

DANIEL DOMAN
235 East 95th Street, Apt. 29E
New York, NY 10128
Daniel.Doman@gmail.com
M: 917.902.9684 W: 347-722-1024
<https://www.linkedin.com/in/ddoman/>

SUMMARY

Infrastructure / Cloud and CyberSecurity Architect and CTO. Skilled in designing and deploying highly secure, real time improvements in large, global, complex, production environments for regulated businesses. Extensive experience with Cloud infrastructure and security processes. Experienced implementing infrastructure as code, “building the airplane in flight” and “just-in-time engineering”, with a strong blend of business leadership and hands-on “practitioner” technical skills from start-ups to large organizations such as Federal Government/Dept of Defense, Mastercard, Accenture, Avanade, Morgan Stanley, Broadridge, JPMC, Valley Bank, Millennium, Zoetis, OCLC, IBM, Time Inc., AIG, DoubleClick, BeyondTheRack, Dubilier & Co, Accoona, Liberty Travel, iStockPhoto, Mediaport, WPP, Interpublic, Omnicom and Information Builders.

Over 30 years of leadership: Business, technical and IP creation. More than 14 years of Cloud specific experience, large scale Cloud architecture & standards, migration, transformation, Hybrid, “Born on The Cloud”, Cloud Native, serverless, event driven, agile transformation, High Availability and Cloud security. Extensive knowledge of AWS/EC2 and Azure internals. Focus on security standards and processes for regulated industries and specific standards for containers, network, database and other PaaS offerings. Security for infrastructure as code Cloud models and best Cloud practices. Extensive experience with 4 major Cloud platforms (AWS, Azure, Google, IBM) as well as PCF and on-premise virtualization.

Extensive experience with organizational transformation required for Cloud migration. 8 years of experience with enterprise Cloud transformation and 8 years in the financial and payment processing sectors, security standards and encryption requirements for domestic and global regulatory standards.

Broad experience with evolving business models leveraging appropriate technologies. Extensive experience with Hybrid Cloud, senior management, infrastructure, operations, high-speed transaction processing, Service Oriented Architectures, internal and external API’s, ERP, Data Warehouse, OLAP, e-commerce, video streaming and mobile. Extensive experience with extreme high-volume, robust and scalable architectures on new and legacy platforms using Grid, Cloud platforms, virtualization and other similar technologies. Equally at home with enterprise level application architecture and low-level system internals. More than 14 years of enterprise security standards, architecture and remediation.

CORE COMPETENCIES

- HA, Poly Cloud Hybrid Fabric - infrastructure design & security
- Cloud Data Security Standards & vulnerability assessment
- Cloud Native, Serverless, reactive & Event Driven architecture
- High performance Big Data analytics, ETL, Real Time analytics
- Container Orchestration & Fabric, Kafka, NATS, PCF
- Cloud Computing, Hybrid Cloud Grid applications & Storage
- SQL, NoSQL and Big Data analytics
- Developed high speed Object Database Engine
- Developed commercial DB Product: Network, SQL, NoSQL, Object
- Governance, Security Review and Mitigation
- Refactoring multifunction legacy platforms and environments for security, scale, robust performance, and agile function
- SaaS experience with secure & *extreme* transaction & data volumes for more than 25 years.
- Extensive development in Java, C++, PHP, Assembler, Python and many more languages. Developed compilers, P-Code Parsers, link loaders, Platform migration tools, network transport, encryption, multimedia transcoding and more.
- Hybrid, portable Cloud encryption methods
- NIST, FedRAMP, GovCloud
- Extreme volume, high-speed, scalable systems
- Video, Media Streaming & DRM
- E-Commerce and Enterprise Architecture
- Distributed & Grid Computing
- Payment Industry and global regulatory compliance
- ITIL, COBIT, NIST frameworks
- Agile, DevOps & IBM Design Thinking
- Zero Trust and Defense in Depth (DID)

EXPERIENCE

Mastercard

11/2022 – 2.29.2024

Principal Platform Architect, Next Generation Network Solutions / Contract

Architect distributed edge platform payment services, new global payment processes and product offerings including ISO20022, API edge services. Shared internal global services. Event driven architecture using both NATS and Kafka streams. New single and dual message global payment services. Hybrid cloud infrastructure.

