

Success Stories

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Laser focused visionary executive responsible for creating products that drive corporate vision, values, and growth. Experience covers product/software development, project/data center management, strategic planning, application/infrastructure architecture, and the ideation of industry game-changing solutions. Strategically build industry leading products by taking a deep dive into the competitive landscape, interacting with clients/prospects to get voice of customer, and a personal interaction with a seasoned architecture team to energize/provoke creativity. On the operations side, demonstrated experience in management of world-class data centers, certifications in ISO 9001/27001/SAE16, redundant/fault-tolerant enterprise computing, and vendor/contract management. Dennis is a leader of culture, a mentor to drive human capital, and a change agent to accelerate engagement, motivation, and productivity. Dennis has summarized his accomplishments by authoring a series of success stories. Due to the many hats worn by this seasoned executive, the success stories are organized by functional responsibilities.

System Architecture & Development – Designs/Approves software architecture decisions, charts design standards and sets visionary direction on development strategies. Directs software life cycle models, enforces strict code standards and benchmarks application capacity limits covering over 20 different program languages.

Accomplishments

- Company struggling to innovate and become competitive in a marketplace dominated by gorillas like TD Ameritrade, Schwab, and Fidelity, calls upon Dennis to revolutionize the customer technology experience. Client branded mobile apps on “Any Piece of Glass” in the Apple iTunes, Google Play, and Microsoft app store were the result of his game changing architecture.

Success Story: Revolutionized customer experience by leading company through a business/technology re-engineering project that optimized graphical applications using Apple UX techniques. Designed mobile architecture to span all leading tablet technologies by leveraging key technologies that drive hand gestures via tablet rendering engines.

Building a leading architecture that Dennis calls, “Just Before the Glass Architecture” utilizes a stackable/replaceable technology framework that leverages model view presenter java technology to discover how the glass needs to be painted to display on “Any Piece of Glass.” This technology allowed his development team to build reusable components behind the glass to display information on every tablet, smart phone, or web technology front-end device. Dennis received CIO Magazine’s top 100 innovators award for 2012 being recognized amongst companies like IBM, INTEL, TOYOTA, and BOEING. National reporters from the financial/technology industries and graphical/customer experience niche organizations continue to interview and ask for keynote speaking engagements on how the experience drives company innovation, growth, and more importantly revenue. As of August 2014, TCA has over 100 apps in each of the mobile app stores that are individually branded for each customer. In Dennis’s word’s, “We power our clients with their own apps with their message and story. It’s like being the client’s silent partner, by powering them with technology and services. The only place you see TCA’s name is the developer of record.”

- CEO wanted Dennis to redesign a 4 million line brokerage back office system to modernize the software application to use a new relational database without sacrificing compliance deadlines mandated by the SEC, FINRA, NSCC, OCC and other financial/institutional governing bodies.

Success Story: Implemented a new relational database without changing 99.8% of business logic or missing one compliance deadline

Faced with an old fixed file database below 4 millions of Cobol code, Dennis developed an architectural strategy to divide and conquer key areas of the application to drive modernization to implement both a relational database and service oriented web services to bring life back to a 30 year old back office system.

Key to the design was an implementation of an IO layer that removed old COBOL IO for a new IO module that implemented SQL commands under a C isolation service that communicated with the new relational database and returned data sets that were consumed by the business logic for processing. Project requirements imposed by Mr. Noto, focused on minimal business logic changes to 3,000 online, batch, and report programs as well as same or better IO performance numbers.

Dennis's leadership through all phases of the project; development, vendor development diagnosis, implementation, system and quality assurance life cycle management, and deployment were critical to the success of the project. Even when Dennis's development team hit major DB2 performance bottlenecks, he coordinated both IBM and CRI development to detect faulty IBM DB2400 PL1 code that required vendor PTF's to resolve critical project killing performance problems.

Today, all core files for the brokerage system, Positions, Balances, Transaction History, Name and Address have been successfully implemented into relational tables utilizing SQL technology. Benchmarks have shown that the new database design achieved a 30% increase in overall IO performance against the old file set. More impressive is the new capabilities like SQL compliant field and new data relationships, allowing the development organization to leverage new web technologies/frameworks and third party application integrations for implementing new business functions.

