CTO / CSO / VP - Technology

Technology Evangelist / Strategic Sales / Strategy / Partnerships / Startups & Turnaround / Incubation / C-Suite / Thought Leader / Cross Functional / Product Categories

Proven, strong track record of uncovering and converting latent market needs into viable products and services ahead of the competition. Possess complete product ownership from conceptual definition, specifications, architecture to engineering execution. Additional strengths in new business development, creating new market categories, developing strategic partnership development and more. Large company (IBM, HP), small company, VC, start up and turnaround experience.

An outstanding, motivating communicator and charismatic leader, equally effective one-on-one in C-level meetings with customers as in front of large audiences as a keynote speaker, team builder, and problem solver. Accomplish include:

- Catapulted IBM to #3 position in Cloud Provider space.
- Transformed Infoblox from a one product company to a multiproduct organization ready to go IPO.
- Invented the technology that made RedShift a profitable winner of multiple awards.

Recognized as incredibly bright and passionate with a deep understanding of enterprise security technologies, markets, and business models. Able to deliver effective solutions to complex problems, and communicate these ideas to different parts of the organization with ease.

Education: **Ph.D. in Computer Science**, UC – Irvine. **Bachelor of Technology (BTech),** Computer Science, College of Engineering, Andhra University- India. Admitted to Indian Institute of Technology (IIT), Roorkee, Mechanical Engineering.

CAREER HISTORY AND HIGHLIGHTS

CTO/VP

IBM Cloud Infrastructure and platform services 2017 to present

IBM Cloud is a leading Cloud provider whose core platform spans public, private and hybrid environments ranging from core infrastructure, platform to Watson Data management and AI analytics services. Infrastructure organization includes 2000+ people, distributed worldwide with 60+ data centers and multi-\$B in revenues.

Provide technology & product strategy and vision, drive innovative architectures, forge business alliances, gather and interpret competitive intelligence, work with execution teams, and incubate and drive several Horizon-2 / 3 projects.

- Drove a turnaround. Transformed IBM Cloud from a collection of acquisitions that were disjointed and cumbersome, and according to Gartner "broken, disconnected, etc." to Number 3 among Top 10 Cloud provider in the world. Earned Gartner credit as a front runner. Aligned all siloed-products together toward one common architectural framework, one Cloud user experience, one billing and deployment model.
- Boosted customer satisfaction. Numerous Fortune 100 customers (BoA, Morgan Stanley, CitiBanamex, Macys, WorkDay, more) were on the verge of shifting to competing cloud providers. Challenged with winning back customer confidence. Conducted multiple C-/Board level meetings and planning sessions with clients. Attained their buy-in to vision, architecture, technical foundations and cloud services. Lost no customers, extended yearly multi-million \$M+ contracts.
- Focused IBM Cloud research toward winning product market category creations. Formed a formal Research Guild committee, performing quarterly update and reviews of leading research projects, identifying synergies and gaps versus the competition and reprioritized per business needs. E.g. SW-defined power optimizations, DR/Backup, Common IAAS/PAAS policy frameworks, App-aware QoS, Auto Scaling etc.
- Caught up to competition. The Cloud group was not focused on investing or nurturing forward-looking Horizon-2/3 projects. The competition was ahead by 2-3+ years. Evaluated various 3rd party vendors and identified technology / product / architecture and market fit. Several of the projects are now in advanced

implementation phase with expected deliverables in 2020 with high revenue expectations. E.g. VMware, Cisco, Nvidia, Broadcom, Nutanix, AT&T, Cloudflare, Juniper and several leading startups in hot spaces.

Projects include. Cloud infrastructure services [Compute, Network, Storage, NextGen], SW-defined infrastructure, Hybrid Cloud, AIOPs, AI enabled Infrastructure optimization and automation using structured, unstructured and graph data, Compliance-As-Code Automation, FI (financial institutions) utility cloud, NFV (network functions virtualization), Power in IBM Cloud, MZR/SZR (multi/single zone regions architecture), Enterprise developers, Cloud Internet services (DDOS, DNS, WAF, GLB, Caching), Edge Cloud, CDN, GPUs, SmartNICs

EBC presentations and planning sessions, Keynotes, Analyst briefings, customer engagements, RedHat and Cisco partner world summit and Think

EIR, Venture Advisor

Foundation Capital 2015 – 2016

Foundation Capital is a leading VC firm that invests in early growth companies. Provided technical advisory functions, product / market diligence, roadmap, deep technical and architecture reviews, competitive intelligence and advisory to both Foundation portfolio of existing / new companies.