Developed Event-driven cross region replication protocol for multi-region Active/Active support. Developed shared Timer Service (event driven, deployed as single shared, multiple instance and managed service). Timing is key to orchestration of payment rails between acquiring and issuing institutions.

Mastercard
Principal Solution Architect / Consulting

2019/2020

SRC payment processing rails. Federated deliveries
Design new payment rails aligned with global on soil regulations

Valley Bank
Principal Architect Contracting with TechParGroup / Consulting

5/2021-8/2021

Bank replaced its core banking systems as part future state operating model. Developed Unified Time, Event Driven Orchestration and Integration Platform - A BankOS to enable business to easily compose its services across multiple cores and internal/external systems as well as integrate with new MDM platform. Developed Cloud Strategies & Cloud Security standards, serverless patterns, micro segment network topology.

Respecta Consulting
Cloud Strategy, Transformation and Security Architect
Projects

07/2020 – Present

- * NewValueGroup (2022) – Data center migration plan for national home alarm company
- * Broadridge (2020) – Hybrid Cloud Transformation Security architect for all on premise infrastructure
- * SLAIQ –IP for commercial MDM platform using an event driven integration orchestration platform to compose business processes for continued, iterative implementation with additional focus on access control and security.
- * Cap Market: Security and ITIL/ITSM programs. Data lake, ETL engine and secure query interface using serverless model and reactive code. Implemented on both AWS and Azure.
- * Fintech: Board of advisors – CTO and Security Architect
- * Federal/Defense Dept: Data Lake using cascading management groups, policy inheritance, secure enclave processing and on-demand Data Warehouse to support mix of secret and top-secret tagged content.

Avanade
Director of Global Enterprise Architecture and Strategy

02/2019 - 7/2020

As Avanade/Accenture/Accenture Federal (All one company)

Federal Cloud/DOD – Senior Architect: Poly-Cloud Hybrid Fabric. Connected and disconnected state support. Edge Compute. SSO, IAM, IDS, AWS, Azure and On-Premise. NIST, FedRamp, DOD standards.
Developed cloud migration factory model used for three global banks, a global retailer, telecommunications and media companies. Developed Cloud Native, Serverless streaming data ingestion Data Reservoir, (7 TB/Day), ETL and reporting platform using Reactive code on both Azure and AWS
Developed Big Data aggregation and reporting service platform for global bank and overall cloud migration strategy on Azure
Developed RBAC driven Container orchestration for poly-cloud, hybrid, zero-trust defense in depth model for both Azure & AWS
Transformed AWS based ingestion and cache for travel company to Azure with 100% reactive code, Polybase, Cosmos DB and EventHub
Developed Zero-Trust Container strategy and encrypted deploy model Federal/DOD
Bank: Cloud migration factory, Cloud Center of Excellence (COE)

Respecta Consulting
CTO, Strategic Consulting, Cloud Transformation & CyberSecurity

01/2007 – 02/2019

Projects:

- * OCLC – Cloud Security standards and processes. Transformation of n-tier and Mainframe platforms to Cloud. AWS API management, Microservices and Big Data analytics on AWS.
- * Bank: NIST, ITIL process and security review of premise and AWS systems.
- * Morgan Stanley – Developed Cloud security standards, onboarding security standards and ITIL processes. Developed hybrid, agnostic mechanisms to secure legacy applications, add encryption to applications lacking native encryption and migrate with zero touch to AWS
- * Bank: Developed Cloud agnostic, portable, on premise friendly (Hybrid) encryption solutions with RBAC support for block, volume object, file, directory list access and geo-fencing on AWS
- * Bank: Security and encryption mechanisms for GreenPlumb DB on AWS/EC2. Developed security framework for ITIL/COBIT processes
- * Pharmaceutical: Cloud security standards. Remediation of current issues, defined data governance structure and technical design authority (TDA) for more agile collaboration with Line of Business (LOB) with better integration of security standards, HIPPA compliance, operations and business need on AWS
- * Zoetis / Dimension Data: Set Cloud Security, transformation standards, SDLC models and best practice road maps for new Cloud applications from application architecture to network topology. AWS/SME for Zoetis. Remediated outsourced application security and performance issues.

