

Summary

Hands-On Technology Leader & CTO with 28 years experience designing, building and running teams and technology stacks that solve complex problems. A proven leader with a strong presence, capable of blending big-picture viewpoints with tactical considerations to inspire, build trust, and deliver.

Held key positions in teams that built many of the fledgling Video streaming & OTT services - Channel 4, Sky TV, OSN and others.

With a hands-on understanding of the components that make up Video Streaming platforms including CDN, DRM, Compute, Storage, Metadata management, Asset management, file acceleration and Transcoding.

Experienced in building the teams, processes and technologies to operate these platforms effectively.

Work Experience

Apple

Working on Apple TV.

Ostmodern / Chief Technology Officer

London, UK / [07/2020 – 09/2022]

London, UK / [09/2022 – Present]

Led a team of ~25 who were responsible for the delivery of projects and operational support for Sky New Zealand, The Royal Opera House, Rakuten, F1 and others.

- Restructured, modernised and aligned the team. Stripped out old methodologies and tech, introduced Scrum, SRE, DevOps, Chaos Testing, and Serverless improving speed of feature development and reliability of running services.
- Evolved an overly-complex legacy API product into a fast to deploy, well operated service. Went from 1 deployment every 3 months to 10+ a day, with deployment times reduced from weeks to 2 hours.
- Repositioned API product as SAAS from an on-prem deployment model whilst migrating from containers to Serverless.
- Identified areas to improve in the team culture by implementing automated team health checks and Westrum Organisational Culture Scoring. Built a well balanced, friendly and effective team that practices open and transparent communication with the business.
- Reduced AWS bill by >50% by utilising tooling to gain insight to safely reduce the size of cloud resources.
- Implemented good operational practice e.g., monitoring and alerting, run-books, service catalogues, on-call escalation processes, continuous integration and deployment. Improved incident resolution and decreased customer outages.
- Initiated projects to migrate self-hosted services and tools to SAAS counterparts allowing the team to focus
 on product and increase speed of feature development.
- Transitioned the ownership of infrastructure to the product teams using infrastructure as code, SAAS hosted services and automation. Reduced the bottlenecks on the infrastructure team and allowed redeployment of team members into other projects.

Visual20 / Founder & Principal Architect

London, Madrid & Switzerland / [01/2017 - Present]

London, UK / [03/2015 - 01/2017]

Led, designed and delivered complex international projects using Infrastructure as Code, Chaos Engineering, Ephemeral Environments and Agile.

- Led a multi national team from Madrid, Switzerland, Bangalore and the UK to successfully build and operate a Video Anti-Piracy platform. Used thousands of EC2 instances to allow downloading of content from suspected pirate sites.
- Built a monitoring service at the UK Home Office using Grafana and Prometheus on AWS to monitor the biometric systems of UK immigration and other UK agencies.

Friend MTS / Technical Operations Director

Led a team of ~45 with ownership of technical, pre-sales, solution architecture and operations.

- Integrated services into the Olympics, Sky, BTSport, WWE, Viacom and other MVPDs.
- Rebranded company and products to align with the broadcast industry.
- Translated complex technical services into easily consumable messages for C-level customers streamlining the sales process and improving the sales pipeline.
- Public Speaking at trade shows (IBC and NAB), allowing audiences to understand the product set and its value in the Video ecosystem.

Irdeto / Senior Solutions Architect

Consultant responsible for improving sales of OVP product.

- Consulted on improving the Video Streaming product, facilitating customer centric features to be developed.
- Tailored product messaging into an understandable message for non-technical staff and provided internal education improving sales team knowledge of ecosystem.
- Pitched service to Public broadcasters, MVPDs.

Piksel (formerly KIT digital & ioko) / Senior Technical Architect San Diego, CA / [03/2005 - 05/2014]

Infrastructure Architect building and running many premier broadcasters OTT platforms.

- Channel 4 The first public broadcaster to launch a streaming service called 4od (4 on demand) in the UK. Designed and built the infrastructure including storage, DRM, transcode farms, database, networks, firewalls and load balancers. Undertook root cause analysis of content preparation and site availability issues. Built and integrated tools to monitor the service for performance and availability.
- Project Kangaroo / SeeSaw.com A proposed streaming video service offering content from, and owned by, the BBC, ITV and Channel 4. Ran the Infrastructure teams responsible for Architecture & Operations. Developed processes to onboard and integrate BBC, ITV and Channel 4 to receive content and metadata. Integrated with CDNs, built transcode farm and workflow. Implemented service monitoring platform to track availability and responsiveness metrics. Public Speaking presentations to audiences of 150+ engineers.
- OSN A satellite broadcaster in the MENA region, wanted to release the regions first video streaming service called OSN Play. Architecture, build, Customer relationship management and technical troubleshooting of priority issues.
- Disney Parks & Resorts Worked on the development of the Magic Band onsite in Florida.
- BBC Monitoring A commercial arm of the BBC, providing signal intelligence across various data sources.
- Sky TV New Online Platform With a team of software architects I designed and built the Sky TV NOP.
 Architected, procured and oversaw the physical kit installs, and built and ran the platform.

Sky / Senior Technical Architect

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London, UK / [01/2003 - 08/2004]
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London, UK / [04/2001 - 01/2003]

London, UK / [11/1999 - 04/2001]

London, UK / [11/1998 - 11/2000]

- Provided architecture, technical and project management expertise to strategic technology projects.
- J.P. Morgan / UNIX System Administrator
 - UNIX and Storage Support for Mission Critical Systems supporting trading.
- **Sky** / Internet Services Support Supervisor
 - Migrated the sky.com, skynews.com and skysports.com websites from Windows to UNIX and supported.

Sun Microsystems / Storage Engineer

- Supported Online and Offline storage products for Sun (VXFS, VXVM, SDS, UFS, QFS, and others).

Skills

- **Business:** Technology and Business Leadership, Organisational Growth, Building Effective Teams, Public Speaking, Product Management, Product Development, Team Development, Time-critical project delivery, Relationship Management.
- **Personal:** Passionate Technologist, Pragmatic, Results-oriented, Ability to work well under pressure, Flexible, Effective Communicator.
- **TV & Media:** Streaming Video Services (OTT / VOD), Monetisation Models (SVOD, AVOD, TVOD), MVPDs, Video metadata, Video assets and asset workflow, Digital content distribution, DRM, Video and Film Industry standard specifications, Digital media workflows, Anti-Piracy Technologies, Broadcast, Encoding, ffmpeg.
- **Technologies:** AWS, UNIX / Linux, API's, Storage, Scripting & Automation, Prometheus, Grafana, MEX, Containers, Shell Scripting, Ansible, Docker, CloudFormation, CDN's, HLS, BSD, Solaris, HP-UX, AIX.
- Methodologies: DevOps, Site Reliability Engineering (SRE), Infrastructure as Code, Ephemeral Environments, Chaos Engineering, Cloud Design Patterns, Agile, Scrum, Kanban, ITIL, Continuous Delivery, Continuous Integration, Root Cause Analysis (RCA), Analytical Troubleshooting, Paired Programming, Test Driven Development.
- Skills: Architecture, Design & Implementation, Cloud, AWS Certified (Lapsed), RHCE (Lapsed), Certified Solaris Admin, High-Availability Infrastructure, Service & Systems Management, Operations, Monitoring, Kepnor & Trego trained Analytical Troubleshooting.