The accomplishments of redesigning the core brokerage data structures into a new relational database are unprecedented and unmatched by any other development organization:

- *Under 2 ½ years of development*
 - *99.8% of the code base unchanged*
 - *Increase in performance and scalability*
 - *Every compliance date obtained. OSI ahead of schedule, first of all brokerage service bureau software providers!*
 - *Before Dennis's tenure, all past database redesign projects in the company's 30 year history failed while his was an outstanding accomplishment.*
- Secured \$20M annual contract by developing system to prove to prospective client that the company could process 1M trades per hour. Consequently, group met its annual revenue target within first six months.

Success Story: Custom System Development Secures Major Contract

Client prospect challenged company to demonstrate a system that could process 1M trades per hour before signing \$20M dollar per year contract for services. Team had only two weeks to secure a mainframe, stress test applications, and produce results that would gain the client's approval.

Dennis rebuilt our HP's Nonstop SQL test system to act as a standalone client environment to handle benchmarking client transactions. With a crack team of developers and system engineers, built a new mainframe, configured a test environment, and simulated 1M trades per hour after two weeks of long nights and weeks to identify and resolve performance bottlenecks in the application.

Client signed \$20M per year contract after reviewing the benchmark statistics, and group's GM met his revenue for the year six months early.

- Directed migration of UNIX data center processing from a centralized Sun E10000 to a decentralized fleet of IBM AIX P-series boxes to cut monthly expense run rates by 25%. This increased system application processing throughput by 300% and system availability 10 times greater than the mean time between failure (MTBF) of the E10000.

Success Story: Vendor Migration Reaps Significant Performance Boost

Faced with client outages with new web application, company's current vendor's E10000 multi-domain enterprise UNIX system was not living up to its high-availability promises. At the time of purchase, no other vendor had a product to compete, but three years later IBM's AIX product was ready for reevaluation.

Needed to migrate the application to another Unix system without shutting down development and product enhancements. The web application was building momentum with users and they were demanding quick turnaround on changes.

Early on the company built open system applications based on Dennis's architecture standards on Java and scripting languages to allow for portability. Assembled a key group of development and systems personnel and invited IBM to build a project plan. To win the sale, laid down requirements for the evaluation, which included a six-month plan requiring IBM to migrate the application without application changes, buy out existing leases on the hardware and storage, and increase processing power 50% without raising run rates.

Project was an outstanding success, reaping 300% improvement in application performance, 25% decrease in monthly run-rate expense, and—most importantly—a tenfold increase in system availability, which delighted clients.

- Spearheaded custom build of intercept library to enable high-pin processing. System was implemented in three months (compared to projections of three years), allowing COBOL programmers to leverage new hardware without changing code and saving \$10M+ in labor expense.

Success Story: Development Innovation Prompts Multimillion-dollar Savings

Installing a new Tandem mainframe for performance reasons required changing all TAL procedure calls in COBOL85 applications, which was projected to take three years by the development group. Needed to find a way to change 5,000 programs without freezing the code for more than a month.

Vendor had to change the operating system calls to allow for high-pin processes. Ability to run more than 256 programs in one CPU had become very important because resources were unavailable during batch processing. This was easy for the vendor but painful for software development companies that had to react to regulatory changes mandated by the SEC and NASD for brokerage processing.

Directed systems department to build an intercept library that sat between the developers code and the operating system that invoked the necessary OS parameters to utilize high-pin processing. The library was implemented in three months, which allow the COBOL programmers to leverage this technology without having to change one line of code. Library was simple bound to the program after compilation and released to production after QA testing.

Saving three years' development time of 60+ programmers salvaged millions of dollars for the company, and the ability to migrate to new CPUs increased processing power and reduced monthly run-rate expense.

- Designed architecture for running a three-tier web application across two data centers to expedite recognition of \$10M in revenue two years earlier than plan.

Success Story: Booked revenue 2 years early and client adds another 5 million in software enhancements.

GM wanted to sell our new web based portfolio system to one of our in-house clients, clients that license the software and run in their data center. Client had failed three times to write a web based system and reached out to us.

