Extending a Product-Based Enterprise-Wide Process Framework to Include Services-Based Efforts

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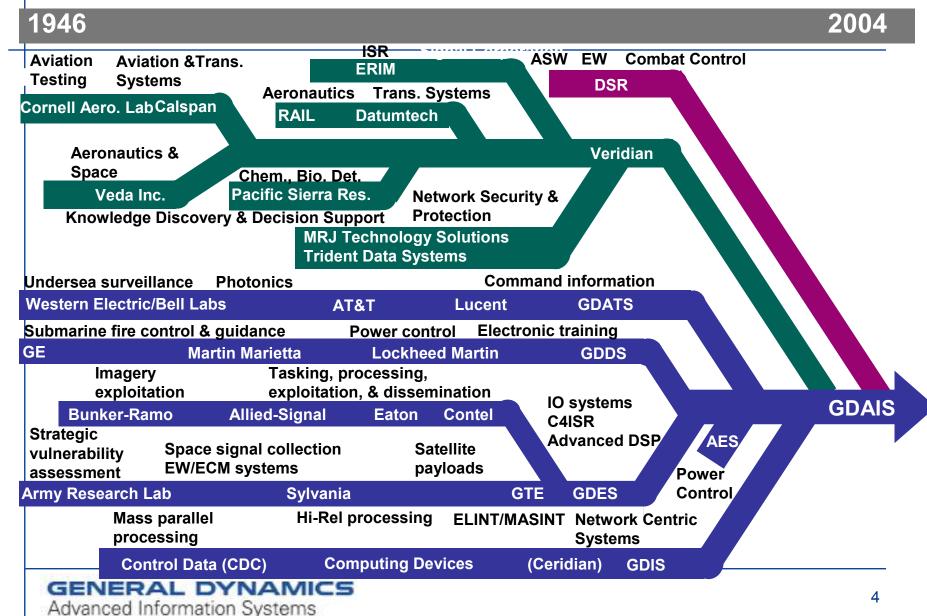
Purpose

- Provide an update of the GDAIS enterprisewide process framework
- Provide insight into the effort required to update a product-based framework to include research and services processes
- Provide examples of implementation lessons learned

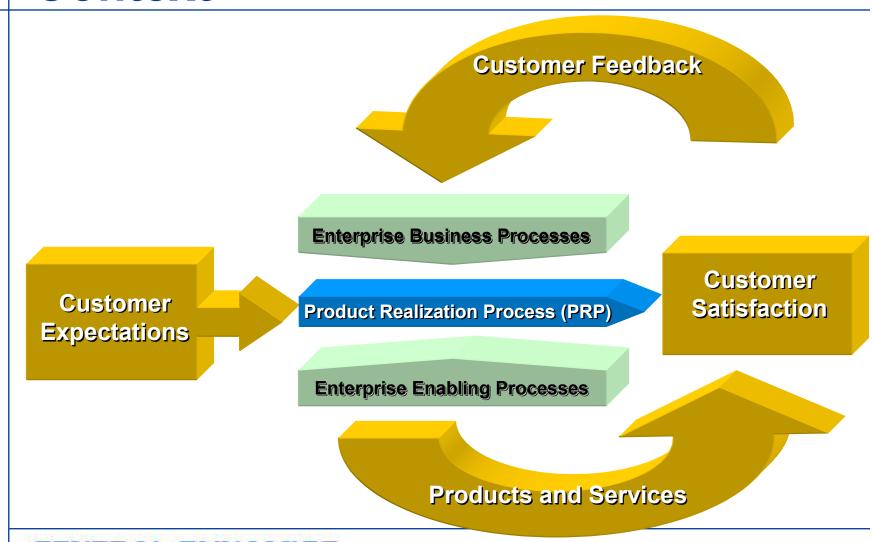
Topics

- Background information -- why change (again)?
- "Old" GDAIS Enterprise Process Framework
- Updated GDAIS Enterprise Process Framework
- Summary & Conclusions
 - Benefits & Lessons Learned
 - Questions

