

ZAK MERZOUKI

Tampa Bay Area, Florida 33764

Mobile: [REDACTED]

[linkedin.com/in/zak-merzouki](https://www.linkedin.com/in/zak-merzouki) [REDACTED]

SENIOR DIGITAL TRANSFORMATION LEADER

Hands-on Enterprise Software Executive and Chief Architect with over 20 years of proven experience, either as an individual contributor or leading global *Software Engineering, Architecture & Technology, Product Strategy, Consulting Services, Development Operations (DevOps)* and *Cloud Operations* organizations across three continents, from startups to Fortune 500 companies, focused on building, deploying and operating platforms and apps that digitalize complex, mission-critical Manufacturing and Laboratory operations in Lifesciences (R&D, cGxP), Semiconductor (FE, BE) and Electronics (EA, PCB, SMT) industries.

Serving as Executive Leader with firms such as Siemens and recently Xavo, I led the definition and execution of strategic initiatives that resulted in the successful release, deployment and validation of new B2B SaaS/PaaS/Hybrid product offerings, including **MES** (Manufacturing Execution System), **QMS** (Quality Management System), **LIMS** (Laboratory Information Management System), **Industrial IoT** and **AI/ML-driven Big Data Analytics** solutions. These solutions included innovative tools that helped reduce customer's implementation cost by over 50%.

Currently, as Digital Transformation Consultant at BSG, I provide advice and functional and technical solutions to Manufacturing companies on how to leverage IT/OT technology to achieve their digital transformation goals and improve their plant operations.

Key Strengths Include:

PRODUCT INNOVATION

- Introduced to market new COTS cloud-based Platforms and Applications that helped industrial companies accelerate the digital transformation of their Quality, Manufacturing and Laboratory operations throughout the Value Chain. The products for which I led the design and development included the last generation of [Siemens Opcenter Execution](#) (f.k.a. Camstar Enterprise Platform), Siemens' leading MES/MOM platform for Semiconductor, Electronics and Lifesciences, [Siemens Industrial IoT Big Data Platform](#) (f.k.a. Omneo), and [Xavo R3](#), the first Generative AI-powered copilot for Sample Management/LIMS amongst some, and were offered as on-prem, SaaS and PaaS (on AWS, Azure). These innovations have garnered significant market recognition, driving Triple-Digit Growth and attracting interest from top-tier investors and buyers.

DIGITALIZATION OF COMPLEX MANUFACTURING OPERATIONS

- Engaging as a key technical SME on numerous large-scale digital transformation projects implementing Closed-Loop Manufacturing by deploying and integrating Siemens MES, QMS, APS, LIMS and PLM, often in the context of high volume/high mix and/or regulatory compliance. Provided expert guidance on architecting and integrating these systems (ETL/ELT, EAI, Data Pipelines) with internal business systems (ERP, SRMS, SCM, ELN), Industrial IoT devices and Factory Automation. I am highly skilled in software architecture and project management and possess strong understanding of challenges and obstacles that can arise in projects.

AGILITY & EFFICIENCY

- Regularly appointed by CEOs as CTO/VP of engineering and R&D to improve performance of product and project teams with the goal of modernizing platforms, apps and delivery models in a cost-effective, timely way. My last R&D team undertook a transformation, shifting from a traditional output-focused approach to an outcome-driven mentality, emphasizing Agility and investment in DevOps/IaC. This resulted in substantial improvements in Quality (~80% less bugs), Cost (~50% reduction) and Time-to-Market (~3x faster).

MERGERS & ACQUISITION LEADERSHIP

- Spearheaded numerous M&A Technical Due Diligence (TDD) initiatives, contributing significantly to the successful closure of billion-dollar deals for renowned global companies, including Siemens. My involvement extended beyond the due diligence phase, as I took charge of substantial post-merger integration projects, leveraging my expertise to navigate and lead these complex endeavors.

PROFESSIONAL EXPERIENCE

BLEU STRATEGY GROUP

01/2023 - Present

Tampa Bay Area

Partner, Digital Transformation Practice

I provide Digital Transformation Advisory services to Life Sciences companies that are in the process of digitalizing their Lab and Manufacturing Operations with cloud and on-prem COTS solutions, including the integration to existing MOM systems (L3), Resource Planning & Logistics (L4), Control systems and IIoT devices (L0-2). I engage in direct collaboration with all relevant stakeholders (incl. C-level, project teams, systems integrators, vendors), analyze their architecture and technology needs, develop strategies, and implement solutions that align with their goals. Main areas of expertise include IT/OT Strategy & Governance, Architectural Blueprint, Solution Roadmap, Technology Selection & Implementation, Regulatory Compliance, Risk Management, Cybersecurity, Data Analytics and Configuration Management.

XAVO AG

02/2020 - 03/2023

Bayreuth, Germany

Chief Technology Officer & Chief Architect

Head of the global Software Engineering organization responsible for the Product Management, Research & Development, Technical Support, PMO, Professional Services, DevOps and Cloud Operations (on AWS) of Xavo R3, Xavo's latest generation of cloud-native, GenAI-powered Sample Management/LIMS Platform and Applications I co-founded, architected and released to market, and that enables Pharma, Biopharma & Biotech Labs to digitalize their Laboratory operations in Drug Discovery & Development.

