Executive Leadership Portfolio

Selected Executive Leadership Case Studies

Edward L. Carnes, MBA

IT LEADERSHIP | TECHNOLOGY STRATEGY
OPERATIONS & TRANSFORMATION

"Examples of executive leadership, organizational transformation, and business results drawn from significant assignments throughout my career."

ECITLeadership@outlook.com
(615) 567-3297
Nashville Metro Area, TN

NCR Corporation

Building and Scaling an EMEA Technology Consulting Practice

EXECUTIVE OVERVIEW

Assignment
Regional Director, Technology Consulting, leading NCR's EMEA technology consulting organization and developing regional practices across Applications, Microsoft, UNIX, and Networking.

Scope
Built and led an organization of approximately 115 professionals across 13 country organizations supporting customers throughout approximately 60 EMEA countries, with responsibility for a $20M+ regional business.

Primary Challenge
Build and scale a multinational consulting business while establishing practices, governance, financial discipline, market strategy, and operating standards across diverse EMEA markets.

Leadership Focus
International leadership, organizational design, P&L management, business development, sales & marketing, strategic alliances, and operational governance.

Results

- Established and scaled regional consulting practices across Applications, Microsoft, UNIX, and Networking, creating a coordinated EMEA consulting organization from previously fragmented capabilities.
- Directed practice strategy, budgets, financial outlooks, and market-growth objectives for the regional business.
- Improved regional income and profit by more than 20% over four years through stronger management, operating discipline, and business development.
- Developed NCR's UNIX Year 2000 Upgrade Program, creating a new practice area generating millions of dollars in annual revenue.
- Directed regional sales and marketing initiatives spanning Microsoft, e-commerce, emerging technologies, presales, and Windows 2000 consulting.
- Served as EMEA Microsoft Global Alliance Manager and led regional Cisco and Nortel certification efforts.
- Participated on NCR's EMEA Technology Services and Sales Leadership teams.

Situation

One of the defining experiences of my career began when I was offered the opportunity to relocate from the United States to Europe to build NCR's Regional Microsoft Consulting Practice across Europe, the Middle East, and Africa (EMEA).

This was not an assignment to manage an existing organization. My responsibility was to create one.

I was responsible for establishing a regional Microsoft Consulting Practice spanning 13 country organizations that collectively supported approximately 60 countries throughout EMEA. While a few countries had small consulting groups, many had no consulting organization at all. In several countries, consultants were dispersed throughout other business units and had to be identified, transferred, organized, and developed into cohesive consulting teams operating under a common regional vision.

There was no regional operating model, no common governance, no financial reporting, no standardized consulting services, no marketing strategy, no consultant incentive program, and no meaningful operational metrics.

Beyond building the business itself, I also had to earn credibility as an American leading experienced professionals representing many different cultures, business practices, and languages.

Looking back, this assignment established the leadership philosophy that has guided the remainder of my career: **listen first, earn trust, build structure where little exists, and leave organizations stronger than you found them.**

Scope of Responsibility

My responsibilities included:

- Building a regional Microsoft Consulting Practice across 13 country organizations supporting approximately 60 countries throughout EMEA.
- Establishing consulting organizations where none previously existed while integrating existing consulting resources from other business units into a unified regional structure.
- Leading 13 country consulting managers and their local consulting organizations.
- Developing regional governance, operating standards, consulting methodologies, financial reporting, KPIs, organizational structure, and business processes.
- Building strategic relationships with Microsoft leadership at both the country level and the EMEA regional level while aligning consulting, sales, finance, marketing, and executive leadership around common business objectives.

The Challenge

When I accepted the assignment, there was very little structure in place beyond the opportunity itself. Even practical details such as where I would live and where I would work had not yet been finalized. London had been identified as a likely location because of its business opportunities, while the regional finance organization operated from Amsterdam.

The organizational challenge was much greater.

Only a handful of countries had recognizable consulting organizations, and even those operated independently with little consistency. Many countries had consultants embedded within other business units, while others had little or no consulting capability at all.

Before operational improvements could begin, I first had to identify consulting resources, establish local leadership, organize consulting teams, create regional standards, and build an operating model capable of functioning across approximately sixty countries while respecting the unique culture and business environment of each market.

At the same time, I had never worked internationally. I quickly realized that my success would depend less on technical expertise and far more on earning trust.

Listening Before Leading

One of the first decisions I made was not to begin by changing things.

Instead, I spent my time listening.

I met with country managers, consultants, finance organizations, sales leaders, marketing teams, Microsoft representatives, and regional executives to understand how each country operated and what challenges existed within their markets.

I had one simple personal objective throughout the assignment:

Earn credibility without becoming the stereotypical "know-it-all American."

Rather than assuming the successful U.S. consulting model could simply be exported to Europe, I focused on understanding each country's strengths, business culture, and customer expectations before introducing regional standards.

Those conversations became the foundation for everything that followed.

Building the Operating Model

Once I understood the business, I began building the operational framework necessary to transform independent country activities into a unified regional consulting organization.

Together we developed common consulting methodologies, governance, operational standards, financial reporting, consultant utilization measurements, productivity metrics, and management practices that could be adapted locally while still providing meaningful regional visibility.

One of the largest challenges involved financial reporting.

The information I needed simply did not exist.

Unlike my counterparts in the United States, who had dedicated organizations producing business reporting and analytics, I largely had to build those capabilities by working with regional finance and country organizations to develop meaningful reporting around revenue, profitability, consultant utilization, productivity, and operational performance.

Initially, many finance leaders were understandably skeptical of someone from the United States asking detailed questions about regional financial information.

Over time those relationships evolved into trusted partnerships built around common goals and mutual respect.

Aligning the Business

Building a consulting organization required much more than operational improvements.

I worked closely with sales leadership, finance, marketing, executive management, and Microsoft to establish a common vision for consulting services across the region.

An important part of that effort involved developing strategic working relationships with Microsoft leadership in each country as well as with Microsoft's EMEA regional organization. Those relationships did not previously exist at the regional level and became an important part of aligning Microsoft, NCR, country management, sales organizations, consulting teams, and executive leadership around common business objectives. By strengthening those partnerships at both the country and regional levels, we established greater consistency in how consulting services were delivered and supported throughout EMEA.

Another major initiative involved consultant incentives. EMEA had no regional consultant incentive program.

I developed a complete regional model from the ground up, including financial analysis, profitability modeling, performance measurements, implementation methods, and business justification. After obtaining executive approval, the program was implemented across the region.

It became one of the most challenging projects of the assignment and one of the most rewarding.

Business Results

Within approximately one year, the EMEA Microsoft Consulting Practice had evolved into a fully functioning regional organization with common leadership practices, standardized governance, financial visibility, operational consistency, and a shared strategic direction.

Key accomplishments included:

- Built a regional Microsoft Consulting Practice spanning 13 country organizations supporting approximately 60 countries throughout EMEA.
- Established consulting organizations where none previously existed while integrating existing consulting resources into a unified regional operating model.
- Increased consultant utilization by approximately 60 percent.
- Created the region's first consultant incentive program.
- Established regional governance, KPI reporting, financial visibility, and operational measurements.
- Reduced operating costs while maintaining profitability objectives.
- Improved employee morale, management consistency, and organizational alignment across the region.
- Earned expanded executive responsibility for building the EMEA Networking Consulting Practice while continuing to lead the Microsoft Consulting organization.
- Assumed responsibility for **three of NCR's six global Cisco certification teams**, cross-functional groups consisting of sales, marketing, and consulting professionals whose certifications were required to maintain the company's worldwide **Cisco Gold Partner** status.
- Developed and maintained the training, certification, and ongoing compliance programs necessary to successfully sustain these strategic partner requirements across the EMEA region.

Although revenue continued to present opportunities for improvement through stronger alignment between product sales and consulting services, the regional organization had become a sustainable business capable of continued growth.

Leadership Reflection

One moment from this assignment has remained with me throughout my career.

During an EMEA management meeting in Zurich attended by more than sixty regional leaders, a discussion arose regarding a proposed U.S. initiative that did not fit the realities of the European marketplace.

The Regional Vice President remarked that our U.S. counterparts needed to think more globally instead of assuming American approaches automatically translated internationally. Then he paused, looked directly at me, and said:

"Except for Ed. He is not a typical American. He is one of us."

Of all the accomplishments throughout my career, those words remain among the ones I value most. They represented something far more meaningful than recognition for business performance.

They reflected trust.

That trust was earned by listening before leading, respecting different cultures, building relationships, maintaining high standards, and creating an environment where people from many different countries could work toward common goals while still preserving what made each market unique.

Those principles have remained the foundation of my leadership philosophy throughout my career and continue to shape how I approach every leadership opportunity today.

Round Hill Music

Global IT Stabilization, Integration & Transformation

EXECUTIVE OVERVIEW

Assignment
Led and modernized global IT for a music-rights and investment-management organization. Recruited for executive technology leadership, music-publishing experience, and knowledge of the core iMaestro platform, the role expanded into global infrastructure, cybersecurity, governance, application rationalization, acquisition integration, and investment-operations support.

Scope
Global responsibility for cloud and infrastructure, Microsoft 365, identity and security, networking, UK data-center and IBM i operations, music-publishing and corporate systems, end-user services, cybersecurity, business continuity, vendors, office openings, and acquisition integration across U.S. and UK operations.

Primary Challenge
Transform a fragmented environment of disconnected data centers, separate Google and file environments, overlapping security and remote-access technologies, approximately 50 software platforms, legacy financial middleware, and limited global standards or cybersecurity governance—without disrupting critical publishing, royalty, financial, and investment operations.

Technical & Professional Focus
Designed an integrated Microsoft Azure, Microsoft 365, and Cisco Meraki global architecture while preserving critical UK IBM i/iMaestro operations. Standardized identity, MFA, networking, endpoints, and files; consolidated legacy platforms; established cybersecurity, incident-response, disaster-recovery, and business-continuity practices; strengthened financial controls; integrated acquisitions; and created a cross-functional IT Advisory Group to align technology priorities and spending with business needs.

Results
- Established a secure, standardized global technology environment supporting seven offices across the U.S. and UK.
- Built and managed a detailed ~$1.16M global IT budget, excluding salaries and overhead.
- Reduced UK data-center costs by more than half and eliminated the UK Citrix environment, saving an additional ~$60K annually.
- Eliminated approximately one-third of roughly 50 software platforms and reduced SMARSH licensing from ~250 to ~75.
- Integrated U.S. and Canadian acquisitions and multiple Google/file environments into the corporate Microsoft platform.
- Established enterprise cybersecurity, BCDR, identity/access, and employee security-awareness practices, with no cybersecurity breaches during tenure.