- * Major cross brand Ecommerce Company: Global platform, warehouse automation, call center and ERP
- * Time Inc. – AWS security with focus on Cloud database security standards and Big Data Analytics. Defined governance, data security standards and rules for “move to Cloud” initiative on Amazon (AWS / EC2). Defined VPC and subnet access strategy for Big Data Applications. Established a Unified Authority and RBAC for automated database management across business units, legacy, instance based and as-a-service RDS databases to eliminate manual hands on controls. Developed POV for initial use of container technologies. Wide variety of languages used. Backend in Java, Erlang, Python etc, Front end / UX in Java, PHP and C++.
- * Vproud.tv – Chief Technical Officer: Developed Social Media video platform and conversation-based platform for women on AWS. Took previous unscalable beta version to scale past one server. Redesigned to easily scale and easily handle 1M+ concurrent users. Developed highly efficient plug-in for effective DB caching. *Company IP acquired.*
- * Technical review and reengineering for large ecommerce platform to increase capacity by orders of magnitude
- * Security resolution and crisis management with several global companies: Company names and details under NDA.
- * Global ecommerce / brick and mortar and online: Crisis virus infection across data centers, end users and POS systems. Stopped propagation, blocked data breach and cleansed all systems including POS in first 3 days. Then established new defensive protocols at datacenter, network, office and retail levels. *And - kept the company out of the newspapers.*
- * RedDrummer: CTO - Developed conversation and collaborative application platform. Hybrid: AWS Cloud or On Premise. 600-700M users. Written in Java, data gathered from mail, chat and other collaborative sources for real time profiling, targeting and user-visible analytics used both relational and NoSQL tools. **Company IP acquired.**
- * Dubilier & Co CEO/CIO: Evaluated opportunities in water related markets for content, data and analytics. Developed model to deliver critical content using low/medium/high budget and product profiles that could be executed based on different funding levels. Developed embedded data query language for data mining. Platform development in Java.
- * Media/Advertising: Consulting CTO: Designed a new, low cost reporting and database and analytics platform to deliver content and insight with highly interactive user experience from the widely fragmented and inconsistent data currently available in the market. Platform consisted of several microservice service layers for internal and external API/SOA functions.
- * Pre/Post acquisition technical and process review for several companies (NDA) as requested by investment groups. Delivered short and long-term road maps for post-acquisition execution.
- * Fotalia: Pre-investment due diligence review and long-term execution road map for continued expansion. *Company Acquired*
- * iStockPhoto: Developed technical road map for scalable high-performance infrastructure and application design. *Company acquired.*
- * SendWordNow: Reengineered a multi-source emergency-messaging platform with scaling and throughput challenges designed to send out several million of emergency real time alerts across multiple channels. Designed global application architecture and high availability designs. *Company saw substantial growth and was acquired.*
- * Reliant Security Consulting: Security crisis intervention, review and resolution.
- * Presentation Builder TM: Redesigned document & presentation management application. Designed EAI hub to synchronize with 3rd party repositories, Design2Launch, Documentum, Sharepoint, CRM and file-based repositories with source metadata. Development in Java. Reverse engineered undocumented .NET client-server application using deep packet analysis
- * AssureNet: Business development, funding, supporting CTO. Developed modular design process using multiple Service architecture layers.
- * Media Addiction: (Media) Rewrote business plan, corporate structure, patent applications, and licenses to enable additional funding.
- * Social Networking: Strategic business and technology advisor for several companies
- * Global ecommerce: Resolved crisis virus/malware attack extending from back office to POS at highly visible multinational retail company. Avoided public relations disaster. Analyzed virus characteristics, network and application structures. Analyzed packet data and network traffic requirements. Put into place within a day immediate incident push response to cleanse global systems and desktops and protect against further attack. Updated security policies at network and OS level. Developed road map set for deeper protection. Built packet scanners at core and end edge points with real-time review programs for response metrics and long-term detection.
- * Freshpair.com: (ecommerce) Redesigned entire infrastructure with effective horizontal scaling. Business showed a 150% increase in volume. Technologies: PHP, BSD, MySQL. Extended their platform into web and B2B SOA services (both vendor and warehouse) as well as internal processing and application SOA layers. **Company Acquired.**
- * Listservices: Designed and developed system for CAN-SPAM compliance using mix of .NET and existing AS400.
- * Multimedia: Developed a highly configurable streaming audio/video application as learning exercise. Application acquired by several commercial sites and available for OSX, Linux and Windows. Product still in popular use through 2018.

