Exponent®
Engineering & Scientific Consulting

Michael Stypa

Senior Associate | Construction Consulting
Oakland
+1-510-907-5860 | mstypa@exponent.com

Professional Profile

Mr. Stypa has over two years of experience providing business intelligence and project controls support for his clients' electrical distribution portfolio and programs. By analyzing, monitoring, and escalating trends within the portfolio, he has helped clients take data-driven approaches to solving issues related to construction data discrepancies, resource constraints, scheduling and attainment risks, backlogs in the pre-construction phases, and future work planning.

Mr. Stypa understands the importance of cross-functional collaboration. To produce useful and effective business intelligence, his process involves scoping out the issues, collecting key information from stakeholders, and developing accurate and robust dashboards and tools. These tools facilitate conversations between functional managers and executives, resolve discord, and drive accountability, thereby eliminating waste and ensuring the client achieves their goals and commitments.

Mr. Stypa has created various tools to support his clients' business intelligence needs, including developing PowerBI dashboards that analyze work readiness and monitor portfolio health across all phases in the projects' lifecycle, as well as leveraging collaborative platforms that enhance day-to-day operations. Mr. Stypa has spearheaded projects to improve visibility into existing resource levels and future resource planning, including developing a new resource benchmarking data model. In addition, Mr. Stypa is experienced in quality control, program management, cost forecasting, look ahead scheduling, variance analysis, and project closeout.

Prior to joining Exponent, Mr. Stypa had received his M.S in Construction and Engineering Management and M.S.W in Social Work, Management of Human Services from the University of Michigan, Ann Arbor. His Master's program related to lean construction, advanced project planning, life cycle analysis; additionally, Mr. Stypa has specialized research on Social Identity Theory as a mechanism to drive safety on job sites, as well project bids optimization with Monte Carlo simulation.

Mr. Stypa has worked as a project engineer for general contractors in San Francisco Bay Area, Northern Virginia, and the Greater Detroit Area, managing the construction and remodeling of hospitals. The scope of that work included ground-up patient tower construction, lab facility upgrades, and capital improvements. Through his interdisciplinary background, Mr. Stypa is specialized in facilitating collaboration from multiple stakeholders where input from all disciplines is valued and leveraged.

Academic Credentials & Professional Honors

M.S.E., Construction Engineering and Management, University of Michigan, Ann Arbor, 2021

B.S., Civil Engineering, University of Michigan, Ann Arbor, 2019

Prior Experience

Assistant Engineer Intern, Turner Construction Company, 2020

Project Engineer Intern, DPR Construction, 2018, 2019

Project Experience

Spearheaded a multi-phase process to create a resource benchmarking data model. The model serves as a tool to measure current and future year resourcing. Project phasing included data model optimization, quality assurance, functional manager support, and change control. Recurring reviews ensures the tool updates and improves as new information enters the data model.

Developed trackers that optimize the information-collecting process from multiple permitting stakeholders. The tool includes dynamic and automated features that that work at scale for large volume, high budget programs with dynamic project lists.

Provided business intelligence and portfolio management support by analyzing datasets across SQL, Excel, and SAP, isolating specific trends, and present findings using data visualization software (e.g. PowerBI) to support directors to make data-driven decisions. In addition, collaborated with multiple work groups to synthesize business strategies and tailor reports.

Administered operating review meetings, recorded action items and corrective action plans, and worked with action owners to ensure target dates are met.

Led external audit effort to review 600+ electrical distribution assets across multiple regions in Northern California. Worked with internal audit teams, mapping, and construction to identify data inaccuracies, guide field action to collect new data, and resolve issues with closeout documentation.

Developed and maintained multiple financial, schedule, and performance tracking views in user interactive tools built upon SQL and Excel.