Situation

Round Hill Music combined music publishing and investment management, with approximately 90 employees across seven U.S. and UK offices and investment funds typically $400 million or more. Technology supported specialized publishing and royalty operations as well as financial, security, and compliance requirements.

I was recruited as Vice President, Global Information Technology for my international IT leadership, technical and music-publishing experience, and familiarity with Round Hill's core iMaestro platform. Based in Nashville as it became the company's headquarters, I reported directly to the COO throughout my tenure.

An Unexpected Transformation Assignment

I was not recruited with the understanding that Round Hill required a technology turnaround. Once inside, I found three data-center environments; an expensive standalone UK infrastructure supporting critical IBM i/iMaestro operations; multiple Google and local file environments; overlapping VPN, MFA, security, collaboration, and file-sharing technologies; approximately 50 software platforms; legacy financial middleware; and limited enterprise-wide cybersecurity or business-continuity governance.

The assignment quickly became one of stabilizing operations while determining what to retain, replace, integrate, or eliminate—without disrupting publishing, royalty, financial, or investment activities.

Opening the New Nashville Headquarters

Simultaneously, I was tasked with helping deliver Round Hill's new Nashville headquarters within approximately four months. With no established local technology organization, I coordinated across more than ten design, construction, facilities, and technology groups.

I helped redesign workspace configurations after identifying a four-to-six-seat capacity shortfall; addressed ESG/Energy Star requirements; implemented the network and building-wide Cisco Meraki wireless environment; and coordinated more than 60 monitors and related workplace technology. At the CEO's request to make the environment "look fun," I also implemented office-media and new video-conferencing capabilities. My portion was completed for the original move-in date.

Immediate Business Stabilization

During the headquarters work, the COO told me two key employees were considering leaving because of inadequate hardware and unreliable systems access. I assessed their needs, configured appropriate solutions, and restored reliable access. Both employees remained with the company.

These early challenges defined the broader assignment: stabilize immediate business needs while transforming a fragmented technology environment into a secure, standardized, and manageable global IT operation.

Building the Global Technology Operating Model

The inherited environment had evolved location by location rather than as a global architecture. Working with outside technical resources, I designed and implemented an integrated model centered on Microsoft Azure and Microsoft 365 while preserving the business-critical IBM i/iMaestro publishing environment in the UK.

Identity was consolidated into Azure AD/Entra ID, with Microsoft Authenticator standardized for multi-factor authentication and overlapping authentication products eliminated. Remote access moved to Azure VPN, corporate PCs were brought under Microsoft Intune for centralized management, patching, and application deployment, and Microsoft Defender was deployed for endpoint protection. Office networking was standardized globally on Cisco Meraki with Advanced Security, creating a common architecture across U.S. and UK locations and secure connectivity to cloud services and the UK publishing environment.

The result was a fundamentally different operating model: offices, remote employees, cloud resources, and the specialized UK publishing platform could function as components of one managed global environment rather than separate technology islands.

Financial & Application Rationalization

Technology spending had developed with limited global visibility or discipline. I built a detailed global IT budgeting model from scratch, separating U.S. and UK requirements and ultimately managing approximately $1.16 million in annual technology expense, excluding salaries and corporate overhead.

I then systematically challenged recurring costs and redundant technologies. UK data-center expense was reduced by more than half while preserving critical iMaestro operations, and the separate UK Citrix environment was eliminated, saving approximately $60,000 annually. Roughly one-third of an initial portfolio of approximately 50 software platforms was retired, and SMARSH compliance licensing was reduced from approximately 250 licenses to about 75.

A particularly important modernization involved a legacy European financial process dependent on aging IBM i middleware, spreadsheets, and associated workstation processes. Despite understandable resistance following an earlier unsuccessful attempt, I worked directly with the UK financial leadership to replace the process with QuickBooks Online. The transition eliminated obsolete dependencies and became one of the most successful smaller-scale business transformations of the assignment.

Acquisition & Business Integration

Round Hill also acquired businesses in the U.S. and Canada whose email, documents, and business information resided in separate Google environments. I led the conversion and migration of legacy email and files—including Google-native documents—into the corporate Microsoft environment, integrating both acquisitions on schedule while preserving access to their business information.

Building Cybersecurity & Operational Resilience

Round Hill had limited enterprise-wide cybersecurity, incident-response, or business-continuity practices when I arrived; existing documentation was largely UK-specific.
I established a global cybersecurity and resilience framework including Technology and Cybersecurity Policy, Business Continuity and Disaster Recovery, Cybersecurity and Privacy Incident Response, documented backup/recovery practices, and employee security-awareness training. Microsoft Defender, Intune, and Cisco Meraki Advanced Security strengthened endpoint, application, and network protection.

Critical UK IBM i/iMaestro operations were protected through layered backup and disaster recovery, including replicated hot-standby infrastructure with a targeted 30-to-45-minute failover. I also worked with the CFO/Compliance Officer to administer SMARSH retention and controls for sensitive Microsoft 365 communications while reducing excessive licensing.

During my tenure, **Round Hill experienced no cybersecurity breaches.**

Creating Business & IT Governance

The COO considered the historical disconnect between IT and the business a significant organizational weakness. Drawing on an approach I had previously used at Sony/ATV, I created the **IT Advisory Group (ITAG)** to connect technology priorities and spending directly to business needs.

I selected knowledgeable and influential representatives—not simply managers—from Copyright, Royalties, Administration, Finance, Sync/Creative, A&R, Records, Business Analytics, UK operations, and IT. Meeting approximately monthly, ITAG surfaced business needs, evaluated priorities, improved communication, and helped direct technology spending toward areas of greatest value.

The COO became a strong supporter of ITAG. It gave IT trusted advocates throughout the organization while providing me with direct insight into operational priorities before making technology and spending decisions.

Panning for Gold — Applying Data & AI to Revenue Recovery

As the technology foundation matured, I began exploring how Round Hill could use its data to create business value rather than simply operate technology. The Mechanical Licensing Collective maintained a massive data set containing unmatched or unclaimed mechanical royalty information. Round Hill, meanwhile, held copyright information across iMaestro, legacy OnBase/Hyperion records, contracts, files, and other sources.

Working with Business Analytics, I conceived "**Panning for Gold**," an initiative to combine these disparate internal sources with MLC data and use Python, SQL, and emerging AI techniques to identify potential copyright matches and recover otherwise unclaimed royalties.

The COO estimated that the concept could identify **at least $100,000 in additional annual revenue**. I developed the initial architecture, began evaluating vendors, and received approval to proceed. The initiative had not reached implementation when Round Hill subsequently outsourced the IT function.

Results & Business Impact

By the conclusion of the transformation, Round Hill had moved from a fragmented collection of local technologies to a secure, standardized, and financially managed global IT environment supporting seven U.S. and UK offices, remote employees, music-publishing operations, investment activities, and acquired businesses.

Key outcomes included:

- Established an integrated Microsoft Azure/Microsoft 365 and Cisco Meraki global environment while preserving and securely integrating the critical UK IBM i/iMaestro publishing platform.
- Built and managed a detailed global IT budget of approximately **$1.16 million**, excluding salaries and corporate overhead, providing visibility and accountability across U.S. and UK technology spending.
- Reduced UK data-center costs by **more than half** and eliminated the separate UK Citrix environment, saving approximately **$60,000 annually**.
- Eliminated approximately **one-third of an initial portfolio of roughly 50 software platforms**, reducing cost, complexity, and support requirements.
- Reduced SMARSH licensing from approximately **250 to 75 licenses** and strengthened controls around compliance-related communications.
- Integrated U.S. and Canadian acquisitions and multiple Google, email, and file environments into the corporate Microsoft platform.
- Modernized a critical European financial process by replacing legacy IBM i middleware and associated manual processes with QuickBooks Online.
- Established enterprise cybersecurity, business-continuity, disaster-recovery, identity/access, onboarding/offboarding, and employee security-awareness practices, with **no cybersecurity breaches during my tenure**.
- Created the **IT Advisory Group (ITAG)** to establish sustained business/IT alignment and provide business leaders a voice in technology priorities and spending.
- Conceived and received approval for **"Panning for Gold,"** a data/AI revenue-recovery initiative estimated by the COO to have the potential to identify at least **$100,000 in additional annual revenue**.

Transition to an Outsourced IT Model

As Round Hill later reduced staffing and operating costs, newly appointed financial leadership moved toward a fully outsourced IT model. I was specifically advised that elimination of my position resulted from this cost-effectiveness and operating-model decision. My performance had received strong support from executive leadership.

The transformation itself helped make that transition possible. By then, the environment had standardized architecture, security controls, documented policies and procedures, defined backup and recovery practices, centralized budgeting, application and hardware standards, inventory and lifecycle practices, and structured onboarding and offboarding processes.

Following my departure, the CEO subsequently contacted me directly for assistance with technology at another business he owned when the new outsourced provider was unable to resolve the issue.

Professional Reflection

Round Hill became one of the clearest examples in my career of entering an organization for one assignment and discovering that the underlying business need was substantially broader. I was recruited for global technology leadership and specialized music-publishing experience; the actual challenge required simultaneously stabilizing operations, opening a new headquarters, rebuilding global infrastructure, reducing costs, establishing cybersecurity and governance, integrating acquisitions, supporting investment and compliance requirements, and beginning to explore how data and AI could contribute directly to revenue.

The transformation also reinforced the importance of knowing what **not** to change. The UK IBM i/iMaestro environment was expensive and isolated, but it supported business-critical publishing and royalty operations. Rather than replacing functioning technology simply for the sake of modernization, I integrated it into the global architecture, strengthened its resilience, reduced its operating cost, and concentrated transformation efforts where they would produce greater business value.

Just as important was the organizational transformation. Technology problems were not solely technical. Round Hill needed stronger financial discipline, clearer standards, formal cybersecurity and business-continuity practices, better communication with operating groups, and a mechanism for ensuring that technology priorities reflected business priorities. Establishing ITAG became an important part of creating that connection and gave business representatives a meaningful role in technology decisions.

By the end of the assignment, IT had transformed from a fragmented collection of technologies and local practices into a structured global operation with standardized architecture, security, financial controls, governance, documented processes, and a clearer connection to the business.