IBM
Senior Cloud Advisor and Strategist

06/2015 – 07/01/2017

FSS Cognitive and Cloud Transformation Team & FSS Strike Team to develop targeted financial sector solutions for IBM cloud offerings.

Designed Private IBM Cloud Initiatives
IBM subject-matter expert for AWS, IBM Cloud and Azure.

Member 6-person executive *Tiger Teams* to develop IBM strategy and product offerings with specific focus on Financial Services Sector. Worked exclusively with tier one financial services clients (banking, finance, and insurance) to create roadmaps and programs to drive organizational transformation and leverage Cloud capabilities. Specific clients and projects are confidential.

Created Cloud product roadmap with IBM clients to convert IT to Cloud platforms and using single tenant SaaS and PaaS services that compliments and conforms to agile application development and the ability to rapidly roll out Cloud applications. Developed global IBM Cloud models and managed as-a-service capability for Financial sector. Developed n-tier private managed storage offering for IBM Softlayer Cloud. (This solution is now an Azure offering).

Developed highly secure HPC solution with encrypted OS and encrypted end-to-end network transport for a 15K core, encrypted HPC burst workload for tier 1 bank using both bare metal and virtual Cloud offerings. Technical due diligence on IBM acquisitions.

Fraud detection/management platform with GDPR compliant geo-fencing.
Projects on AWS, Azure, VMWare and IBM Cloud

Qello
Chief Technical Officer / Consulting

10/2010 – 8/2011

Developed a flexible platform for branded and white label partnerships. Developed large-scale, high volume Amazon AWS/EC2 Hybrid Cloud video syndication and streaming platform along with mobile client applications (handset and tablet), IPTV and MRSS streams in partnership with several hardware manufacturers using white label model. Featured mobile application at CTIA. Platform continues to be licensed to other media companies under white label. Client apps were rated one of the *top ten coolest Android apps for 2011*. Architecture and API's developed were subsequently incorporated into later versions of the Kaltura CMS Platform. Designed and built Service Oriented Architecture (SOA) and API's with data layers for very modular and extensible platform. Front-end services used middle tier API's in turn used media management API's to interact with the Kaltura CMS. This allowed each layer to be developed and scale separately. Different public service and API layers were exposed for B2B, public and Mobile/IPTV applications. These layers could be developed in isolation without requiring full understanding or impact on backend media management services and API's. This modular design allowed new customer specific features to be added with minimal effort or impact on existing services. Development in wide variety of languages, C, PHP, Java, Objective-C, Python & Lisp depending on platform (server, mobile etc.) This application is often bundled on "Smart TV's" under various names.

BeyondTheRack
Chief Technical Officer / Consulting

07/2009 – 10/2010

Brought in by investors for due diligence as interim CTO for Canadian company. In less than one-year, developed AWS/EC2 Cloud based internal and public facing platforms, warehouse management; call center and ERP supporting multicompany, global financials and processes. Established development and management and governance processes - Implementing process controls as company grew from only \$200K/yr to over \$150M/yr in revenue. Volumes on average 8-17 million *unique transactional* users a day with 76% of users coming in a 45-minute period (feature of business model). Hybrid Cloud (Amazon AWS/EC2, CDN, SaaS and On Premise) based E-Commerce platform that could and subsequently did scale to volumes many times higher during seasonal peaks. Developed system with real-time inventory for both physical inventories in flight items temporarily allocated in shopping carts but not yet checked out. Developed using multi-tiered, **secure and robust** layers of Cloud computing services that minimized exposure to limitations of technical capacities in Montreal. Established sales, development, operations and QA culture that aligned with business needs. Implemented end-to-end ERP platform (NetSuite) managing multi-company financials, warehouse and merchandising. Developed loosely couple integration layer that allows the web front end to support large volumes of traffic independent of the ERP backend to maximize uptime. Designed interface with ERP backend with API's and message queues to minimize web developer interaction with ERP backend and in general minimize the scope of knowledge and required for any developer task. Set up telephony, warehouse management, developed Data Warehouse analytics, merchant targeting and user retargeting programs. Developed low cost, analytics platforms able to deliver highly interactive content from thousands of fragmented data sources.