The client said they would need two years to staff the necessary technology personnel to handle Unix/Linux based components necessary to run the web based portfolio system before they could go live in production. They only had mainframe development/support staff and were not positioned to take on open system technology. GM wanted revenue recognition now.

Dove into the three-tier architecture to find a service demarcation, which would allow us to deploy across both data centers. After assembling a small group of development and system personnel, created a web hosting service in the Denver that leveraged redundant DS3 WAN circuits that connected to their backend mainframe system for brokerage data in Cleveland. After a quick proof of concept test in our lab, presented to the client the ability to host the complex open system applications in our data center while they ran the mainframe services locally.

Client licensed the web system bringing in \$20M per year within the current fiscal year. Recognized revenue 2 years early! After using the product for 6 months, they signed for an additional \$5 Million in development to enhance the product. GM was thrilled. The client is enjoying a new web service that they tried to development by themselves which resulted in wasting \$100 Million.

Global Partnering: Designs and administers international service level agreements across production operations, development, and quality assurance groups. Organizes strategic, tactical, and change and configuration management planning for client environments in both production and test regions.

Accomplishments

- Initiated service-level agreements between US-based and international operations groups to mitigate problem escalation and optimize incident management.

Success Story: Service-level Agreement Bridges International Operations

Entered company with a major problem that involved poor communication and procedures between India- and US-based operations. Working with business units that outsourced operations internationally due to expense savings caused problems with two organizations trying to run batch in two different regions of the world. Business units were experiencing delayed problem management that led to client disruptions.

Brought the heads of all units (operations and business lines) together to develop a service-level agreement (SLA) that all groups ratified to be the measuring stick for world-class service. The SLA documented ownership of each procedure and detailed actions required by each operations group.

As a result of these actions, all business units are on the same page and running smoothly, and problem management resolution times have dropped by 80%.

Data Centers/Facilities: - Manages regional data centers, disaster recovery hot sites, operations/network control centers, and physical/logical security systems. Delivers world-class services by running mission critical applications for Bank of America, Key Bank, ADP Clearing, Smith Barney, and First Trade.

Accomplishments

- Worked with CISCO developers to add alias functionality into their IOS to make the PIX firewall network address translate individual customer networks onto class A, B, and C network address spaces. Sparked 1,000% increased in availability, curtailed firewall expense by 75%, and created an invisible inner network.

Success Story: System Migration Skyrockets Availability & Cost Savings

Data center was faced with 60 checkpoint firewall Sun servers that were failing every week. Needed to find a solution to protect individual client IP circuits within backbone LAN network from hacker activity. Using a server-based firewall solution for each individual client was a nightmare to manage and suffered from hardware side effects of a personal computer. Network device was needed that could operate like a router: minutes to set up and deploy with the least moving parts for high availability.

Brought in Cisco to unveil their new PIX firewall. Working with the CTO, designed aliasing functionality that allowed setup of invisible networks behind the firewalls to create ultimate security defense. After a proof-of-concept evaluation in QA network lab, beta-tested new network design on client environment. After successful client beta test, developed a rollout migration plan in Microsoft Project with a detailed network design Visio Graphic that the network engineers used to implement into production.

Negotiated a deal for Cisco to buy out Sun lease for all systems to replace with PIX router-like firewalls. Streamlined from 60 devices to 10, and decreased configuration time from five days to 10 minutes. Availability increased 1,000% because the PIX firewalls had the same system redundancy found in the high-end routers. Monthly expenses were reduced by 75%.

- Consolidated regional data centers across the US into a central production and a hot-site disaster recovery data center, which reduced staff 30%, run rates 40%, and maintenance bills 25%.

Success Story: Change Management Streamlines Data Center Network

Because of rising labor costs, company needed to analyze cost-saving initiatives. Company had decentralized data centers across the US. Managing operations staffs in several different cities and facing mainframe upgrades in several locations necessitated making changes without disrupting real-time and batch processing.

As wide-area network (WAN) cost started to decline, presence in every city was no longer needed. Initiated actions to centralize data center operations in Colorado with client connections furnished by a redundant Tmplex backbone.