The experience reinforced a leadership principle that has guided much of my career: effective technology leadership begins with understanding what the business actually needs—not simply the technology it currently has. The objective is to stabilize what must continue operating, eliminate unnecessary complexity, establish appropriate controls, and create a technology foundation capable of supporting what the business needs next.

Accelerated Christian Education
School of Tomorrow

Enterprise-Wide Technology & ERP Transformation

EXECUTIVE OVERVIEW

Assignment
Initially engaged by Accelerated Christian Education (ACE) to assess enterprise requirements and identify a replacement ERP platform. After evaluating more than 60 vendors, the assignment expanded into leadership of an enterprise-wide transformation when it became clear ACE's fragmented systems and infrastructure could not support the ERP investment.

Scope
Led ERP selection and implementation, infrastructure and network modernization, legacy-system retirement, systems integration, custom development, data conversion, and technology standardization. Directed ACE IT staff, Berger & Co. consultants, and TECSYS resources while working directly with the Vice President of Finance and Executive Council.

Primary Challenge
Replace disconnected financial, distribution, and legacy systems while simultaneously modernizing the underlying technology environment—without disrupting order processing, purchasing, inventory, warehousing, shipping, financial operations, or international distribution.

Technical & Professional Focus
Selected and implemented TECSYS Elite on UNIX/Informix; consolidated legacy networks into a standardized TCP/IP and Windows NT environment; standardized desktops and centralized security; integrated Windows applications with ERP data; and led phased financial and distribution conversions. Built trust with internal IT staff and adapted leadership and communication to ACE's highly mission-driven culture.

Results
- Transformed an ERP-selection engagement into an approximately 18-month enterprise technology transformation.
- Evaluated 60+ ERP vendors and led selection and implementation of an integrated financial and distribution platform.
- Replaced fragmented financial, order-processing, purchasing, inventory, warehouse, and distribution systems with an integrated enterprise environment.
- Retired legacy application and network platforms and standardized TCP/IP networking, Windows servers and desktops, and centralized security.
- Led two successful major production cutovers following extensive conversion development and testing.
- Established integrated reporting and applications providing business units access to current enterprise information while protecting ERP data integrity.
- Cross-trained internal IT staff and transferred operational knowledge to support the new environment.

Situation

Accelerated Christian Education (ACE), widely known as School of Tomorrow, was a global provider of curriculum and educational materials serving private schools, homeschool families, and international operations in more than 100 countries. Its business model depended heavily on the production, warehousing, ordering, and distribution of printed curriculum and other educational materials to customers in the United States and internationally.

By 1994, ACE's technology environment had evolved into a collection of disconnected legacy systems and networks that no longer provided an effective foundation for the organization's operations. Financial and administrative functions were distributed across multiple systems, including an older Great Plains financial platform and applications operating in UNIX and MAPPER environments. Warehousing, order processing, inventory, purchasing, and other business functions similarly depended on systems that were poorly integrated and increasingly difficult to support.

The underlying infrastructure was fragmented as well. Multiple network technologies—including Banyan VINES and Novell—coexisted with emerging Windows and TCP/IP environments. Information frequently had to move between systems through manual processes, custom interfaces, or duplicate data entry, limiting timely access to enterprise information and complicating support.

ACE engaged Berger & Co. Information Management Consultants to assess its enterprise information requirements and identify a new ERP platform capable of supporting both financial operations and the organization's substantial warehousing and distribution requirements. As Berger's lead technology and solutions architect, I was assigned to lead the assessment and software-selection effort.

I conducted interviews across ACE's executive leadership, business departments, IT organization, and key user groups to establish enterprise requirements. The resulting evaluation began with more than 60 ERP vendors and progressively narrowed the field based on ACE's financial, order-processing, inventory, purchasing, warehousing, distribution, technology, and integration requirements.

As the assessment progressed, however, a larger issue became apparent: **selecting the right ERP would not by itself solve ACE's technology problem.** The organization's fragmented networks, aging infrastructure, disparate applications, and limited integration would have to be addressed if the substantial ERP investment were to succeed.

Enterprise Assessment & ERP Selection

I began the engagement by developing an enterprise-wide understanding of how ACE operated before evaluating technology solutions. I interviewed executive leadership, department managers, IT personnel, supervisors, and key users to identify business requirements, operational constraints, information needs, and weaknesses in the existing environment. The assessment extended beyond finance to the organization's substantial order-processing, purchasing, inventory, warehousing, distribution, and international operations.

Using those requirements, I conducted a structured ERP evaluation beginning with more than 60 potential vendors. I progressively narrowed the field through increasingly detailed reviews of functional fit, technology architecture, vendor capabilities, and ACE's operational requirements. Particular attention was given to warehouse and distribution functionality because those operations were central to ACE's ability to fulfill curriculum and educational-material orders throughout the United States and internationally.

As the field narrowed, I subjected the leading solutions to increasingly detailed analysis rather than relying solely on demonstrations or vendor claims. I evaluated how the systems would perform against ACE's actual operating conditions, including unusually large and complex orders containing more than 300 line items. The objective was to ensure that the selected platform could support both the organization's financial requirements and its demanding distribution operations.

The process ultimately resulted in the selection of TECSYS Elite, a UNIX/Informix-based enterprise platform with strong warehouse and distribution capabilities. Working closely with the Vice President of Finance and executive leadership, I helped establish the implementation strategy and coordinated the ACE personnel, TECSYS resources, and Berger & Co. consultants who would execute it.

From Software Selection to Enterprise Transformation

The selection process also confirmed something more fundamental: the ERP could not be implemented successfully as an isolated software project. ACE's existing networks, servers, desktops, applications, and data environment had evolved independently over time. Installing a sophisticated enterprise platform without addressing those dependencies would put both the ERP investment and business operations at risk.

I recommended expanding the program beyond ERP implementation to establish the technology foundation necessary to support it. With executive approval, what began as a software-selection engagement became a coordinated enterprise transformation encompassing infrastructure, networking, data conversion, systems integration, application modernization, and organizational readiness.

Enterprise Technology Transformation

Once the ERP platform was selected, implementation proceeded as a coordinated transformation rather than a stand-alone software deployment. I led the combined efforts of ACE's four-person IT staff, up to four Berger & Co. consultants, and approximately three to four TECSYS consultants plus their project manager. I managed the project activities across these groups, while major enterprise-wide recommendations were presented with the Vice President of Finance to the Executive Council for approval.

Building the Technology Foundation

The existing infrastructure had to be modernized before ACE could fully realize the value of the new ERP. Multiple network environments—including Banyan VINES and Novell—were consolidated into a standardized TCP/IP architecture supported by Windows NT servers. Windows desktops and common software were standardized across the organization, centralized network security was established, and the infrastructure was redesigned to provide reliable access to the new enterprise systems.

These changes were implemented while the ERP project continued. Rather than waiting for one initiative to finish before beginning another, I coordinated the infrastructure, ERP, conversion, and application workstreams so that the required technology foundation would be in place as each implementation phase reached production.

ERP Implementation & Legacy-System Retirement

TECSYS Elite became the integrated enterprise platform for financial, purchasing, order-processing, inventory, warehouse, and distribution operations. The implementation required conversion from multiple legacy environments, extensive testing of conversion programs, and close coordination among ACE personnel, Berger consultants, and the TECSYS team.

The program was deliberately phased to reduce implementation risk. Core financial functions—including General Ledger, Accounts Payable, and Purchasing—were converted first. The larger order-processing, warehouse, and distribution environment followed later, allowing the team to apply lessons from the first production conversion to the more operationally complex second phase.

As functionality moved to the new environment, the former Great Plains, SCO UNIX, MAPPER, Banyan VINES, Novell, and related legacy platforms were retired. ACE emerged with a standardized enterprise architecture rather than the collection of independent systems and networks that existed when the engagement began.

Extending the ERP Through Integrated Applications

Elite could not address every specialized business requirement. Instead of allowing those gaps to recreate isolated information silos, I led the design and development of

complementary Windows-based applications and integration capabilities that used the ERP as the authoritative source of enterprise information.
These solutions supported requirements such as historical invoice and statement retrieval, customer communications, production costing, warehouse reporting, and other specialized business functions. A three-tier security and access architecture was also designed to allow Windows applications to retrieve approved information from the UNIX/Informix environment without exposing the underlying ERP database to unrestricted user access.

The result was an integrated environment in which the ERP served as the operational core while specialized applications extended its capabilities without compromising enterprise data integrity.

Leading Through a Mission-Driven Culture

The transformation required more than technology and project management. ACE had a deeply established, mission-driven culture that influenced how decisions were made, how employees interacted, and how leadership viewed organizational responsibilities. As an outside consultant, I had to earn credibility within that environment while leading internal IT staff, Berger consultants, and TECSYS resources through substantial change.

I learned early that effective leadership at ACE required understanding the organization rather than expecting it to adapt to my own management style. I worked particularly closely with the internal IT team, where I had to establish trust without diminishing the authority or expertise of existing staff. I deliberately involved team members in the new technologies, provided cross-training where possible, and worked to broaden the technical capabilities of individuals who previously had limited exposure beyond their established responsibilities.

Adapting the Message Without Compromising the Requirement

That cultural awareness became particularly important as the first major ERP cutover approached. ACE traditionally closed its headquarters for approximately two weeks each summer while employees either participated in activities at an organizational property in Colorado, used vacation time, or remained home without pay. Unfortunately, the planned financial-system conversion required several key ACE employees to remain available during this period.

When I presented the staffing requirement to the Executive Council, conventional project-risk and implementation arguments were not persuasive. Leadership was reluctant to interfere with the organization's long-established summer practice, and I was not permitted simply to require employees to remain.

I realized that continuing to make the same argument in conventional business or technical terms would accomplish little. Instead, I reframed the issue within ACE's own values:

responsible stewardship of the organization's investment required us to do the preparation and hard work within our control rather than assume that problems would somehow resolve themselves. The message resonated. Leadership authorized me to offer the required employees the option of remaining to support the conversion, and everyone I needed volunteered to stay.

Preparing for Successful Cutovers

The staffing decision was only one element of the implementation strategy. Before production conversion, the combined ACE, Berger, and TECSYS team spent multiple weekends testing data-conversion programs, identifying problems, correcting them, and repeating the process until we were confident in the results. TECSYS proved to be an exceptional implementation partner, with its consultants and project leadership working nights and weekends alongside us when required.

The first financial cutover was completed successfully. Later in the year, we applied the experience and disciplines developed during that implementation to the substantially larger order-processing, warehouse, and distribution conversion. Despite its greater operational complexity and data volume, the second cutover was also completed successfully and remains one of the smoothest major ERP production transitions I have experienced.