Accoona
Chief Operating Officer & Chief Information Officer

5/2006 – 10/2007

Restructured company and its five business units after more than \$100M invested. Established rigorous P&L, financial controls and detailed working capital models. Cut cash burn from 4M/Month to \$300K. Consolidated acquisitions as company grew to more than 200 employees. Updated business model for each division. Established competitive, less expensive health plans and

401(K). Established technical foundations and built service shared platform for all five divisions to further reduce overhead. Rebuilt data centers with direct cash savings of \$300K a month.

Developed materials for London AIM IPO and NASDAQ S1

Consolidated ecommerce division of five acquired companies operating multiple online brands with collective revenues of more than \$200M million putting them in the top 15 of online electronics retailers. Developed new management, inventory, warehouse, buying, marketing, and sales functions. Developed Cloud ERP/CRM and E-Commerce platform. Eliminated recurring losses and increased margins. ***Changes made the E-Commerce group an attractive acquisition target and it was successfully sold.***

Within 8 months, put into operation a new model specific to the Chinese market supporting multiple revenue streams and functioning as a framework into which additional functions and services could be added consistent with the new corporate theme being developed by the parent company in the United States. Created Chinese WOFE using three corporate entities created in Shanghai: Two as required by law for the different business operations and a third holding company that would also protect U.S. corporate assets despite the regulatory challenges in Chinese law. ICP (Internet) and Social Media (forum and content) licenses were extremely difficult to acquire and could take more than a year if at all. Acquired licenses through shell companies. The corporate and Internet licenses alone were worth 3 times what had been invested. ***The division was successfully sold.***

Developed search engine, ad exchange and other businesses written in Java. Ecommerce platforms rewritten in PHP. ***Search IP acquired by Microsoft.***

Reengineered Accoona search engine and business model while leveraging existing resources and investment for a more competitive offering. Developed platform used a combination of Grid and Cloud technologies. ***After product launch, the division successfully sold.***

Consolidated company overall. Even with 5 completely different business units, core internal API's were developed to allow shared services across business units. The goal was to make best use of common assets while enabling each business unit to be sold off with minimal disruption. ***All business units were sold.***

Liberty Travel

11/2005 - 7/2006

Chief Technical Officer / Consulting

Brought to review enterprise project plans and architecture after years of repeated delays and cost overruns. Analyzed of all aspects of Information technology, business process – legacy, design, staffing and risk. Redesigned next generation architecture, strategy and all aspects of the software architecture, organization and infrastructure.

The “*next generation*” long-term architecture suffered from an impractical and fragile monolithic design. Projects suffered from repeated missed deadlines. Developed overall design decomposed into smaller deliverables. Development, operations and release schedules accelerated with reduced timelines, costs and risk. Next generation platform developed exclusively in Java with some legacy front-end work built using .NET.

Developed a “Plan A” to refactor the next generation platform a “Plan B” to move company off single aging legacy Unisys mainframe. “Plan B” project delivered a port of current business applications – all functionality and UI intact - into a modern scalable grid platform HP/UX Oracle RAC DB cluster as a foundation and for the first time giving full dual site contingency capabilities. Maintained critical legacy business continuity and knowledge. Maintaining legacy application had the added benefit of making new generation development easier and faster by leveraging a common database platform. Reduced the complexity of long-term projects.

Rejuvenated legacy division to reengage and empower disenfranchised key resources and personnel who had been behind the Liberty's long history of flexible and entrepreneurial business activities. The old legacy platform and the new “next-generation” platform coexisted in harmony.

