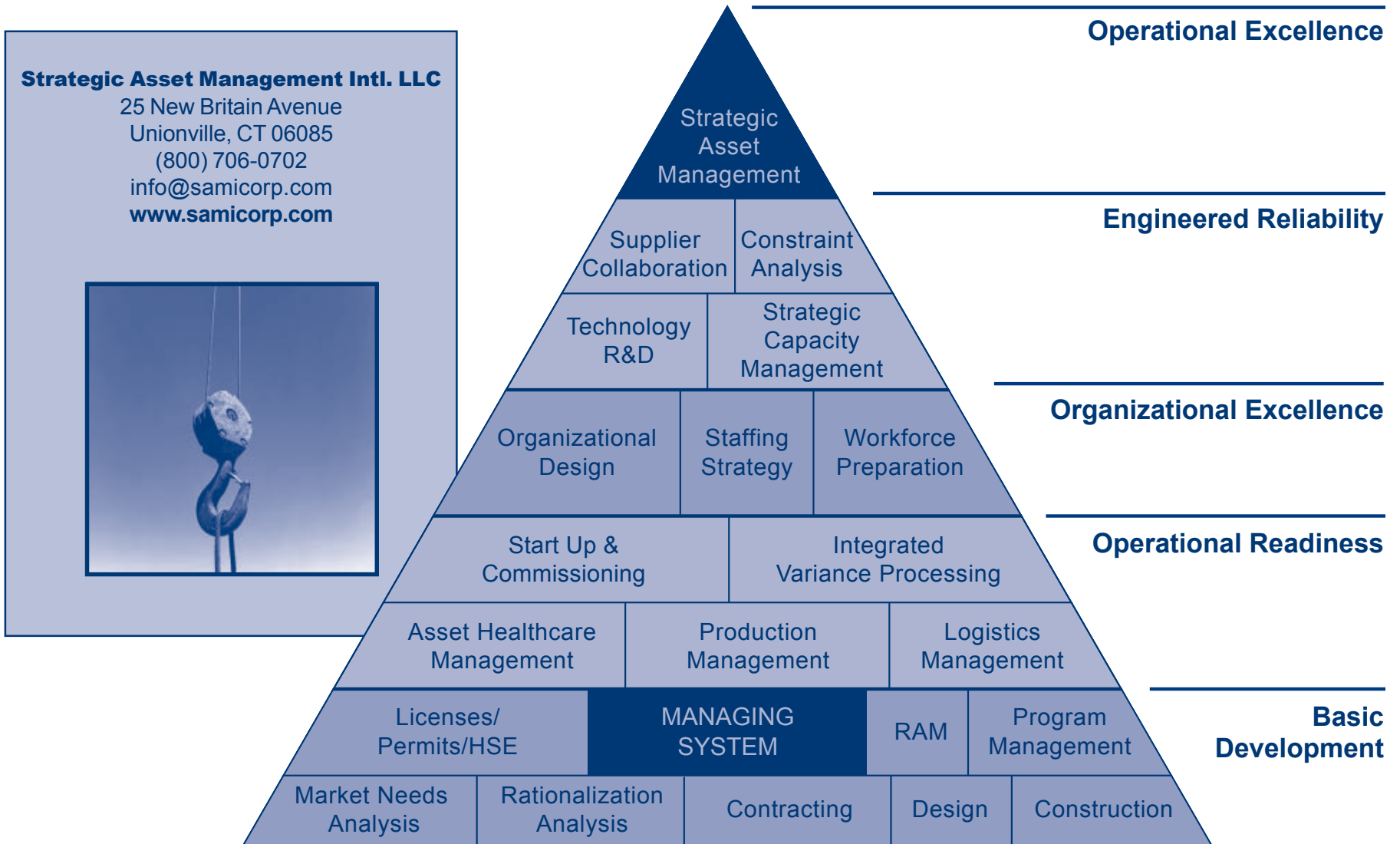


The SAMM Capacity Triangle



SAMI's Capacity Maturity Matrix

Stage \ Class	Low Performing	Competent	High Performing
Basic Development	<ul style="list-style-type: none"> Late to react to market signals Poor evaluation of existing capacity Project designs regularly overlook RAM and regulatory compliance Construction contracts lack clarity Schedule/budget targets frequently missed 	<ul style="list-style-type: none"> Market forecasting mechanisms in place, reasonably proficient Capacity rationalization performed systematically Standard practices & inclusion of RAM in contracts established Proactive treatment of regulatory compliance issues, lifecycle costs considered More than 70% of projects completed on-time/on-budget 	<ul style="list-style-type: none"> Market needs analysis consistently performed, accurately predicts demand trends Capacity rationalization identifies most efficient use of existing capacity Designs integrated/optimized, includes RAM, regulatory compliance, total-cost perspective Projects on-time/on-budget > 90% of the time
Operational Readiness	<ul style="list-style-type: none"> Policies/Procedures not documented/followed Insufficient technical references & procedures Production reliability < 90% Inefficient start-ups, commissioning, excessive off spec products & resource expenditures Construction logistics poorly planned, delays prevalent inconsistent Poor data collection/analysis of key process variation 	<ul style="list-style-type: none"> Processes/Procedures documented, > 80% compliance Asset Healthcare practices understood, production reliability > 90% Active QA/QC program minimizes Start-Up/Commissioning waste Construction logistics controlled, responsive to schedule changes Production materials consistently available ahead of need, supplier performance monitored Key process data collected/analyzed, action taken 	<ul style="list-style-type: none"> Process/Procedures well documented, entire facility aligned, following guidance Asset Healthcare at Stage 3 or higher, excellent operational performance No surprises during Start-Up/Commissioning Flawless construction logistics, highly responsive to schedule changes Production materials always available just prior to processing, minimum space allocated to input materials and WIP Variations in performance immediately identified & resolved