Business & Organizational Impact

By the end of the engagement, ACE had moved from a fragmented collection of financial, operational, network, and application environments to an integrated enterprise technology foundation. Financial, purchasing, order-processing, inventory, warehousing, and distribution functions were brought together around the Elite platform, while standardized networking, servers, desktops, security, and integrated applications provided a common technology environment across the organization.

The transformation also changed how information could be used throughout the business. Instead of relying on disconnected applications, duplicate data entry, and labor-intensive processes to assemble information, business units could access current enterprise data through the ERP and complementary applications. In some areas, reporting and operational processes that previously required days of manual effort could be reduced substantially through direct access to integrated information.

Legacy Great Plains, SCO UNIX, MAPPER, Banyan VINES, Novell, and related environments were retired as their functionality moved to the new architecture. The result was not simply a new ERP system, but a substantially simplified and more supportable enterprise environment designed around common standards and integrated information.

Building Internal Capability

An important objective throughout the transformation was ensuring that ACE could operate the environment after the consulting engagement ended. I worked to transfer knowledge to the internal IT staff through cross-training and direct involvement in implementation, testing, conversion, and production support rather than create long-term dependence on outside consultants.

I also encouraged management to invest in and develop the internal IT organization rather than rely indefinitely on higher-cost external resources. After approximately 18 months, the major transformation objectives had been achieved, the environment was positioned to be supported and extended internally, and ACE's IT staff had gained experience with the systems they would carry forward.

Professional Reflection

This engagement became an important milestone in my development as a technology leader. I was initially brought to ACE to solve a specific problem—help select a new ERP system—but quickly learned that the real responsibility was to understand what the organization needed to accomplish and address the broader technology, operational, and organizational issues necessary for success.

It also reinforced that effective leadership requires understanding the organization rather than expecting it to adapt to me. ACE had a culture unlike any organization in which I had previously worked. I had to understand that culture, earn trust, and communicate in terms meaningful to the people making decisions. The summer cutover demonstrated that a sound recommendation is not enough; a leader must communicate it in a way the organization can hear and act upon.

I also learned that leadership did not require proving that an outside consultant knew more than the people already there. It required respecting their knowledge, developing people where I could, and leaving the organization stronger and more self-sufficient than when I arrived.

The project also reinforced a principle that has remained central throughout my career: technology decisions must begin with the business, not the technology. The ERP, infrastructure, applications, and integrations mattered because together they enabled ACE to operate more effectively. That business-first perspective helped shape my approach to enterprise transformation and technology leadership throughout the rest of my career.

EXECUTIVE PERSPECTIVE

"You were definitely worth more than the money paid, but it was not the documents you produced. It was truly listening to our perceived problems and developing exceptional solutions—all while apparently keeping both your sanity and your sense of humor!"

— Walter Baines, former CFO, Accelerated Christian Education

Sony/ATV Music Publishing

Building and Modernizing Global IT

Creating Global Governance, Financial Discipline, and a Business-Aligned Technology Organization

EXECUTIVE OVERVIEW

Assignment
Director, Global Information Technology, recruited into a newly created role to build and lead Sony/ATV's global technology function supporting 40 offices in 35 countries.

Scope
Global IT leadership across the U.S., Europe, Latin America, and other international markets; $5M+ global IT budget; internal teams in Nashville and London; Sony Music technology resources throughout other countries; global applications, infrastructure, vendors, financial management, and technology strategy.

Primary Challenge
Transform fragmented technology resources into a cohesive global IT organization while establishing financial controls, business-driven investment priorities, technology standards, shared infrastructure, and reliable support for a rapidly evolving global music-publishing business.

Leadership & Technology Focus
Global IT Leadership • Financial & Vendor Governance • Business/IT Alignment • Global Infrastructure • Application Modernization • Acquisition Integration • Data Center Strategy • Business Continuity • Microsoft • Cisco • IBM iSeries

Results

- Built and led a global IT organization supporting 40 offices in 35 countries.
- Established a $5M+ global IT budget and financial controls across countries, currencies, vendors, and differing capitalization requirements.
- Eliminated approximately $1M in uncontrolled vendor spending by implementing centralized authorization and financial accountability.
- Created a business-led technology steering process that gave global managers responsibility for collectively prioritizing development investments.
- Reduced development costs and lead times by approximately 20%.
- Implemented a $200K contract-imaging solution with an approximately two-month ROI.
- Migrated critical music-publishing systems into Sony's shared data-center environment to improve reliability, security, backup, and business continuity.
- Led technology integration and facility modernization following the acquisition of Acuff-Rose Music.

Situation — Building a Global IT Function

When I joined Sony/ATV Music Publishing as Director, Global Information Technology, the company operated approximately 42 offices in 39 countries but did not have a unified global IT organization.

In Nashville, two technology employees reported through a business function. London had a larger technical group supporting applications, systems, and infrastructure but likewise reported through local business management. In other countries, Sony/ATV relied primarily on technology personnel within Sony Music for local support.

My assignment was to bring those resources together into a global technology function while establishing the financial, governance, infrastructure, and operating disciplines required to support an international business.

The organizational environment added another layer of complexity. I formally reported to Sony/ATV's Vice President of Global Administration in Nashville while maintaining important executive relationships across Sony Music leadership in Nashville, New York, and London.

Leading global IT therefore required navigating a matrixed organization, balancing competing expectations, and keeping senior stakeholders appropriately involved while maintaining a coherent global technology strategy.

Establishing Global Financial Control
One of my first priorities was determining what Sony/ATV was actually spending on technology worldwide.

I developed and managed a global IT budget of more than $5 million covering personnel, infrastructure, applications, development, vendors, and technology services across multiple currencies. This required working with financial managers and Sony Music technology organizations in individual countries, each with its own accounting practices and capitalization requirements.

Creating that visibility exposed a significant problem.

Business users had been able to contact a primary development vendor directly, request enhancements, and authorize work without centralized IT review or prioritization. The vendor performed the work and submitted invoices, which historically had been paid without adequate technology governance or accountability.

I worked directly with the vendor to change that model. Going forward, development work required IT authorization, an approved budget, and an agreed business priority.

The resulting controls eliminated approximately ***$1 million in uncontrolled vendor spending*** while creating much greater predictability around technology expenditures.

But simply centralizing spending authority in IT was not the solution I wanted.

Putting Technology Priorities in the Hands of the Business

I established defined funding for ongoing system maintenance, application development, and special projects and created a weekly business steering process to determine how development resources would be used.

Rather than having IT decide whose request was most important—or allowing individual managers to compete privately for technology resources—I brought business managers together and gave them responsibility for collectively prioritizing the work.

My Nashville business manager chaired the meetings and coordinated requirements with managers throughout the global organization. Business leaders could see the available budget, understand competing requests, and determine together which enhancements provided the greatest value to the company.

IT maintained control over financial discipline, technical standards, vendors, and delivery. ***The business owned the business priorities.***

The process reduced development costs and lead times by approximately 20% while giving managers visibility into what was being developed, why initiatives were prioritized, and when requests could reasonably be addressed. Technology prioritization became a shared business decision rather than a series of individual negotiations.

This governance model became one of the most important lessons I took from Sony/ATV and an approach I would use again later in my career.

Modernizing the Global Technology Environment

At the same time, I established common technology standards across the organization. Sony/ATV relied heavily on Lotus Notes for email and departmental applications, some of which became difficult to support when their creators left the company.

I moved the organization toward standardized Microsoft technologies, migrated email to Microsoft Exchange, established more supportable approaches for departmental

applications, and standardized desktop and laptop configurations and purchasing practices in the U.S. and UK.

The objective was to create an environment that could be supported consistently across a global company while reducing the operational risk created by fragmented technology and unsupported applications.

Moving Critical Systems into Shared Services

Sony/ATV's core music-publishing application, iMaestro, operated on an IBM iSeries located in a Nashville office. I led its migration into Sony's enterprise data-center environment in New York as part of the broader Sony shared-services strategy.

The move improved reliability, security, backup, and disaster-recovery capabilities while allowing Sony/ATV to leverage infrastructure operated at enterprise scale. I also worked with senior Sony technology leadership on broader data-center utilization opportunities intended to consolidate infrastructure and reduce duplication across Sony operating companies.

Acuff-Rose Acquisition and Nashville Consolidation

The acquisition of Acuff-Rose Music created another significant technology challenge. Its Nashville facility contained aging technology that did not meet Sony/ATV standards, while the building provided an opportunity to consolidate employees from two other locations.

I led the technology transformation of the facility, replacing network and telecommunications infrastructure and implementing high-speed connectivity, including fiber between floors and a dedicated dark-fiber connection to Sony/ATV's Nashville studio for transferring large digital music files.

Current publishing operations were transitioned to Sony/ATV's systems within approximately six months. The acquired legacy publishing system was retained for historical reference where information could not practically be migrated.

My responsibilities extended beyond technology implementation to office planning, employee consolidation, and coordination with business and financial leadership in preparing the facility for its new role.

Delivering Rapid Business Value

One of my earliest projects addressed Sony/ATV's large volume of paper publishing contracts and the labor and storage required to manage them.

I selected and implemented a document-imaging solution with high-speed scanning and indexing that allowed users to retrieve contract information directly through their browsers. The approximately ***$200,000 investment paid for itself in roughly two months*** through reduced labor, physical storage, and document-retrieval costs.

Business Results

During my 2½ years with Sony/ATV, the technology function evolved from fragmented local resources into a globally managed organization supporting 40 offices in 35 countries.

- Built and led Sony/ATV's global IT organization supporting 40 offices in 35 countries.
- Established financial accountability for a $5M+ global IT budget across multiple currencies and country-specific requirements.
- Eliminated approximately ***$1 million in uncontrolled vendor spending*** and created a business-led governance model that reduced development costs and lead times by approximately 20%.
- Implemented a $200K document-imaging solution with an approximately two-month ROI.
- Migrated critical music-publishing infrastructure into Sony's enterprise data-center environment, improving reliability, security, backup, and business continuity.
- Led technology modernization and operational consolidation following the Acuff-Rose Music acquisition.

Professional Reflection

Sony/ATV reinforced that leading technology at enterprise scale is as much about governance, finance, relationships, and business judgment as technology.

Building a global IT function required navigating different countries, currencies, accounting requirements, business practices, and organizational relationships. My previous international experience helped me recognize that global operations could not simply impose U.S. practices everywhere.