• Evaluated and recommended investment in two companies, Cyphort and ForgeRock. Provided detailed product / market diligence. Conducted reviews of what competition was and what it could be in 5-7+ years. Provided competitive intelligence on the market. Both companies grew in size and revenues significantly.

VP, Technology / Advanced Products and Engineering

InfoBlox 2012 to 2015

Hired to identify new emerging technologies with supporting product ideas that could provide substantial high growth opportunities -- security, analytics, distributed systems, infrastructure automation, orchestration etc. Infoblox is a public traded company (NASDAQ: BLOX) and a leader in Network Control and Automation solutions. Customers include global 1000 enterprise and service provider customers

As an SME, accepted speaking engagements - RSA, AT&T Cyber Security, Light Reading Mobile Network Security. Customer webinars on DNS Security / DDOS. Posted Security blog articles.

• Transformed Infoblox from a one product company to a multiproduct organization ready for its IPO. Formed an Advanced Technology Group of core PhDs, architects, product function and execution team that provided advanced Engineering / Incubation functions. Incubated two multi-\$B products [DNS security, DNS analytics] that increased revenues by 20% quarter-by-quarter. Logged a succession of 6-8+ quarters of 20% growth. Positioned InfoBlox as a front-runner in the DNS security, DNS Analytics products and DNS server business.

Founding Member, CTO & VP, Products

RedShift Networks 2007 to 2011

A privately held company that builds carrier class gateway products processing Bs of SIP / LTE traffic providing complete control, visibility and security. As a founding executive team member, provided company's technology direction and marketing direction. In charge of research, architecture, investors pitch and business / sales alliances. Invented Synchronous Flow Technology TM (patents approved) that provides foundation for RedShift product definition and a new UCSG product category.

- Created new market category. Made presentations to key CIO / CTO executives at Fortune 500 customers and partners. Landed key accounts including AT&T, Verizon, Frontier communications, Telefonica, Orange Labs, RingCentral. Forged key alliances with technology partners; Polycom, Genband, Broadsoft/Cisco, and Juniper. Created a newly defined market category called VOIP Security and Fraud analytics.
- Established a company and personal presence. Accepted invitations to be an active participant, invited speaker, panelist, video interviewee in leading communication conferences ITEXPO, InterOp, AstriCon, Cloud Expo, RSA, Enterprise Connect, VOIPSA.

- **Detected and seized an emerging opportunity.** With the rise in VOIP security threats, there was a gap in the market and no competitive solutions. Provided technology direction. Led research and architecture. Developed investors pitch. Created product and marketing strategy including product features definition, competitive positioning and business / sales alliances. Helped define a brand-new product category called Session Border Control (SBCs).
- Made company an award winner. Awards: listed as Top 10 startups to watch (Yankee Research), nominated as
 Major Enterprise SBC player (Gartner), Product of the Year Award 2010 (Internet Telephony Magazine) and Red
 Herring Top 100 North America Finalists Most Innovative Companies to watch. Secured marquee customers
 including AT&T, Telefonica and more.

Vice President, Applied Technologies & Chief Scientist

Phoenix Technologies 2008 to 2010

Responsible for driving numerous advanced technologies, product research, competitive analyses for cloud storage initiatives, infrastructure and SAS services. Held cross-matrix ownership of projects and teams, defined corporate security and SW quality requirements.

- Drove next generation cloud infrastructure efforts, core systems, storage, security and SAS services. Created a cloud storage infrastructure that can scale up to 100M+ connections and PB of storage using innovative information dispersal algorithms with backend SAN/NAS systems and block/file storage architectures.
- Developed SAS services including Backup/sync/access/share applications across multiple devices using common Amazon S3/EC2 infrastructure.