Organizational Excellence	<ul style="list-style-type: none"> Inefficient organizational allocations, production capacity adversely affected Poor utilization of infrastructure Outsourced support misapplied Facilities/Locations not optimized for capacity goals 	<ul style="list-style-type: none"> Inefficient organizational allocations, production capacity adversely affected Poor utilization of infrastructure Outsourced support misapplied Facilities/Locations not optimized for capacity goals 	<ul style="list-style-type: none"> Flexible/Integrated organization; easily adapts to market/capacity mix changes Flexible staffing strategy, regularly exceeds production goals Well trained, highly motivated, capable workforce
Engineered Reliability	<ul style="list-style-type: none"> Little attention paid to production capacity or product mix R&D Strategic Capacity Management inconsistently applied; short-sighted No collaboration with suppliers Constraints on capacity not analyzed or acted upon 	<ul style="list-style-type: none"> Policy established for production capacity & product development R&D Strategic Capacity Management viewed as central issue for Strategic Business Plan; short-term/long-term objectives established Suppliers routinely consulted to improve finished goods quality/capacity Theory of Constraints used to improve throughput/quality 	<ul style="list-style-type: none"> Aggressive R&D program for production capacity & product development Strategic Capacity Management tightly integrated w/ SBP; competitor reactions, sourcing decisions, supplier effects considered Suppliers systematically engaged to collaboratively improve capacity Rigorous program of constraint elimination & reduction, leveraged cost-benefits across business units
Asset Management	<ul style="list-style-type: none"> Management unclear re: goals & methods Equipment condition not factored into goals Equipment run parameters changed daily to respond to market pressures Too many priorities prevent focus Poor understanding of plant potential/liabilities 	<ul style="list-style-type: none"> Clear organizational alignment Goals cascaded from plant level to individual Production goals based on plant capability Most work identified and planned prior year Hourly help set unit goals & improve work Activity-Based Management implemented Production reliability is part of product marketing 	<ul style="list-style-type: none"> Each employee knows & is rewarded for role All decisions based on facts & models 80% of work is preventive or project, & is identified prior to the start of the year Production is 98% predictable Lowest cost producer Plant becomes corporate