The most enduring lesson came from the technology steering process. Rather than having IT determine which business requests mattered most, I gave business leaders visibility into finite resources and responsibility for collectively establishing priorities.

IT governed the technology, financial discipline, and execution; the business owned the business priorities. That principle became an important part of my leadership approach and one I continued to apply in later executive roles.

Healthcare Claims Automation & Rules-Based Processing

Adapting Enterprise Claims Technology and Developing Automated Claims Screening

EXECUTIVE OVERVIEW

Assignment
Apply emerging database, client/server, and IBM enterprise technologies to improve insurance claims processing and develop new approaches for evaluating healthcare-related claims.

Scope
Two major insurance initiatives while working in the Perot Systems Healthcare Group: adapting healthcare claims-processing technology for Personal Injury Protection (PIP) insurance and developing rules-based automated claims screening for Travelers.

Primary Challenge
Extend existing claims technology into a new insurance environment while developing a system capable of applying complex medical and billing rules to incoming healthcare claims before normal adjudication.

Technical & Professional Focus
Database architecture and administration, application development, rules-based automation, claims processing, IBM mainframe integration, DB2, CICS, OS/2, and distributed development.

Results
- Adapted healthcare claims-processing technology for production use across The Robert Plan's PIP claims operation.
- Helped develop an automated rules-based system that screened Travelers healthcare claims before adjudication.
- Enabled potentially inappropriate claims to be identified and routed for review before payment processing continued.
- Used distributed OS/2 development and testing with deployment to the customer's IBM mainframe production environment.
- Contributed to a system reported to generate significant cost savings by identifying potentially inappropriate healthcare claims before payment

Situation

During an early-career assignment with Perot Systems' Healthcare Group, I brought database, application development, and IBM systems expertise to several emerging claims-processing initiatives. Although healthcare was a new industry for me, my technical background was directly applicable to the challenges the organization was addressing.

My initial work involved supporting healthcare claims-processing applications running on what is now the IBM i platform. That experience introduced me to healthcare claims adjudication and the business rules used to determine whether claims should be paid or subjected to additional review.

At the same time, emerging PC and client/server technologies were creating new opportunities to develop and test applications while continuing to rely on established IBM platforms for production processing. This combination of healthcare knowledge and technical expertise soon led to two significantly different claims-processing initiatives.

Adapting Healthcare Claims Processing for PIP Insurance

One of the first opportunities involved The Robert Plan, which processed many thousands of Personal Injury Protection (PIP) claims across its operations. Because medical expenses resulting from automobile accidents may fall under automobile insurance rather than traditional health insurance, the company needed an effective way to evaluate those medical claims.
Rather than create an entirely new technology approach, we recognized that many of the underlying requirements were similar to those already addressed by healthcare claims systems. I helped adapt the existing healthcare claims-processing application and its business logic to accommodate the specialized requirements of PIP claims.

The resulting application was placed into production and used across The Robert Plan's PIP claims operation. The project demonstrated an approach I would use repeatedly throughout my career: understand the underlying business problem, identify proven technology that can be reused, and adapt it rather than automatically starting over.

Developing Rules-Based Healthcare Claims Screening

Shortly afterward, I was assigned to a more technically ambitious healthcare claims initiative for Travelers. I served as the database administrator and one of the principal developers on an approximately 12-person Perot Systems team developing a system to examine healthcare claims before they proceeded through normal adjudication.

Healthcare claims can contain procedures, services, or billing combinations requiring additional scrutiny. Our objective was to translate established medical, procedural, and billing requirements into structured data and programmable business rules that could automatically evaluate incoming claims.

For example, certain routine surgical procedures would not normally require an assistant surgeon. If a claim included an assistant-surgeon charge under circumstances where established rules indicated it might not be medically necessary, the system could identify the exception.

The software did not make the final medical or payment decision. When a claim triggered an established rule, it was flagged and prevented from proceeding through normal adjudication until reviewed by a claims professional.

The result was an early form of automated claims screening and exception management: expert knowledge was converted into repeatable rules, technology applied those rules consistently across incoming claims, and human expertise remained responsible for the final decision.

Bridging Distributed Development and Mainframe Production

The development architecture was innovative for the period. Rather than performing the entire development lifecycle directly on the customer's mainframe environment, we developed and tested the application using IBM OS/2-based systems and technologies including DB2 and CICS.

My background in these technologies allowed me to contribute as both the project's database administrator and one of its principal application developers. Completed releases were deployed to Travelers' IBM mainframe environment, where the application ran in production as part of the claims-processing workflow.

This approach allowed us to take advantage of emerging PC-based development capabilities while retaining the reliability and processing capacity of the customer's established mainframe infrastructure—an early example of integrating new and existing technologies rather than replacing proven enterprise platforms unnecessarily.

Business Results

Both initiatives moved beyond development and into production use.

For The Robert Plan, healthcare claims-processing technology was successfully adapted to support the organization's PIP claims operation, which processed many thousands of

claims across the company. The solution allowed healthcare claims-processing concepts to be applied to an insurance environment with specialized requirements without creating an entirely separate technology approach.

For Travelers, the rules-based screening system introduced an automated control before normal healthcare claims adjudication. Potentially inappropriate claims or billing combinations could be identified and routed for review before payment processing continued.

Key accomplishments included:

- Adapted existing healthcare claims-processing technology for use in the automotive PIP insurance environment.
- Supported production processing of many thousands of PIP claims across The Robert Plan's operations.
- Served as database administrator and one of the principal developers on an approximately 12-person healthcare technology team.
- Helped translate medical and billing requirements into structured data and executable business rules.
- Developed automated screening that identified claims requiring additional review before adjudication.
- Maintained human review and judgment as an integral part of the claims decision process.
- Helped bridge distributed OS/2 development and testing with IBM mainframe production deployment.
- Contributed to a Travelers claims-screening system reported to produce significant savings by identifying potentially inappropriate claims before payment.

Professional Reflection

These projects were important early steps in shaping my approach to enterprise technology. The Travelers project demonstrated the value of translating specialized human knowledge into repeatable business rules, automatically identifying exceptions, and directing them to people capable of making informed decisions. Modern analytics and artificial intelligence use far more sophisticated methods, but the principle remains recognizable: automate what technology can evaluate consistently while retaining human judgment where context and expertise matter.

The projects also reinforced the value of integrating new and established technologies rather than replacing proven platforms unnecessarily. Understanding the business problem, automating repeatable decisions, integrating technology generations, and keeping people at the center of important decisions became principles that continued to influence my approach to architecture, transformation, and technology leadership throughout my career.

Carnes Group

Technology Transformation Across Multiple Industries

EXECUTIVE OVERVIEW

Assignment
Founded and led Carnes Group, a technology consulting, systems integration, and managed services firm serving more than 100 organizations across diverse industries and operating environments.

Scope
Provided technology strategy, architecture, infrastructure design and implementation, systems integration, project leadership, cloud and data-center services, cybersecurity, telecommunications, vendor and licensing management, and ongoing technology support. Engagements ranged from entrepreneurial businesses to multi-location, national, and international organizations.

Carnes Group maintained Microsoft Silver Partner competencies in **Datacenter** and **Small and Midmarket Cloud Solutions**, held **Microsoft Authorized Education Partner — Silver** status, and participated in **Dell PartnerDirect** as an EA Certified Server Specialist. The firm also maintained partner and value-added reseller relationships with HP, 3CX, Altaro, ThreatTrack, and Comcast.

Primary Challenge
Clients entered periods of growth, relocation, acquisition, expansion, modernization, or operational difficulty with widely different technology needs. The challenge was to quickly understand how each business operated, determine the appropriate level of technology, and build solutions that were reliable, supportable, secure, and capable of evolving with the organization.

Focus
Business-oriented technology architecture; infrastructure modernization; multi-location connectivity; Microsoft platforms; cloud and data-center services; systems integration; project and program execution; vendor and licensing management; and long-term technology leadership.

Results
Built, modernized, and supported technology environments for more than 100 organizations across industries including healthcare, publishing, manufacturing, industrial distribution, staffing, financial services, music, retail, professional services, sports, construction, and utilities. Many initial project engagements developed into multi-year relationships in which Carnes Group functioned as the client's external technology organization and trusted advisor.

Situation

Carnes Group was founded in 2004 and developed through work with an unusually broad range of organizations, industries, technologies, and operating models.

Although the clients varied widely, many of their underlying technology challenges were similar. Growing companies often had systems that had developed piecemeal without an overall architecture. New or expanding organizations needed complete environments designed from the ground up. Multi-location businesses needed reliable connectivity and centralized access to business systems without unnecessarily duplicating infrastructure at every site. Other clients were relocating facilities, integrating acquisitions, modernizing aging systems, or undertaking projects that exceeded the capabilities or capacity of their internal teams.

In many cases, Carnes Group entered at a point of significant business change. The work could begin with a network redesign, a server upgrade, an office move, a new facility, or a major project, but the real requirement was usually broader: understand how the organization operated, determine what technology it actually needed, and establish a practical environment that could support the business over time.

Many clients lacked the internal technology depth to plan, build, and manage these environments themselves. As relationships developed, Carnes Group frequently became the organization's external technology function — providing architecture, implementation, procurement, licensing, vendor coordination, security, business application support, and ongoing managed services.

This created relationships that were often substantially broader than the assignment that initiated them. A company might first engage Carnes Group for a server replacement or office move and later rely on the firm for technology decisions associated with additional locations, business growth, acquisitions, new facilities, or specialized projects. In several cases, those relationships continued for many years as the client's business and technology needs evolved.

As the client base grew, Carnes Group became responsible for environments ranging from small single-site businesses to multi-location, national, and international operations. Some required traditional Microsoft-based infrastructure and managed services; others involved specialized ERP systems, financial analytics, medical technology, manufacturing operations, point-of-sale systems, remote application delivery, data-center architecture, or complex project management.

The diversity of the work created a recurring leadership challenge: **apply consistent judgment without assuming that every organization needed the same solution.**

That became the foundation of the Carnes Group approach — understand the business first, then design and deliver technology appropriate to its size, complexity, risk, and operating requirements.

Actions

Built Complete Technology Environments Around the Business

For many clients, Carnes Group was responsible for creating most or all of the technology environment required to operate the business.

That work could include server and storage architecture, Microsoft Active Directory and Exchange, Microsoft 365 and cloud services, network switching, wireless infrastructure, Internet connectivity, VPNs, remote access, desktop standardization, security and antivirus systems, onsite and offsite backup, voice-over-IP, financial systems, ERP applications, point-of-sale platforms, and specialized industry software.