The company generated 85-90% of its business through *white label services* supporting other brands including Travelocity in its early days. These services were offered through a combination of interfaces, SOA layers and shared operators.

The confidential long-term corporate goal was to make the company an attractive acquisition target. This goal was met, transformation completed in 9 months and company sold just 16 months after I was brought in.

DirectRevenue

6/2004 - 8/2005

Chief Technical Officer

Rapidly growing contextual Ad serving company - Brought in by VC with \$20M investment. Reengineered exiting code and geographically distributed applications running in several small data centers without of control operations costs, no documentation and poor code quality and tight failure prone coupling to backend databases. Overall design was monolithic and suffering major failures on a daily basis. While volume and revenues grew exponentially - Reengineered rigid application architecture, server and

client applications. Added new products business models and features. Developed a next-generation Ad Server with yield optimization, behavioral and psychographic targeting. ***The Ad server was subsequently repackaged and privately acquired.***

Consolidated multiple expensive data centers saving recurring costs by 75% and increasing reserve capacity increased even as transaction rates and volume exploded to 30M a day. Developed active / active architecture in redundant grids across data centers. Changed an unmanageable, fragile and fault-prone systems without of control costs that frequently hit capacity limits into a stable, robust, scalable and economical platform.

Average ACID transactions of 900M a minute with sustained spikes of more than 2 million transactions *a minute* and bandwidth over 5 GB could be sustained even with the loss of one data center.

Decoupled online applications from the databases and data models for faster, reliable, and more complex operations with fewer MySQL engines. Databases were reconfigured in clusters and the total number of systems was reduced. The existing Oracle server was retired.

Developed platform using multiple SOA layers for internal services, ad serving / external services as well as services to the external embedded ad clients.

Server-side applications written in Java and client-side applications in C++ and extensive ASM.

Implemented a modular architecture. Reduced development costs by \$750,000. Created real-time bi-directional data flow using an ETL infrastructure supplanted by lightweight messaging. Transactions flow continuously refined behavioral targeting and maintained impression caps and other targeting requirements in near real-time regardless of backend latency or availability. Designed ETL processes using a *cascading database* technique that maximized throughput in a high-volume ROLAP without investment in high-end hardware. Redesigned system to maximize DB performance: avoided needless locks, joins, temp table overhead, inserts and deletes on live tables even under extreme query and load volume. Extremely fast query performance on several billion plus row MySQL tables. Low cost MySQL outperformed the previous Oracle engine. Developed extremely sticky and durable Windows-based Adware client called Aurora that leveraged multiple ring layers of Windows operating system
**** Ad serving platform subsequently acquired ****

Mediaport Chief Technical Officer

9/2001 - 08/2002

One of 5 founders - media buying, and order management company funded by a consortium of the three largest media buying holding companies Omnicom, WPP and Interpublic. Collectively this consortium controlled more than 60% of all media-buying dollars. The goal was to automate the inefficient media buying and selling processes across all sectors and types with the ultimate goal to replace Donovan Data Systems (DDS) with integration into existing sell-side trafficking systems and buy-side financial systems. Languages included Java, C, Python and some 4GL tools. Developed business model, full life cycle budget and P&L.

Mapped existing media buying processes, developed data model and published XML schema open for industry use. ***These standards remain in use throughout the industry.***

The project started on September 10, 2001: The subsequent collapse of the advertising market resulting from the *9/11 tragedy* forced the consortium to cancel the project despite the ready availability of funds.

Quixi Chief Technical Officer

1/2000 - 5/2001

Startup telephony and services company growing from 6 employees to over 100. Developed technical strategy, architecture and operations using best practice art for scalable, resilient, redundant infrastructure and application technologies that allowed all nodes including calls centers to work independently and withstand periodic loss of connectivity using a distributed database model. Three geographically dispersed call centers each with over 100 operators.

The underlying architecture allowed me to easily revise core business model *several times* with only a few weeks of work each time.