CTO Office and Director, Engineering / Technology

Determina / VMWare 2004 – 2006

Determina is a recognized leader in the Host Intrusion Prevention space. The flagship product, Vulnerability Protection Suite (VPS), provides real-time vulnerability protection for enterprise applications without disrupting business operations. Determina won the prestigious InfoWorld 2005 Innovator award.

- Provided complete product PRD definition, competitive analysis, architecture and research for VPS 1.0, 2.0 and 3.0 products. Performed detailed CTO summary of host-based security threats, attack vectors, rootkits and trojans detection, authentication methods, OS hardening, sandboxing execution, encryption. Served as technical officer for all Determina Business Development and Partner's engagement effort.
- Secured \$5M funding from DARPA to develop new techniques that enable a system to learn where it is vulnerable
 to an attack or programming error, then automatically generate ways to thwart the attack or recover from the error
 to continue to execute successfully.

Chief Architect, Platforms and Technology

NetContinuum / Barracuda Networks 2000 to 2004

A privately owned 150-employee company with offices in Silicon Valley and India. NetContinuum was formed in late 1999 with a vision to develop a high-powered ASIC appliance to provide security for web and application servers at unparalleled throughput and connection speeds. Its clients include CNN, NY Times, Time Warner, Ford, EBay.

Provided complete vision and direction to the company comprising of 150+ people. Provided technical vision, product strategy, architectural definitions, PRD and MRD definitions and reviews, advanced prototypes. Performed market and product research and competitive analyses. Formed technology alliances,

Principal

MIPS Technologies/SGI 1995 - 2000

Led a design group of 8 people that developed a world-class backend compiler for HP-Intel IA-64 (Itanium) processor.

Research Intern

HP Labs 2019 to 2019

Primary post-graduate dissertation work on VLIW chip architecture definition and program parallelism exploitation. The work, code named Trimaran .helped pioneer VLIW style of computation and parallelism extraction.

KEYWORDS

Cloud Computing, Cloud Infrastructure, Enterprise Software, Security, Virtualization, Product Management, Telecommunications, Big Data, Hadoop, Architecture, Storage, Go-to-Market Strategies, Data Center. Unified Communications, VMware, SaaS, High-Performance Computing, Compliance, Distributed Systems, Networking, Security, Virtualization, SDN, VOIP/UC, Voice/Video/Unified Communications, DPI Appliances, Infrastructure, Hyperconvergence, Big Data Analytics, Hadoop, NoSQL, real-time databases, Benchmarks, Cloud SOC, Performance, Enterprise, Carrier gateway appliances, Security, Networking protocols, High-Performance computing, Compilers, Algorithms, Micro-architecture, Distributed systems, Mobile Platforms, SW-defined Infrastructures & services, Kubernetes and Hadoop/Storm Analytics

VENTURE / BOARD ADVISOR / EXECUTIVE

Consultant and Advisor on projects for several startups including:

- AnalyticsMD -- Healthcare Big Data Analytics / Prescriptive Platform (www.analyticsmd.com)
- Digital Shadows -- Cyber Threat Intelligence (<u>www.digitalshadows.com</u>)
- SecondWrite -- Next Generation Binary Rewrite / Sandboxing platform (<u>www.secondwrite.com</u>)
- BanyanOps -- Micro-services platform (<u>www.banyanops.com</u>)
- RedShift Networks -- SIP/LTE Carriers Infrastructure & Gateway(<u>www.redshiftnetworks.com</u>)
- AppCito -- WebFW/Traffic Shaping As a Service [2014-2016] (acquired by A10 Networks)
- Prismo Systems -- Insider Threat Protection [2014-2016] (www.prismosystems.com)

PATENTS / AWARDS

- 6 patents issued and publications in security, enterprise systems, VOIP / Unified Communications, infrastructure, systems and networking.
- Won several industry awards for leading product innovation, category creation, thought leadership
- Speaking engagements at leading conferences and tradeshows, including RSA, VoiceCon, HotChips, PLDI, MICRO, PACT, HPC, CSI, InterOp
- Received Delhi State Topper in Mathematics (100 / 100); Prize by Lt. Governor, Delhi