The objective was not to apply the same technical configuration repeatedly. The architecture was shaped around the way each organization operated, the number and location of its users, the applications it depended on, its growth plans, and the level of complexity it could reasonably support.

For **A-Game Sportsplex**, Carnes Group created the technology environment for a large sports complex containing hockey rinks and multiple basketball and volleyball courts. In addition to the traditional Microsoft, server, network, desktop, and security environment, the facility required distributed point-of-sale systems and thermal printers supporting transactions throughout the complex.

At **Dixie Medical**, a business refurbishing and selling defibrillators grew from operations in the owner's home into a dedicated commercial facility. Carnes Group designed the technology environment for the new location, including servers, networking, Internet connectivity, backup, Microsoft systems, cloud email, and financial applications, and then provided the company's ongoing technology services.

For **Design Conveyor Systems / Diakonia**, Carnes Group implemented and supported the infrastructure for headquarters and a remote location, including networking, wireless, servers, software, PCs, remote access, and specialized industrial software and hardware. The relationship continued for years, and the company owners came to trust Carnes Group enough to involve the firm in technology work associated with other businesses they acquired.

At **Wang Vision Institute**, Carnes Group designed and supported the technology environment for a specialized medical practice, including servers, networking, backup, desktops, wireless infrastructure, and the medical systems and industry-specific software required to operate the organization.

These engagements reflected a recurring Carnes Group role: translate business and operating requirements into technology environments that were practical, scalable, supportable, and appropriate to the way each organization actually worked.

Led a National Technology Standardization Program for NFIB

One of the most significant Carnes Group engagements began through Dell Professional Services with the **National Federation of Independent Business (NFIB).**

NFIB was standardizing technology across its state and regional offices throughout the United States. Its internal technology team had developed initial pilot configurations, and Carnes was brought in to assist with the rollout.

After the first several deployments, Dell determined that the ongoing services work fell outside the type of engagement it wanted to continue managing and allowed Carnes to work directly with NFIB. Carnes Group then assumed responsibility for the rollout and became the primary services provider for the program.

After reviewing the deployment process, Carnes identified opportunities to improve hardware preconfiguration, network preparation, data migration, workstation standardization, and the sequence in which offices were being completed. As the engagement progressed, he assumed responsibility for the overall project schedule and coordination of the deployments.

Carnes managed the rollout from planning through execution — determining deployment sequencing, scheduling field work, coordinating directly with NFIB state directors and internal technology staff, managing implementation activities, and tracking project costs. By reorganizing the schedule and consolidating work more efficiently, he reduced unnecessary effort and travel while accelerating completion.

Carnes ultimately led deployments across **26 NFIB offices throughout the United States**, completing the program approximately **six months ahead of schedule and producing estimated savings of approximately $100,000.**

The success of the initial rollout led to additional assignments. Carnes was subsequently asked to standardize another **five regional offices**, perform additional work at NFIB headquarters in Washington, D.C., and later return as the organization's requirements continued to evolve.

One headquarters engagement included completely reengineering a network closet supporting approximately **250 connections**. NFIB later brought Carnes Group back to implement Microsoft Exchange clustering, which at the time was an emerging high-availability architecture.

The NFIB engagement demonstrated more than technical execution: it required taking ownership of a geographically distributed program, restructuring how the work was performed, coordinating multiple stakeholders, managing schedule and cost, and delivering measurable business results.

Designed Centralized Technology for Distributed Organizations

Multi-location clients often needed consistent access to business systems without the cost and complexity of duplicating substantial infrastructure at every office.

At **All-Star Personnel**, a staffing organization operating approximately eight or nine locations across Middle Tennessee, Carnes Group designed a centralized environment built around Microsoft Remote Desktop Services. Branch locations required reliable networking, wireless connectivity, standardized workstations, and secure access, while ERP, financial, and customized business applications were hosted centrally and delivered remotely to users across the organization.

The architecture allowed the company to avoid placing substantial server and application infrastructure in every branch. It also reduced the need for specialized workstation configurations at each location, simplified application support, and gave employees a more consistent experience regardless of which office they were working from.

Carnes Group also supported the broader technology environment, including Microsoft Exchange, server and desktop standardization, antivirus, backups, hardware and software procurement, and ongoing managed services. Because Carnes Group supplied and supported both the centralized environment and the branch technology, responsibility extended from infrastructure design through day-to-day operation. The relationship continued for many years and became one of Carnes Group's larger and more trusted client engagements.

A different multi-location model was implemented for **Grogan Jewelers**, which operated three retail locations in two states. Carnes Group created a Cisco-based private VPN connecting the locations, implemented Active Directory security, network infrastructure, onsite and cloud backup, Microsoft 365 and Azure services, voice-over-IP using 3CX, and the ERP and point-of-sale systems required to operate the jewelry business.

At **Alfred Williams & Company**, Carnes Group supported two Middle Tennessee offices that operated with a degree of local independence while remaining connected to the corporate organization in North Carolina. Carnes Group designed and implemented local server, network, wireless, voice, backup, and workstation environments while coordinating with corporate IT and supporting both Microsoft and Mac users.

Over time, Carnes Group became a trusted technology resource for local management while maintaining a productive relationship with the corporate IT organization.

These environments reflected the same principle: distributed organizations did not all need the same technical model. The architecture had to reflect how users worked, where applications belonged, what could reasonably be centralized, and how much infrastructure each location actually needed.

Supported Growth, Acquisitions, Moves, and Corporate Integration

A substantial portion of Carnes Group's work occurred because the business itself was changing. Clients were growing, opening new facilities, relocating operations, combining businesses, or integrating acquisitions, and the technology environment had to change with them.

At **Currie Medical**, Carnes Group became involved as business operations were being separated, combined, and reorganized. Carnes Group integrated the technology environment, connected operations in Tennessee and California, supported the company's ERP systems, and designed the technology environment for a new Southern California warehouse, office, and manufacturing facility.

The engagement required more than installing infrastructure. Technology decisions had to account for how the newly combined business would operate, how manufacturing and office functions would interact, how employees in different states would access shared systems, and how the environment could support the company's continuing growth.

At **Worthy Publishing**, the relationship evolved with the company over several stages. Carnes Group began supporting the publisher when it operated from a small office of approximately four people, then designed and implemented the technology environment for a much larger facility as the company expanded. When Worthy later outgrew that location, Carnes Group designed its next environment as well.

The relationship subsequently expanded to include integration of an acquired children's publishing and media business, bringing additional users, systems, and operating requirements into the environment. Carnes Group continued supporting the organization for years as it matured and eventually helped identify and transition services to another provider when the company's needs had outgrown the original support model.

At **MCS America / Conexion Media**, Carnes Group was initially engaged around the company's specialized iMaestro music-industry application environment. The relationship expanded into responsibility for the broader local technology environment, including servers, networking, wireless systems, and more than 20 workstations.

Carnes Group supported the organization through multiple office relocations and changes in ownership of portions of the business. The trust developed through the relationship eventually resulted in Carnes being asked by the owner to assist with technology work in **London**, extending the engagement internationally.

These engagements demonstrated that technology transformation was often inseparable from business transformation. Successful execution required understanding not only the existing systems, but what the organization was becoming and how technology needed to support that next stage.

Built Enterprise and Data-Center Environments When Required

Although many Carnes Group clients were small and midsize organizations, their technology requirements were not necessarily small or simple.

At **CX-Analytics**, a startup serving financial-industry customers in the United States and United Kingdom, Carnes Group built the technology environment from the ground up to support intensive data-processing and analytical workloads.

The architecture included approximately a dozen servers, a storage area network, substantial storage capacity, onsite backup, and Dell server technology within a data-center environment. Built around Microsoft enterprise technologies, the platform supported the company's specialized banking and financial-services applications. Because CX-Analytics operated virtually, the centralized environment and remote support model were fundamental to its operation.

Carnes Group was responsible for both the original architecture and the ongoing managed services required to keep it operating, including server administration, storage, centralized services, backup, and remote access.

At **Emergency Services Network**, which specialized in scheduling physicians for emergency-room coverage, Carnes Group moved the company's servers from its local office into a data center and established secure VPN connectivity to the hosted systems. Carnes Group also supported the specialized scheduling application and provided technical input into enhancements.

MCS America / Conexion Media presented another specialized environment. Carnes Group was initially brought in to support and upgrade the company's iMaestro music-industry application platform, including migration to newer and more capable server hardware. That technical assignment eventually expanded into responsibility for the broader infrastructure and became a long-term technology relationship.

High availability was also part of the work when required. Following the successful national rollout for **NFIB**, the organization later brought Carnes Group back to implement Microsoft Exchange clustering, providing redundancy for a critical communications platform at a time when clustered Microsoft messaging environments were still relatively uncommon.

Across the broader client base, Carnes Group regularly designed server, storage, remote-access, backup, and recovery environments based on business requirements rather than company size alone. Some organizations needed only a straightforward local server platform; others required centralized applications, data-center hosting, storage-area networks, remote application delivery, or redundant systems.

The common principle was to match the architecture to the organization's **performance, availability, data protection, application, and operating requirements** — using enterprise-class technology when it created business value without introducing unnecessary complexity.

Translated Complex Plant Operations Into Executive Management Information

Not every Carnes Group engagement centered on infrastructure. At **Nyrstar**, a Middle Tennessee zinc manufacturing facility, Carnes was engaged during the plant's major annual shutdown, an intensive period in which extensive maintenance and project work had to be completed within a limited operating window.

SAP contained much of the underlying planning and scheduling information, but shutdown management and executives relied on a different management view of actual progress.

The assignment required working inside an active industrial facility rather than from a conventional office environment. Access was controlled through plant security, and work in operating areas required appropriate industrial protective equipment. Carnes frequently had to go directly into the plant to verify progress with supervisors and skilled trades personnel performing maintenance and shutdown activities.

That field involvement was important because reported status did not always provide enough context to understand what was actually happening. Carnes incorporated information drawn from SAP, physically walked the plant, spoke with the people doing the work, and reconciled field conditions with the integrated shutdown schedule maintained in Microsoft Project.

The location also created practical technology challenges. The plant was in a rural area where wireless connectivity could be inconsistent, requiring work processes that did not assume continuous access to systems while moving through the facility.

Carnes then translated the combined scheduling, operational, and field information into management reporting used by executives and shutdown leadership to understand progress, identify schedule variances, and determine where corrective action was required.