All applications were launched *only 6 months after standing start*. Built web-based applications on Java/J2EE and developed Call Center applications in C++, which combined CTI on a thick client server model. Installed PBX systems, telephony switches. Developed patented architecture for transfer of user context from WAP/Voice & Web sites to live agents. Added ASP model for sales force automation (SFA) on a variety of CRM systems and legacy applications with template apps and EAI tools using the existing physical infrastructure and new SOA functions. All systems were built using a series of public and private Service Architecture (SOA) layers

Joined DoubleClick in its early pre-IPO days as a startup Internet marketing and advertising company. Responsible for all design and engineering for high-volume platform. Rebuilt all server processes and optimized for volume, performance and durability with modular clustered processes in less than one year as we grew from 100K daily impressions and transactions a day to over 7 Billion a day. In subsequent years volume increased by orders of magnitude and the system scaled to handle it. Designed new products and applications for analytics driven ad targeting. The system became the gold standard for ad serving platforms.

Developed systems, products and services that turned what had been “pain points” into profit centers. The early cash cow of Ad serving waned, and these new systems, products and services now make up the core of the DoubleClick business platform. Managed intermediate and direct staff of several hundred.

- * Developed backend processes and systems known as DART. All systems were arranged in a Grid-like platform that scaled for capacity and durability.
- * Designed and developed “**Boomerang**”^(TM) a data driven ad-targeting platform targeting based on demographics, psychographics, real-time and latent behavior as well as intent velocity all with goal of maximum yield.
- * Developed high throughput (17K TPS) object-oriented database appliance with sub 2ms latency for user behavioral, impression and context tracking information. Appliance/Application storage efficient scaled horizontally and geographically. Note: Not impressive in 21st century, but this was on a single Pentium processor machine less powerful than a typical smartphone.
- * Redesigned statistically driven ad targeting logic to deliver ads using performance metrics and psychographic routines.
- * Developed enterprise management applications and automation tools and suites to coordinate and automate end-to-end processes in a fault tolerant manner.
- * Developed high-performance, object-oriented database
- * Added ETL systems for next-generation back-end processing. Front end and backend systems SOA layers where possible.
- * Developed all DoubleClick platform services to expose multiple API’s using a variety of methods as, RPC, API and SOA layers.
- * Platform developed in high performance C, assembler, 4GL tools and scripting languages such as Python & Perl. Later introduced Java to application development.
- * This platform and its systems were the core processes and applications that were *subsequently purchased by Google*.

AIG
Director of CORE Technologies

2/1997 – 12/1997

Responsible for Core enterprise technologies standards and solutions. Developed tools, systems and processes to convert over 160 legacy applications and built new tools for 14,000 workstations for common Windows/NT operating system and application platforms. Converted 48 Notes applications into Exchange groupware applications.

Information Builders
Director of Engineering

7/1987 – 2/1997

FOCUS is an enterprise level natural language (4GL) non-relational database. Architected new functions, features, services and ports to multiple compute platforms and Intel on OS/2. Managed staff of more than 120. Massive code base of more than 11,000 new and legacy source files in C, C++, Fortran, mainframe and other platform Assembler language (PC, Mainframe, Dec etc.,)

FOCUS began as a large monolithic mainframe application. Reengineered the product - breaking core functions and services out with a variety of SOA-*like* methods to build new products out of service layers exposed from core legacy code. WebFocus, EDA, PM/Focus and all of the other platform specific variants came out of this work. Interfaces to multiple data stores were added enabling heterogeneous and asynchronous joins. Platform to this day continues to be used as an analytical tool across multiple databases.

Developed cross platform compilers, assemblers, p-code parsers and code generators, reverse polish functions, dynamic and static link and overlay loaders, object parsers, and meta-code translation tools. Developed core internal services including low level caching routines, compilers, cross memory stub, dynamic, static link and overlay loaders and debuggers. Developed function-based and register-based API’s to emulate IBM 360 Assembler functions on other platforms. Developed sub 2K stateless graphics engine in assembler and exposed functions several ways: assembler function, high level language calls and exposed API’s. Added product API’s and internal hooks to allow clients to extend product with their own binary code. *Company subsequently acquired.*

EDUCATION

Bachelor of Arts - English, Pitzer College; Claremont, CA

Nationally certified Porsche Racing instructor / Coach