Actions reduced staff by 30%, reduced run rates by 40% by consolidating mainframe systems, and lowered maintenance bills by 25%. Great success was achieved with minimal disruption in processing.

Financial Management / Audit & Compliance: Manages fiscal budgets and forecasts, Sarbanes Oxley and SAS70 audit compliance, and negotiates all IT service/product purchases. Directs staffing, development, and succession strategy planning for all operational areas of IT.

Accomplishments

- Innovated mobile-access product to allow users remote connection to run mainframe, browser, and print traffic from a secure software tunnel (SSL/VPN). Brought in annual revenue of \$120K in the first year with an initial \$10K monthly revenue stream.

Success Story: New Product Design Cultivates Data Center Profitability

Personally charged by general manager to generate revenue from data center. Client revenue was generated by brokerage transactions entered in to company systems, and everything else had been considered free from the data center perspective. Finding a product that would grab clients' attention and persuade them to purchase additional services was a challenging problem.

Focused on designing a product that would allow users to connect from anywhere to run all brokerage services via a secure connection, which could be promoted for telecommuting and disaster recovery for client offices. Worked with a startup to design a product that would allow users to connect to the data center—over a standard Windows PC using a SSL/VPN connection—to run the company's browser-based and TN3270 applications.

Product was a major success, allowing users to access company applications from any Microsoft Windows desktop/laptop without installing a VPN client on the remote computer, which was extremely important when dealing with non-technical users. The service generated annual revenue of \$120K in the first year with an initial \$10K monthly revenue stream.

- Led first division in company to complete SAS70 Type II audit, and first business unit to complete Information Security certification under BS7799. Implemented ISO 9001:2000 into Processing Services, enjoying exception-free audits since 2001.

Success Story: Adept Audit Management Ensures SAS70 Compliance

Faced with SAS70 Type II request from a client and SOX on the horizon, commenced work with independent SAS70 auditor to outline requirements to achieve Type II compliance, wherein every control had to be demonstrated every six months. Faced with defining a consistent tool for maintaining audit tracking, keeping the auditors to a defined set of tasks was the only way to be successful.

Designed a spreadsheet tracking tool that outlined every control/observation with a defined audit resource. This became the communication document between the auditor and the division. When they sent the spreadsheet with specified time periods for review, several boxes of physical documentation were prepared for their review.

Led first division in company to SAS70 compliance, and audit-tracking tool provided the company with an valuable tool to manage auditors. Documents were prepared ahead of auditors' onsite visits. After several cycles, onsite review shortened from 10 days down to three, which lowered stress levels around the company based on the speedy review.

- Interviewed by **Computerworld** reporter on ways to leverage leasing to increase performance and decrease monthly run rates. Interview appeared in the May 2002 edition of the publication.

LEVERAGING LEASING

Barbara DePompa Reimers

May 27, 2002 ([Computerworld](#)) Businesses are increasingly leasing hardware as a way to reduce upfront capital expenses while still investing in new technologies to keep pace with their growing competitive needs.

The Equipment Leasing Association's (ELA) fourth-quarter 2001 "Performance Indicators Report" (PIR) reveals an increase in new business leasing volume of almost 13%, compared with the same period in 2000. First-quarter 2002 leasing figures, scheduled to be released this month, also look strong, based on preliminary returns, according to officials at the Arlington, Va.-based ELA. IT leasing makes up about 15% of all types of equipment leasing.

Customers say the benefits of leasing from hardware suppliers directly include regular technology upgrades and less finger-pointing, since the vendor is the single point of contact on both equipment and contract issues. The primary drawbacks are the lack of control associated with not owning the technology and being tied to a single vendor.

Analysts and IT managers agree that leasing hardware can reduce financial roadblocks to investing in big-ticket IT projects (such as enterprisewide customer relationship management or enterprise resource planning efforts) by spreading out costs over a few years or even skewing them toward the back end of a project instead of swallowing the cost all at once.

In mid-2001, ADP Brokerage Services Group, a division of Roseland, N.J.-based Automatic Data Processing Inc., faced such a challenge, which it recently resolved with help from IBM.