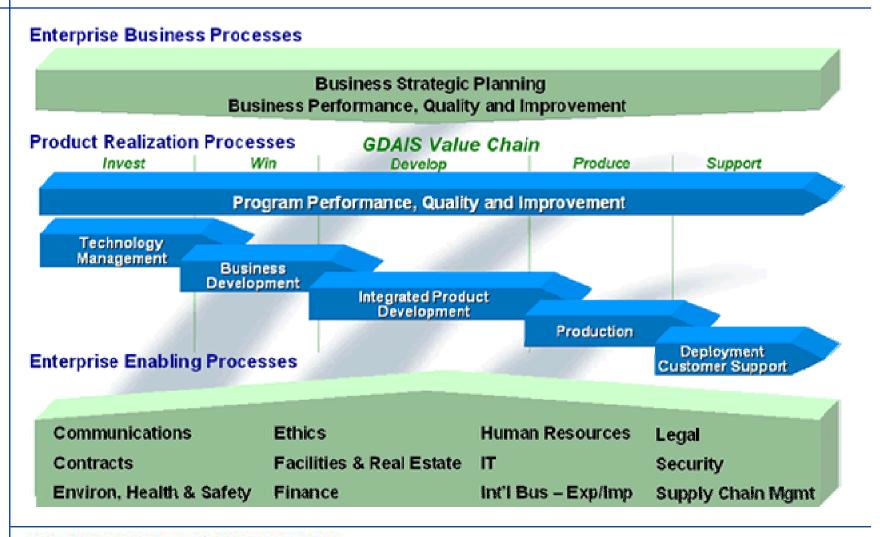
Organizational Context



Product-Based Process Framework Context



GDAIS Product-Based Process Framework



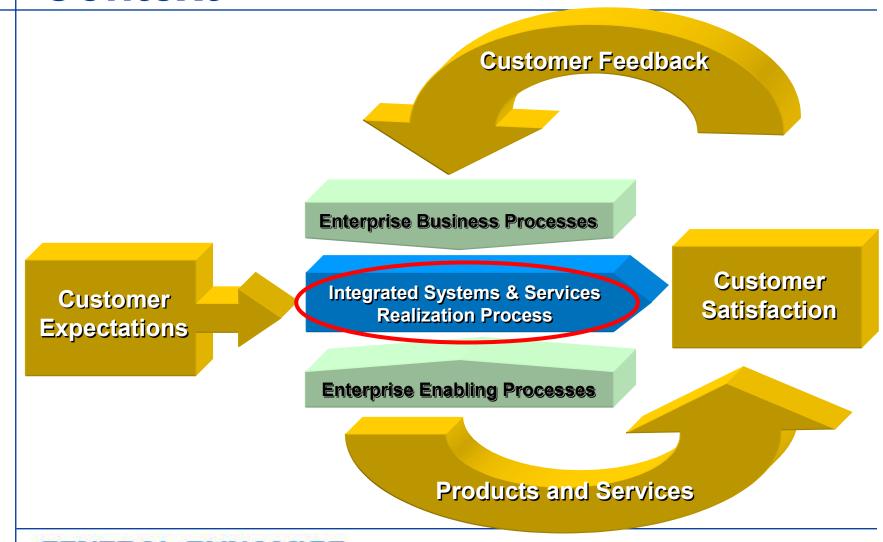
Integration Value Driver

- Value Driver #5 Process
 - IPQ IPT recommendations on changes to the Common Process Framework to better align with the business needs of the new GDAIS
 - Key areas that need attention
 - Services (various types)
 - Research

Goals for the Process Framework

- Tie to our Customer Intimacy model
- People can easily see where their activities fit into the framework
- Enable the definition of effective and consistent performance and improvement measures
- Simple, yet comprehensive
 - Easy to understand and needs little to no explanation
 - Covers and aligns with all GDAIS Functional Areas
 - Goes beyond the value chain/development process
- Clear ownership of the processes
- Balance the impact to "old" and "new" GDAIS employees
 - Change as needed, but not unnecessarily
 - Be sensitive to terminology
- Defines how "one GDAIS" does business

Updated Process Framework Context



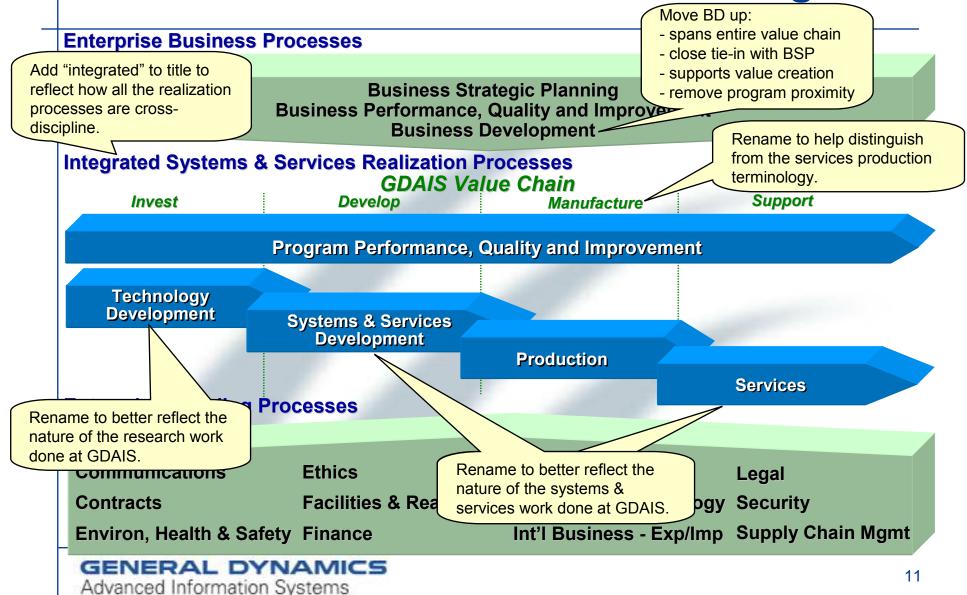
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Updated GDAIS Process Framework