Large-format schedules and status information were displayed in a conference-room environment so management could review the overall shutdown visually, identify areas falling behind plan, and direct changes back into the operating schedule.

The engagement was repeated annually for approximately seven or eight years and typically required roughly 30 consecutive days onsite, including weekends, during the shutdown period, with a daily round-trip commute of approximately 150 miles.

Although very different from Carnes Group's infrastructure work, the assignment relied on the same core capability: understanding complex technical and operational information, validating what was actually happening, and converting it into management information executives could use to make decisions.

Established Long-Term Technology Leadership Relationships

Many Carnes Group engagements continued long after the initial project was completed.

Clients including **Grogan Jewelers, All-Star Personnel, Worthy Publishing, MCS America, Alfred Williams & Company, Volunteer Utilities, Design Conveyor Systems, Wang Vision Institute**, and others retained Carnes Group for extended periods. Several relationships continued for **more than 10 years**, and a small number extended to approximately **15 years**, with responsibilities often expanding well beyond the work that originally brought Carnes Group into the organization.

Carnes Group frequently became the client's external technology organization, providing not only day-to-day support but also architecture decisions, infrastructure planning, vendor selection, hardware and software procurement, licensing, cybersecurity, backup and recovery, telecommunications, business application support, office moves, expansion planning, and technology guidance as the business evolved.

That role required understanding both the technology and the organization behind it. For smaller companies without deep internal IT resources, Carnes Group often provided the judgment and continuity that an internal technology leader would normally supply. For larger organizations, the firm worked alongside local or corporate IT teams to provide specialized expertise, project execution, or onsite leadership where additional capability was required.

The durability of these relationships became one of the clearest measures of client trust. In several cases, owners and executives brought Carnes Group into additional locations, newly acquired businesses, or other companies they were involved with because of the results of earlier work.

Carnes Group's partner ecosystem supported this broader role. The firm maintained Microsoft Silver Partner competencies in **Datacenter** and **Small and Midmarket Cloud Solutions**, held **Microsoft Authorized Education Partner — Silver** status, and participated in **Dell PartnerDirect** as an EA Certified Server Specialist. It also maintained partner and value-added reseller relationships with HP, 3CX, Altaro, ThreatTrack, and Comcast.

Carnes' involvement in the Microsoft partner community extended beyond the firm's commercial relationships. He was one of the founders of the Tennessee chapter of the **International Association of Microsoft Certified Partners** and served as its president for much of this period, providing regular interaction with Microsoft and other technology partners across the ecosystem.

The result was a business model that combined consulting, systems integration, procurement, licensing, managed services, and ongoing technology leadership — allowing Carnes Group to remain involved as client needs changed rather than treating each engagement as an isolated technical project.

Extended Technology Leadership Into Nonprofit, Competition, and Product Development

Carnes Group's work also evolved beyond traditional business technology consulting. Beginning early in the firm's history, Carnes became involved with nonprofit and community organizations supporting music education, cultural heritage, and competitive music events.

That involvement expanded into leadership roles with national 501(c)(3) organizations and judged competitions. Drawing on decades of experience as a participant, judge, organizer, and advisor, Carnes became a trusted resource to competition directors seeking to improve event structure, judging, scheduling, registration, scoring, and overall execution.

The same pattern that shaped Carnes Group's technology work appeared again in competition operations: understand how the organization actually functions, identify where process or technology creates unnecessary difficulty, and design a practical solution around the operating need.

One of the most significant examples was the development of the **Normalized Scoring System (NSS)**. Carnes identified recurring weaknesses in traditional raw-score methods, including differences in judges' scoring ranges and point spreads that could unintentionally influence final results. He designed a normalization methodology intended to reduce those mathematical distortions while preserving the judgment of the individual judges.

NSS evolved from a scoring methodology into a software platform supporting competition administration, including scoring and tabulation, registration and play order, reporting, and related event-management functions. A companion **Duration Calculator** was developed to help organizers estimate competition length and make more realistic scheduling decisions.

The work subsequently expanded into **Competition Operations Services**, applying the same operational discipline to competition design, rules and procedures, judging processes, registration, timing, scheduling, event-day operations, and post-event review.

This work broadened rather than replaced Carnes Group's technology leadership practice. Today the firm combines **Fractional CIO/CTO and technology advisory services, Competition Operations Services, and the Normalized Scoring System** — different offerings built around the same approach: understand the problem, create structure, apply technology where it adds value, and improve how the organization operates.

Whether working with a business, nonprofit, association, or competition, the objective has remained consistent: provide independent judgment, practical solutions, and leadership appropriate to the needs of the organization.

Results

Across more than 100 client organizations and project engagements, Carnes Group:

- Designed and implemented complete technology environments for organizations that were starting, growing, relocating, acquiring operations, or modernizing outdated infrastructure.
- Connected and standardized multi-location organizations using VPNs, centralized applications, Microsoft Remote Desktop Services, cloud platforms, and other technologies selected according to business requirements.
- Led the NFIB national office-standardization program across **26 offices**, completing the primary rollout approximately **six months ahead of schedule** with estimated savings of approximately **$100,000**, followed by additional regional, headquarters, and high-availability assignments.
- Built environments ranging from small-business infrastructure to multi-server, SAN-based data-center platforms supporting financial-industry analytical workloads in the United States and United Kingdom.
- Supported specialized technology environments across healthcare, publishing, music, staffing, financial services, manufacturing, industrial operations, retail, sports, construction, and utilities.
- Helped clients navigate office moves, facility construction, acquisitions, business combinations, geographic expansion, and other periods of significant organizational change.
- Developed numerous project engagements into long-term advisory and managed-services relationships, with several clients remaining with Carnes Group for **more than 10 years** and a small number for approximately **15 years**.
- Established formal Microsoft, Dell, and other technology-partner relationships supporting architecture, licensing, procurement, education, implementation, and ongoing service delivery.
- Grew Carnes Group from a one-person technology practice serving home and small-business users into a broader technology consulting, systems integration, and managed-services firm supporting more complex multi-location, national, and international client environments.
- Expanded the firm's capabilities beyond Microsoft-centered infrastructure into voice-over-IP, cloud and data-center services, licensing, vendor management, cybersecurity, backup and recovery, and long-term technology advisory relationships.
- Built a repeatable approach that could be applied across widely different industries without assuming that every organization required the same technology solution.

Professional Reflection

Carnes Group provided an unusual opportunity to develop technology leadership through repeated exposure to businesses that often had very little in common.

The industries changed. The applications changed. The budgets, scale, operating models, and technical requirements changed. The underlying leadership challenge frequently did not.

A staffing company with multiple offices did not need the same architecture as a financial analytics startup. A medical-device company did not operate like a publisher. A national association standardizing offices across the country presented different challenges from a sports complex supporting tournaments or a zinc plant trying to complete an annual shutdown.

The first responsibility was therefore not to prescribe a technology. **It was to understand the business.**

Working across more than 100 organizations developed an ability to enter unfamiliar environments, recognize patterns quickly, separate genuine business requirements from technical noise, and determine the level of technology appropriate to the situation.

Sometimes the answer required sophisticated infrastructure. Sometimes it required centralization and simplification. Sometimes the critical need was disciplined execution of a major project. In other cases, it meant translating technical or operational information into something executives could understand and act upon.

The experience also reinforced the importance of trust. Many of the strongest relationships began with a single assignment and expanded over years because clients came to rely on Carnes Group not only to implement technology, but to help decide what should be done, when it should be done, and what level of investment was justified.

That breadth of experience became one of the foundations of my approach to technology leadership:

Technology should be as sophisticated as the business requires — but no more complicated than it needs to be.

Dell Technology Consulting

Professionalizing Infrastructure Consulting & Services Delivery

EXECUTIVE OVERVIEW

Assignment
Senior Practice Manager, Infrastructure Solutions, leading Dell Technology Consulting's North American Relationship Group Microsoft Infrastructure and E-Commerce consulting practice.

Scope
Approximately 10 Dell professionals plus 7–10 partner resources; $6 million business plan with responsibility for consulting delivery and services business development supporting large corporate and commercial relationship accounts.

Primary Challenge
Stabilize troubled customer engagements while strengthening how opportunities were tracked, solutions scoped and contracted, projects managed, financial performance monitored, and technical expertise converted into repeatable services scalable through Dell's enterprise sales organization.

Technical & Professional Focus
Consulting Leadership • Microsoft Infrastructure • Enterprise Servers & Storage • SAN & High Availability • Practice Operations • P&L • Sales & Delivery

Results

- Managed a $6 million North American consulting practice using a blended Dell and partner delivery model.
- Stabilized four significant troubled customer engagements shortly after assuming leadership.
- Strengthened opportunity management, project delivery, proposals, contracts, statements of work, and financial disciplines.
- Helped pioneer high-availability solutions combining Microsoft server clustering, Dell enterprise storage, and SAN technologies.
- Developed repeatable consulting offerings and sales tools that enabled Dell account teams to position infrastructure services as part of enterprise solutions.

Situation

Following my international consulting leadership assignment with NCR, I joined Dell Technology Consulting as the company was rapidly expanding its enterprise services capabilities around Microsoft infrastructure, e-commerce, Dell servers, and enterprise storage.

Dell had exceptional technology expertise and a powerful direct-sales organization, while its comparatively young consulting business was still developing the repeatable processes, commercial disciplines, and standardized offerings needed to support rapid growth.

I assumed responsibility for the Infrastructure Solutions practice supporting Dell's North American Relationship Group, including large corporate and commercial customers. My challenge was twofold: address customer engagements requiring immediate management attention while strengthening the operating foundation needed to make the consulting business more repeatable and scalable.

Stabilizing Delivery and Customer Relationships

I assumed responsibility for the practice with essentially no transition period and immediately became involved in four significant problem engagements involving MarketSource, MetroWorks, SoftBank, and Time Warner.

Working with consulting teams, Dell account organizations, and customers, I helped resolve the delivery issues and bring the engagements to outcomes acceptable to both Dell and its clients. Rather than treating them as isolated problems, I used the experience to identify weaknesses in the consulting process and strengthen the project-management and engagement disciplines surrounding future delivery.

Building a More Disciplined Consulting Operating Model

One of my early observations was that Dell's technical capabilities were advancing faster than some of the business processes supporting the consulting organization.

I strengthened the consulting lifecycle from sales opportunity through delivery by improving opportunity tracking across Dell organizations, project-management procedures, customer proposals and contracts, and standardized statements of work. The objective was to make engagements easier to sell, scope, manage, and deliver while reducing ambiguity for customers, consultants, and Dell account teams.