Typically, it's cost-prohibitive for a business to replace leased servers. The lease must be paid off in full before new equipment can be purchased or leased. But reliability problems on a variety of Web

applications prompted Dennis Noto, ADP's vice president of processing services, to shop around for a new system with better performance and higher availability. So ADP tapped IBM, which settled four leases for servers from Sun Microsystems Inc. and storage equipment from EMC Corp. and other vendors. Then IBM replaced ADP's old equipment with its own pSeries/Shark hardware.

Through the arrangement with IBM, ADP has decreased its monthly lease expenses by 25% and gained three times the performance of the previous systems, says Noto.

Off the Books

Companies typically take advantage of leasing to get costly hardware assets off the books, says Ralph Petta, vice president of industry services at the ELA. IT hardware is the most popular leased item after transportation equipment because it depreciates and becomes obsolete faster than other assets, he says.

"It makes sense for companies to lease IT assets from finance companies and take advantage of regular upgrades," as opposed to determining how to get rid of older equipment or interrupting business operations to shift to new servers, Petta says.

The financial problems besetting third-party lessors such as Comdisco Inc., which has filed for bankruptcy protection, may have some managers concerned that the leasing industry is shriveling away. While the industry's situation isn't that dire, independent lessors have suffered because "as product cycles have accelerated, it has become increasingly difficult for these lessors to profitably resell 3-year-old leased technology," says Rob Schafer, program director at Meta Group Inc. in Stamford, Conn.

But that doesn't mean leasing isn't popular. "We decreased our hardware costs by 70% and increased our server capacity by 30%" over the past year, thanks to a new leasing arrangement, says Dan Agronow, vice president of technology at Weather.com in Atlanta. Weather.com switched from a Sun Solaris platform to an IBM/Intel environment running Linux and WebSphere.

In the beginning, Agronow replaced about 12 big database servers (Sun 45 Servers that cost about \$50,000 each) with 22 less-costly NetFinity servers (at about \$7,500 each) and got the same performance for \$435,000 less. The company now leases multiple IBM xSeries servers running database, content, image, Common Gateway Interface and Web-logging applications.

The potential disadvantage of being locked into a single vendor doesn't bother Noto or Agronow. Says Agronow, "I have no worries about what to do with older technology, and the homogeneous environment is much easier to manage than a heterogeneous environment."

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<http://www.computerworld.com/action/article.do?command=viewArticleBasic&articleId=71445>

Disaster Recovery & Business Continuity Planning

Accomplishments

- Catalyzed disaster recovery program for division that featured a client-pricing model, real-time replication, independent financial auditing, and a hot-site located in IBM's BRS center.

Success Story: Disaster Recovery Program Safeguards Clients & Revenue

Charged by GM with starting disaster-recovery program for the division, including design of the product, infrastructure construction, defining the cost model, and implementing an independent audit procedure using an outside auditor. Needed to design a nonprofit model and deploy only enough hardware to match the number of clients that signed up. Division software did not use TMF-protected writes, which made it impossible to use vendor-replication software packages.

Project was kicked off on two fronts: designing the nonprofit model and selecting a vendor to intercept writes from the application for replication. Built client model using an algorithm based on revenue percentage and application mix. Software was written and quality assured by the software vendor. Negotiated a deal with IBM to lease computer room space for a real-time NOC deployment.

Project was completed on time with sub-second replication to hot site for initial deployment of 13 clients. Client model distributed revenue received based on size and was rebated back to the client if not used for operating expense over the 12-month period. GM was pleased with the success and used the program as a marketing tool for prospects. KPMG provided yearly financial auditing for product compliance.

Corporate Information Systems

Accomplishments

- Delivered corporate-wide information repository for handling internal functions such as problem/incident tracking, change management, release management, defect tracking, development life-cycle project planning, client report cards, client satisfaction initiatives, and operational tracking. More than 500 applications have been designed within the platform.

Success Story: Customized Management Solution Begets Company-wide Information System

Division was faced with understanding the dynamics of client satisfaction and documenting ongoing service levels of product delivery. Thus, a solution was needed to manage from day-to-day operations, client problem management, and tracking for development releases. No existing tool had the functionality to handle all needs based on enterprise requirements like flexible client/server programming, ability to scale on enterprise hardware, and robust ticketing/tracking system.