Enterprise Business Processes Business Strategic Planning Business Performance, Quality and Improvement Business Development Integrated Systems & Services Realization Processes GDAIS Value Chain Develop Support Manufacture Invest **Program Performance, Quality and Improvement Technology** Development **Systems & Services Development Production** Services **Enterprise Enabling Processes Communications Human Resources Ethics** Legal Contracts Facilities & Real Estate Information Technology Security Int'l Business - Exp/Imp Supply Chain Mgmt **Environ, Health & Safety Finance**

GDAIS Process Framework – Changes



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Framework Changes – Research **Process**

Enterprise Business Processes Business Strategic Planning Business Performance, Quality and Improvement Business Development Integrated Systems & Services Realization Processes GDAIS Value Chain Develop Support Manufacture Invest **Program Performance, Quality and Improvement** Technology Development **Systems & Services** Development **Production** Services **Enterprise Enabling Processes** Reflects the scientific method typically applied in research applications **Communications Ethics** Hypothesize-Experiment-Analyze Contracts **Facilities** Developed primarily by the team in Ann Arbor ∠hain Mgmt **Environ, Health & Safety Finance**

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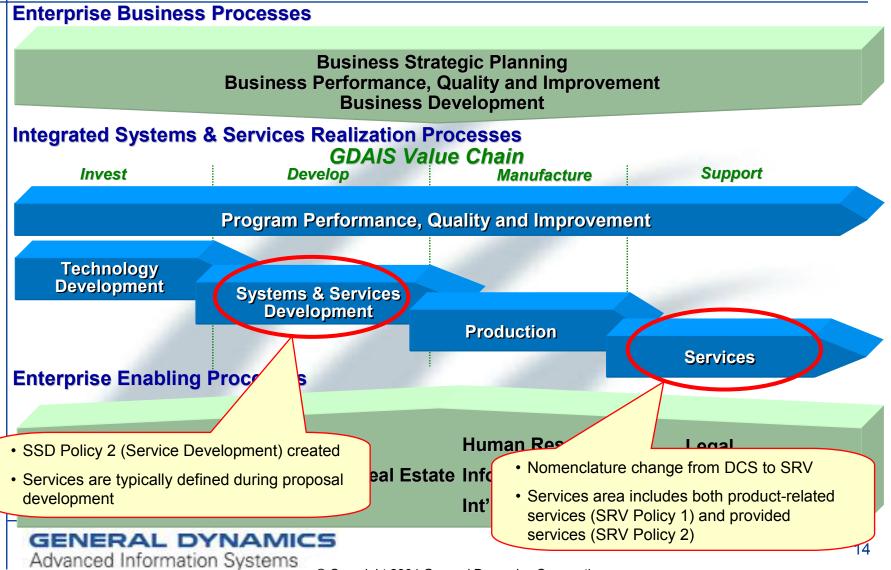
Framework Changes – System Development

Enterprise Business Processes Business Strategic Planning Business Performance, Quality and Improvement Business Development Integrated Systems & Services Realization Processes GDAIS Value Chain Support Develop Invest Manufacture **Program Performance, Quality and Improvement Technology** Development Systems & Services **Development Production** Services **Enterprise Enabling Processes** SSD Policy 1 (System/Product Development) **Communications Ethics** essentially unchanged, except nomenclature Contracts Facilities & Real Estate change from IPD to SSD Int'l Business - Exp/Imp Supply Chain Mgmt **Environ, Health & Safety Finance**

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Framework Changes – Services



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Benefits & Lessons Learned

- Benefits
 - Common language
 - Enterprise focus
 - Reduced maintenance costs
- Lessons Learned
 - Need top-level support
 - Keep ownership with the functional organizations
 - Engage the experts from everywhere to define the new processes, helps with ownership & buy-in
 - Ensure new processes are truly different
 - Account for all "hidden" costs no change is free

Comments & Questions