I also addressed financial-management issues, including erroneous general-ledger entries and equipment records, and strengthened the practice's financial and P&L foundation for managing the existing business and planning future growth.

Expanding and Productizing Infrastructure Solutions

Dell Technology Consulting had substantial expertise across Microsoft infrastructure, servers, storage, and emerging e-business technologies. I worked with my counterpart and other Dell organizations to turn that expertise into repeatable consulting offerings and supporting sales materials.

These offerings included Windows infrastructure migration and deployment, Active Directory, Microsoft Exchange, security, server and storage consolidation, Storage Area Networks, clustering, and high-availability solutions.

One area I particularly helped advance was the integration of SAN technology with Microsoft server clustering. Building on high-availability approaches I had previously worked with at NCR, including LifeKeeper clustering technology, I helped introduce solutions combining clustered Microsoft servers with shared enterprise storage.

These architectures supported planned and emergency failover between servers and approaches for replicating shared storage to secondary or off-site environments, extending availability toward broader business-continuity and disaster-recovery capabilities.

At the time, this was an emerging capability within Dell Technology Consulting. It allowed us to combine Dell servers and enterprise storage, Microsoft infrastructure, and consulting expertise into integrated high-availability solutions addressing customer requirements for reliability and continuity.

More broadly, I developed and refined standardized consulting templates, presentations, service descriptions, and marketing materials that helped Dell account teams position these capabilities consistently and convert specialized technical expertise into repeatable services.

Integrating Consulting with the Dell Sales Organization

Dell Technology Consulting operated within a much larger enterprise sales organization, so consulting needed to complement Dell's hardware business rather than operate independently. I worked with account teams, marketing, technical specialists, and services groups to combine Dell servers and storage, Microsoft technologies, and consulting around customer requirements for modernization, availability, security, and business continuity.

I also developed strategic relationships with consulting and software partners to provide specialized expertise and additional delivery capacity, allowing the practice to expand its capabilities while maintaining clear responsibility for scope and delivery.

Business Results

During my tenure, the Infrastructure Solutions practice strengthened both its immediate delivery performance and the operating disciplines necessary for continued growth.

Key accomplishments included:

- Managed Dell's North American Relationship Group Microsoft Infrastructure and E-Commerce consulting practice against a $6 million business plan, leading approximately 10 Dell professionals plus 7–10 partner resources.
- Stabilized four significant troubled customer engagements shortly after assuming responsibility for the practice.
- Strengthened opportunity tracking, project management, proposals, contracts, statements of work, and financial/P&L disciplines.
- Helped pioneer high-availability solutions combining Microsoft server clustering, Dell enterprise storage, and SAN technologies, including failover and replicated-storage approaches.
- Developed repeatable service offerings across Microsoft infrastructure, server, storage, clustering, and high-availability technologies.
- Created consulting presentations, service materials, and sales tools that helped Dell account teams position infrastructure services as part of broader enterprise solutions.
- Established strategic partner relationships to expand specialized capabilities and delivery capacity.

Professional Reflection

The Dell assignment reinforced an important lesson from my earlier consulting leadership experience: technical expertise alone does not create a scalable professional-services business. Successful practices also require disciplined opportunity management, clear scopes and contracts, repeatable offerings, sound delivery processes, reliable financial information, and strong integration between sales and consulting.

It also reinforced the value of turning emerging technology into practical business solutions. High-availability clustering and SAN technologies mattered not because of their technical sophistication, but because they addressed fundamental customer requirements for reliability, continuity, and reduced operational risk.

The experience strengthened an approach I have applied throughout my career: address immediate problems, understand their underlying causes, and then improve the processes, technologies, and operating structures needed to make the improvement sustainable.

EDS / General Motors

Plant-Floor Maintenance Systems Modernization

Supporting Critical Operations, Equipment Reliability, and Manufacturing Uptime

EXECUTIVE OVERVIEW

Assignment
Systems Engineer with EDS supporting General Motors' Delco Electronics manufacturing operations in Kokomo, Indiana, with responsibility for designing and leading development of a replacement plant-floor maintenance and dispatch system.

Scope
Approximately 10-person team across Kokomo, Indiana, and Dayton, Ohio, with subsequent adoption of the solution by additional GM plants across the region.

Primary Challenge
Replace a fast but aging and difficult-to-maintain plant-floor dispatch system while preserving its operational responsiveness and adding relational data, reporting, and analysis capabilities that could help identify recurring equipment failures and reduce manufacturing downtime.

Technical & Professional Focus
Systems Engineering • Project Management • Manufacturing Systems • Relational Data • COBOL II • CICS • DB2 • IBM MVS • Multi-Site Team Leadership

Results
- Designed and led development of a new plant-floor maintenance and dispatch system using COBOL II, CICS, DB2, and IBM MVS.
- Built maintenance-history and analytical capabilities, including Mean Time Between Failures, to help identify recurring equipment problems and support preventive-maintenance decisions.
- Led an approximately 10-person team operating across multiple locations.
- Delivered the project on time and under budget.
- Solution was subsequently adopted by five or six additional GM plants across Indiana and Ohio.
- Promoted from Systems Engineer to Advanced Systems Engineer following the assignment and recognized by EDS management as ranking among the top 5% of technical professionals in the region.

Situation

Early in my career with Electronic Data Systems (EDS), I was assigned to General Motors' Delco Electronics manufacturing operations in Kokomo, Indiana. My initial six-month assignment placed me directly on the plant floor, documenting systems supporting non-production supplies and identifying potential improvements and savings.

The environment was very different from EDS's formal corporate culture. As a young technology professional arriving in a suit and tie, I was immediately viewed by some United Auto Workers employees as part of management, and several were openly hostile.

Rather than allow the relationship to remain adversarial, I spent time listening, learning about their work, and establishing personal credibility. Over time, employees who had resisted my presence accepted me and began sharing their knowledge and experience. What began as one of the most uncomfortable assignments of my early career became one I thoroughly enjoyed.

The experience taught me an enduring leadership lesson: understanding an operation begins with earning the trust of the people who actually make it work.

Modernizing a Critical Plant-Floor System

Following additional technical training, I returned to Delco as a Systems Engineer and helped lead replacement of the system used to report equipment problems and dispatch maintenance personnel.

The legacy system was old, poorly documented, and difficult to modify, but exceptionally fast. In a manufacturing environment where production-line downtime carried substantial costs, that responsiveness could not be sacrificed simply for newer technology.

Working closely with the General Manager responsible for Delco's maintenance operations, I helped define a replacement that preserved essential dispatch capabilities while providing substantially better maintenance information.

GM management was initially skeptical. The General Manager strongly believed in the project's potential, and together we developed the justification and convinced management that the investment could produce significant operational benefits.

His deep manufacturing-maintenance knowledge combined with my systems and database expertise became central to the project's success. He later became a mentor and trusted professional advisor for many years.

From Break-Fix Processing to Operational Information

The replacement used COBOL II, CICS, DB2, and IBM MVS technologies with relational data modeling to capture and analyze maintenance information while retaining the essential trouble-ticket and dispatch capabilities required by the plant.

The richer equipment-failure and maintenance history made measures such as Mean Time Between Failures (MTBF) more useful. Management could identify recurring problems and determine whether equipment or maintenance tasks should be incorporated into the separate preventive-maintenance program.

The objective was no longer simply to respond when equipment failed. Better information could help recognize failure patterns, improve equipment reliability, and prevent production interruptions, creating direct operational and financial value.

Leading the Project

I led an approximately 10-person team with resources primarily in Kokomo, Indiana, and Dayton, Ohio. Although my formal title was Systems Engineer, my responsibilities included project management, systems and database design, development, quality assurance, standardization, design reviews, user sessions, and rollout.

Managing resources across locations required regular coordination and travel while maintaining common technical and project standards, giving me early experience connecting architecture, development, business requirements, project management, and operational implementation.

Business Results

The project was completed on time and under budget and delivered a maintainable enterprise platform supporting Delco's plant-floor maintenance operation. Its success extended beyond the original facility: approximately five or six additional GM plants across Indiana and Ohio subsequently adopted the solution.

Key accomplishments included:

- Replaced an aging maintenance and dispatch application while preserving required operational responsiveness.
- Added relational maintenance-history data to identify recurring problems and inform preventive-maintenance decisions.
- Led a 10-person multi-location development team.
- Delivered the project on time and under budget.

- Supported adoption by five or six additional GM plants across Indiana and Ohio.
- Promoted to Advanced Systems Engineer following the assignment.
- Recognized by EDS management as ranking among the top 5% of regional technical professionals.

Professional Reflection

First, successful technology begins with understanding the operation and the people who make it work. The Delco plant floor taught me that trust must be earned by listening, adapting, and respecting the knowledge and experience of others.

Second, modernization does not mean discarding everything that came before. The legacy system was difficult to maintain but exceptionally fast. Our responsibility was to preserve that strength while creating the capabilities needed for the future.

Finally, the project demonstrated the value of combining business and technology expertise. The maintenance General Manager's operational knowledge, paired with systems engineering and relational data, produced a solution that supported immediate operations while helping improve equipment reliability and reduce future downtime. Those principles continued to shape my approach to technology leadership throughout my career.

Executive Presence & Communication

Introduction

Executive communication has been a recurring part of my leadership throughout my career—whether presenting strategy, guiding executive discussions, working with customers, or speaking to large public audiences. The settings have varied widely, but the requirement has remained the same: communicate clearly, establish credibility, and connect with the people in the room.

Executive Communication in Practice

Throughout my career, leadership has required more than making sound technology and business decisions. It has required explaining those decisions clearly, earning support, and communicating effectively with people who bring very different backgrounds, priorities, and perspectives. I have presented strategies, technology initiatives, financial recommendations, and business cases to CEOs, senior executives, boards, customers, business owners, and leadership teams in the United States and internationally.

That experience extends well beyond the corporate environment. Over several decades, I have conducted educational workshops, appeared on television, helped organize and lead more than 100 major music events, performed multiple times on the Grand Ole Opry, and appeared before audiences ranging from small groups to approximately 60,000 people.

Whether the setting is a boardroom, conference room, classroom, customer meeting, or stage, the fundamentals are much the same: understand the audience, communicate clearly, remain composed, listen carefully, and adjust when circumstances change. Those experiences have strengthened my ability to establish credibility, communicate complex ideas in understandable terms, and lead effectively under pressure.