After conducting a brief company needs audit, compiled business functions into a requirements document and interviewed vendors for potential development platforms that could be customized to specific needs. Many companies failed the rapid development and ticket system requirements. Engaged Remedy platform for an intense evaluation. Using the base problem and change management system, directed a team to customize systems based on the needs document and selected a test group of network, helpdesk, and customer service associates to test the product.

System went live in three months and team continued to build new applications into the Remedy product to handle release management, development lifecycle progression, operations tracking forms, ISO CAPA tracking, and hundreds of other tasks. Today the entire division runs Remedy system for 400+ applications threaded into all departments. Remedy records major MBO statistics to assess division's world-class service initiatives by analyzing key factors like successful change audits,

average same-day problem ticket completions, development defects by product, and major development project tracking.
20 meetings per week are based on Crystal Reports that mine the remedy database.

Acquisition & Migration Management: Handles human capital and IT infrastructure consolidations, acquisition justifications, project management migrations, and service delivery responsibilities.

Accomplishments

- Migrated web startup company into data center and introduced 20+ new commercial/open-source technologies into the data center. Complete migration met targeted project dates with savings of 30% on monthly expenses.

Success Story: Application Migration Boosts Performance & Savings

When GM wanted to buy a web-hosting trading front end, personally tasked with evaluating and migrating the application into data center with strict guidelines on controlling expense and strengthening the product architecture for high availability. Very young group of highly successful technology and product associates designed a very attractive trading application that suffered from outdated technology and inefficient system-management controls.

Working with chief architect, evaluated points of failure, addressed transaction delivery services on all three tiers of the application design, and analyzed system deployment resources. Within the six-month migration project plan, changed web-services resources, strengthened relational database design, and standardized system components for short-term acquisition. Established long-term requirements for substantial client growth.

Front-end systems migrated from Windows to Linux, Sybase replaced Unidata as the relational database, and the long-term replacement of CGI scripts were replaced by JBoss application server within the six-months data center transition. Monthly expense saving hit 50%, performance capability increased 300%, and client availability boosted from 75% to 99.9%.

Project reaped amazing success, undertaking 50 new technology products, implementation of Linux in the data center, and expense management of an acquisition that actually decreased run-rates in the first month of business. Today, more than 100 service-bureau clients, like Bank of America, Key Bank, US Clearing, and dozens of high-profile trading firms run this product. The GM now has a competitive front-end that connects to any back office system that will allow him to get his foot in the door to sell the portfolio of products.

Technology Consultant & Infrastructure Analysis

Accomplishments

- Conducted consultant services for several major clients to optimize IT resources in the area of application architecture, mainframe performance, batch and real-time service deliveries, release management, development version control, operational procedures, and disaster recovery. Services generated \$75-\$100K per visit. Directed team onsite audit and IT personnel interviews in which recommendations yielded 30% savings in real-time and batch processing, \$5M in deferred hardware purchases, and 40% increase in application availability.

Success Story: Operational Enhancements Improves Data Center Production

Client's data center was failing to finish batch processing before market open and traders were unable to service clients during heavy processing days like end-of-month and dividend-payable days. Their COO requested help. Because applications were licensed to clients, company had an interest in ensuring their success. Clients routinely rewrote or added code to these programs or innovated deployment and management of NSK systems. GM was looking for a quick fix because he was negotiating a new five-year maintenance contract with them.

Assumed responsibility to provide consultant service to identify problems in client's data center to address COO's concerns. Gathered a team of experts in necessary disciplines and designed an action plan, which started with a one-on-one interview with the COO. Group interviews with management personnel were conducted and update meetings scheduled throughout the week the team was onsite. Conducted a thorough performance analysis on all mainframes, networks, and open systems. Observed several batch and real-time processing days and compiled a list of major concerns. After management reviews, worked with programming and system/operations staff to make changes.

COO was extremely pleased with the results, as batch processing was completed daily before market open. Batch processing window was reduced by four hours, system response time improved 40%, and client was able to defer hardware CPU purchases in excess of \$5M. All items were accomplished during one week spent onsite with the client.