**Joshua J. Middagh**  
Phoenix, AZ | <https://www.linkedin.com/in/joshua-middagh-it-professional/>| <https://jjmiddagh.github.io/portfolio/>| jjmiddagh@outlook.com | 602.694.2863

### Executive Profile

Strategic technology leader with 25+ years of experience driving enterprise-scale data, analytics, and software initiatives across regulated industries. Expert in Scaled Agile (SAFe), project/program management, and data governance with a proven record of leading cross-functional teams, scaling technical program management offices, and delivering mission-critical software platforms. Recognized for bridging technology and business strategies, accelerating execution, and building high-performing teams that deliver measurable impact.  
  
Certifications: SAFe Agilist, Google Project Management, Google Data Analytics

### Core Competencies

Technical Program Management Leadership, SAFe & Agile Delivery Frameworks, Data & Analytics Platform Modernization, Risk Management & Governance, Strategic Planning & Roadmapping, Scalable Process/Framework Design, AI/ML Model Development Oversight, Enterprise Data Protection & Privacy

### Director of IT – Enterprise Data & Analytics

USAA – Phoenix, AZ | 2024 – Present

* Mentored senior program and project managers, growing organizational capability in agile scaling, proactive risk management, and disciplined execution; resulted in 20% increase in on-time delivery of high-visibility programs.
* Partnered with product and engineering leaders to align software execution strategy with enterprise risk appetite, ensuring high-availability deployments and regulatory compliance while enabling faster adoption of AI-driven analytics capabilities.
* Oversaw $15M+ portfolio spanning data protection (Protegrity), information governance (IBM IGC/IA), and AI/ML model risk validation pipelines; established standardized execution playbooks, reducing program overlap and accelerating delivery timelines by 30%.
* Championed adoption of Scaled Agile (SAFe) practices across 50+ programs and 400+ engineers, embedding PI planning, release train coordination, and Lean portfolio governance; improved delivery velocity by 18% and predictability of release cycles by 25%.
* Built multi-line of business horizontal planning frameworks that synchronized technology strategy with enterprise priorities across 7 business units, cutting delivery conflicts by 30% and accelerating time-to-market for cross-platform initiatives.
* Directed modernization of enterprise-wide data and analytics platforms (serving 10M+ members and $150B+ in assets), integrating cloud-native architectures, Protegrity tokenization, and IBM IGC/IA governance frameworks; improved system availability by 22% and reduced compliance audit findings by 40%.

### Senior Manager – IT Strategy & Risk

USAA – Phoenix, AZ | 2021-2024

* Delivered multi-year program roadmaps balancing $25M in strategic initiatives with software execution capacity; improved portfolio prioritization accuracy and reduced cost overruns by 15%.
* Directed enterprise-wide program audits on data privacy, cybersecurity, and resilience involving 200+ systems; drove remediation plans that reduced critical vulnerabilities by 45%.
* Established AI/ML risk management playbooks aligned with governance mandates; enabled safe scaling of 25+ advanced analytics models into production, reducing model approval cycle time by 35%.
* Defined IT risk and governance frameworks embedding 100+ compliance controls across software development lifecycles; ensured adherence to FFIEC, OCC, and SR 11-7/21-7 standards for AI/ML models.

### Technical Lead – Data & Analytics Programs

USAA – Phoenix, AZ | 2019 – 2021

* Led cross-functional teams of 60+ engineers and analysts in AWS cloud migration, data architecture redesign, and reporting modernization; reduced infrastructure costs by $5M annually through optimized resource utilization.
* Introduced agile program structures to manage complex data modernization projects (cloud migration, data lakes, and real-time reporting); cut delivery timelines by 25% while improving quality of deliverables.
* Launched enterprise analytics Center of Excellence (COE), scaling advanced analytics adoption across 5 business lines; increased analytics-driven decision-making adoption rate by 40%.

### Senior Database Administrator

Cox Communications – Phoenix, AZ | 2011 – 2018

* Led SQL Server and Oracle database development/administration supporting enterprise-scale telecom platforms serving **6M+ customers**; ensured high availability, scalability, and compliance with SOX and PCI DSS requirements.
* Designed and implemented **ETL pipelines and data integration workflows** enabling near real-time analytics across sales, billing, and customer service systems.
* Partnered with software engineering and DevOps teams to optimize application performance, improving query efficiency by **30%** and reducing downtime incidents by **40%**.
* Applied **Agile and SAFe practices** to coordinate database and application releases, integrating CI/CD pipelines to accelerate software deployment.

### Senior Business Analyst

Cox Communications – Phoenix, AZ | 2006 – 2011

* Gathered requirements and defined technical specifications for **enterprise application development** across CRM, billing, and network management platforms.
* Acted as liaison between business stakeholders and engineering teams, ensuring software requirements were captured, prioritized, and delivered on time.
* Introduced **structured SDLC practices** and early Agile adoption, which reduced requirement change churn by **20%** and improved project delivery predictability.

### Supervisor Quality Department

Cox Communications – Phoenix, AZ | 2002 – 2006

* Directed two QA teams (18 staff) responsible for **voice services quality assurance and work order audits**, improving customer satisfaction scores by **15% year-over-year**.
* Established **process frameworks and performance metrics** to ensure consistency and regulatory adherence across operations.
* Partnered with IT and engineering leaders to implement **workflow automation**, reducing manual audit effort by **25%.**

### Education

M.S., Data Science (AI/ML concentration) – Eastern University (2024)  
B.S., Computer Science and Information Technology Management – Northern Arizona University (2016)

### Select Achievements & Impact

**CertifAI – AI Risk & Compliance Framework (In Development, Patent pending)**

* Designed a multi-dimensional AI model certification platform (Dockerized FastAPI backend, Streamlit UI, Redis messaging) to audit and score AI models for bias, safety, compliance, and explainability.
* Drafted provisional patent filings, architecture diagrams, and user workflows to support enterprise AI governance goals across highly regulated industries.

**Customer Churn Prediction Pipeline**

* Developed a full ML pipeline to predict telecom customer churn, incorporating data preprocessing, model training (Logistic Regression, Random Forest, XGBoost), hyperparameter tuning, and Streamlit-based UI for stakeholder consumption.
* Addressed class imbalance using SMOTE/undersampling and improved F1 score from 0.48 to 0.72 across iterations.

**Airbnb Dynamic Pricing Engine – Flagstaff, AZ**

* Created a time-series and feature-based pricing recommendation system for short-term rentals using historical listings, demand curves, and seasonal factors.
* Deployed interactive dashboards to optimize nightly rates and maximize occupancy.

**FrugalGPT-Style Cost/Latency Smart Router for LLMs**

* Built a multi-model prompt routing engine that dynamically selects between high-cost (e.g., GPT-4) and low-cost (e.g., Claude, Mistral) models based on latency, response quality, and cost thresholds.
* Integrated caching, fallback, and prompt templating strategies to reduce average token cost by 55% while preserving output fidelity; supports scalable GenAI integration for compliance-sensitive orgs.