SIEMENS DIGITAL INDUSTRIES SOFTWARE

12/2014 - 04/2019

Tampa Bay Area

Vice President of Software Engineering

Led the Global Software Engineering organization responsible for delivering to market the Siemens Opcenter MOM (Manufacturing Operations Management) software suite that enables Lifesciences, Semiconductor and Electronics manufacturers to implement Closed-Loop Manufacturing (CLM), an Industry 4.0 digitalization strategy integrating manufacturing operations (MES, QMS, APS) with product engineering (PLM), resource planning and logistics (ERP, SCM) and plant automation (HMI, SCADA, DCS, PLC)

CAMSTAR SYSTEMS (now SIEMENS DIGITAL INDUSTRIES SOFTWARE)

01/2007 - 12/2014

Tampa Bay Area

Vice President of Research & Development

01/2012 - 12/2014

Led the global R&D organization through a transformation period from an output- to an outcome-driven mentality by reframing the operating model towards agility and innovation. Transitioned the MES product suite (f.k.a. Camstar Insight) from mature, aging legacy technologies to the new Camstar Enterprise Platform (now Siemens Opcenter Core). At the same time, initiated a full technology to create additional value for our customers by building and releasing a Cloud-based, Big Data, AI/ML-driven analytics platform, tooling & applications to solve Supply Chain quality issues.

Tampa Bay Area

Sr. Director, Platform Research and Technology Architecture

01/2007 - 01/2012

Hired as a change agent by the CEO, I founded and led the Platform Engineering Research and Technology Architecture team responsible for fostering innovation, defining and driving the company's overall Software Architecture and Technology Strategy. Under my leadership, the group engineered and released to market two new major (IDP) Platforms that accelerated the development of major MES, QMS and Big Data Analytics capabilities, fueled growth, increased profit, and eventually attracted prospective investors and buyers.

APPLIED MATERIALS

09/2005 - 01/2007

Chelmsford, MA

Chief Software Architect

As the Chief Architect for the Lifesciences industry, I was responsible for bridging the gap between the business aspiration to consistently win MES software deals (first) in the Medical Device & Diagnostics market, and the software R&D organization's ability to deliver industry-specific capabilities in the context of regulatory compliance, using Brooks' FactoryWorks MES as a baseline. This role required advanced functional and technical skills, and active and effective collaboration with the Executive Team, Industry Strategy, on-shore and off-shore R&D teams, Professional Services, Customers, Prospects and Strategic Partners in achieving the Company's business and technical objectives.

IQVIA

10/1999 - 09/2005

Tampa Bay Area

Solution Architect & Project Manager

Led the end-to-end implementation of IQVIA's leading Quality Management and Compliance System Software (Pilgrim SmartSolve eQMS) projects at fortune 500 companies. Responsibilities included Project Management, Consulting, Solution Architecture, Development, Validation and Delivery of turnkey solutions.

EDUCATION

Advanced Research Studies Dipl. (Postgraduate eq.), Computational Physics	Grenoble INP, France , 1996 - 1997
Dipl.-Ing. (ME eq.), Signal Processing & Remote Sensing	Grenoble INP, France , 1995 - 1997
Master (MS eq.), Electronics & Automation	University of Lille, France , 1994 - 1995
Bachelor (BS eq.), Electrical Engineering	University of Lille, France , 1990 - 1994

SKILLS

Enterprise Architecture | Software Engineering | Platform Engineering | Product Strategy | PMO
Cloud Computing | SaaS | PaaS | Microservices | SOA | EDA | N-Tier | Data Lakehouse | AI/ML Analytics
Discrete/Process Manufacturing | Lifesciences R&D | Quality Management | cGxP | Product Lifecycle Management
SDLC | SAFe Agile | Scrum | Waterfall | GAMP5/CSV | TOGAF
ISA-95 | ISA-88 | FDA 21 CFR Part 11, 820, 210/211 | ISO 9000, [REDACTED] | ISO/IEC 27001
AWS | Azure | .NET | NodeJS | OpenAPI | SQL | Oracle | NoSQL | Kafka | Spark | Docker | Kubernetes | Gitlab | Jira

CERTIFICATIONS

PMP® – Project Management Institute, 2004 (*renewal in progress*)

LANGUAGES

English – Bilingual Proficiency | French – Native

AWARDS & HONORS

#1 MES Software in Complex Discrete Manufacturing – Gartner, 2019

- Siemens OpCenter Execution (f.k.a. Camstar Enterprise Platform), the last generation of MES product I co-founded and released to market under my leadership takes the top spot in the 1st ranking ever published by Gartner and based on an extensive [2-year study & customer surveys on MES Critical Capabilities](#).

Worldwide Hackathon Winner in Manufacturing Ops Management Systems – Siemens, 2018

- Directly managed and advised the winning team on the hackathon project titled "Smart Factory of the Future" and implemented in the context of Industry 4.0. The project delivered a working prototype which applied the concepts and technologies of MES, Industrial IoT, Machine Learning, and Augmented Reality.

Global Frost & Sullivan Award for Customer Value Excellence - Frost & Sullivan, 2016

- Award presented to Siemens for its [Omneo SaaS Solution](#), a big data, AI-driven analytics product that I co-founded and launched in 2014 to address product quality issues across the global Supply Chain.

Clutch Player Award – William Blair & Company, 2014

- Personally recognized for key contribution in successfully closing [Camstar & Omneo acquisitions](#) by Siemens for close to ~\$200M.

Cool Vendor of the Year in Supply Chain Services – Gartner, 2014

- Honored for the ground-breaking innovation Camstar Systems brought to market with the release of Omneo (a.k.a. [Siemens Insight Hub](#)), a Cloud-based, Big Data, AI-driven Analytics product I co-founded from ground-up in 2011 and aimed at detecting and anticipating Supply Chain quality issues faster, easier and cheaper.

Highest Number of Successful Go-Live Award – IQVIA Pilgrim SmartSolve, 2004

Top Consulting Revenue Award – IQVIA Pilgrim SmartSolve, 2001-2004

- Award won for four consecutive years.

Customers Favorite Award – IQVIA Pilgrim SmartSolve, 2001