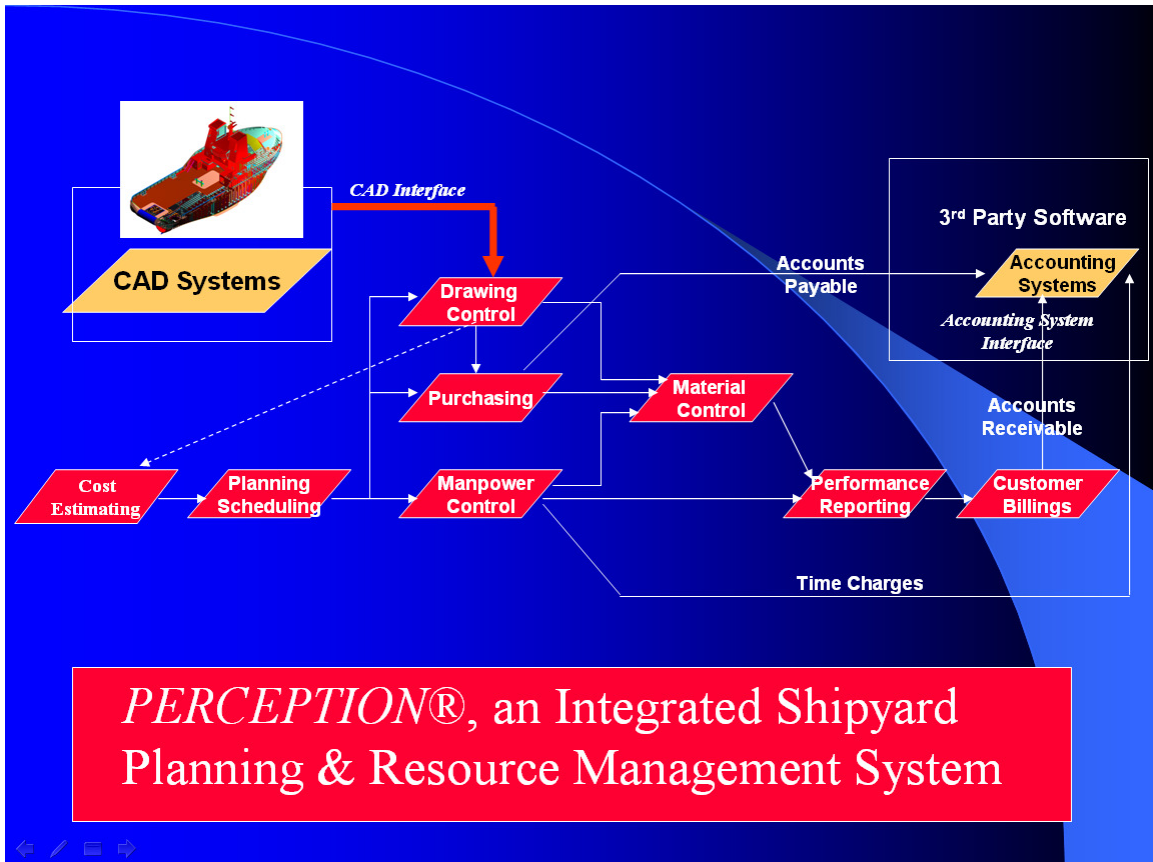




35 Years serving the shipbuilding and repair industry with computer systems for planning and managing production operations.

Integrated Software Solutions:

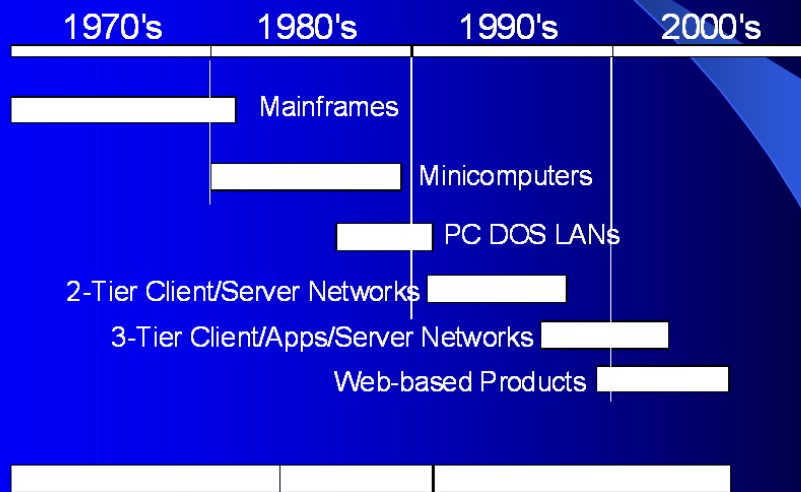
- Cost Estimating
- Planning & Scheduling
- Labor Work Order & Time Charge Management
- Material Purchasing & Inventory Control
- Job Costing & Forecasting
- Activity-Based Accounting - Direct & Indirect Costs
- Earned Value Management Systems * Performance Reporting
- Government Cost/Schedule Control Systems Reporting
- Contract Change Order Management



SPAR's Business Focus:

- Software to Support Shipbuilding (Commercial & Naval)
- Software to Support Ship Repair, Overhauls & Modernization Projects (Commercial & Naval)
- Services to Support Shipyard Planning & Project Management
- Independent Cost Estimating Services to Support Shipyards, Ship Owners, Design Agents & Government Agencies
- Management Consulting Services

SPAR's Technology Advances



Support Services:

- Training
- Customized Software Development
- Systems Integration
- Data Conversion
- Software Maintenance
- Management Consulting
- Independent Cost Estimating
- Planning, Scheduling & Project Management Services

Established Cost Estimating Libraries:

- "Commercial Shipbuilding New Construction Cost Estimating Relationships"
- "U.S. Navy Shipbuilding New Construction Cost Estimating Relationships"
- "Commercial & Government Ship Repair Cost Estimating Relationships"

Cost Models:

The *SPAR* Cost Models (Mono-Hull, Trimaran & Catamaran) are used to estimate concept and preliminary ship designs. The cost models permit quick

assessments of costs, risk, and design/mission cost trade-off and build strategy alternatives.

Technical Publications:

- "Shipyard Cost Estimating"
- "Planning New Construction & Major Ship Conversions"
- "Guide For Shipyard Material Control"
- "Prototype Description of a Shipyard Earned Value Management System (EVM)"