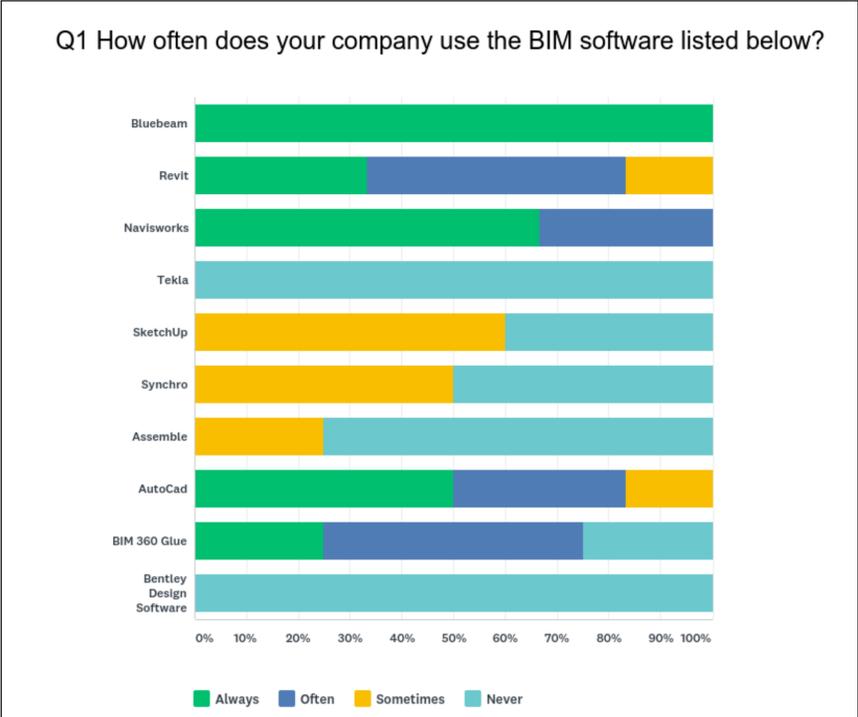


Key Cost Split for Biochemistry Lab facility:
 Architecture ~ 40% & MEP ~ 40%
 (HLW International: Faithful & Gould, 2014)

Application of MEP Contractor's BIM Practices to the Cal Poly San Luis Obispo Construction Management Curriculum

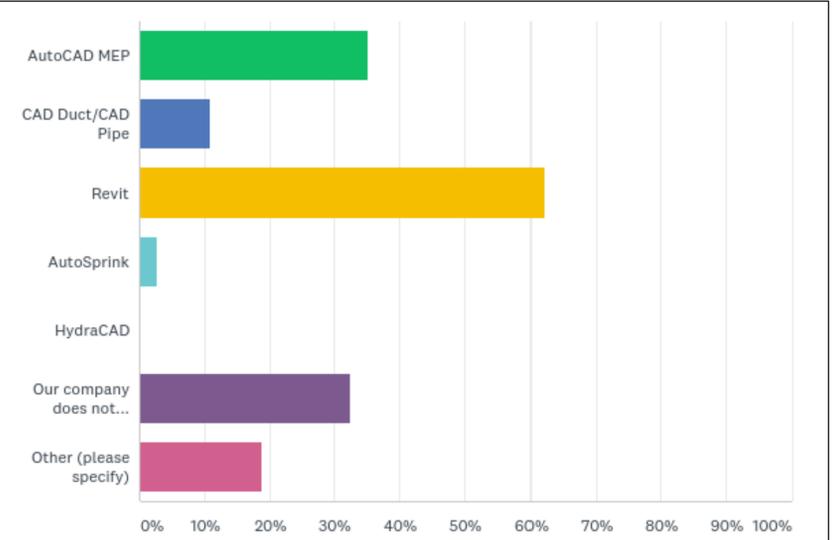
Mechanical, Electrical, and Plumbing (MEP) contractors play such a crucial role in the construction and design phase of building a project, their success or failure can drastically affect the project's overall success. MEP contractor's use of Building Information Modeling (BIM) in the construction industry has grown exponentially over the past decade. This information functions as a foundation for my research into current professional BIM trends as they relate to the Cal Poly San Luis Obispo's (SLO) Construction Management (CM) curriculum.

Understanding how MEP contractors are implementing BIM, in today's industry, helps the CM department prepare the next generation of Cal Poly CM students for success. This research will outline how MEP contractors use BIM in their construction processes. This research will be compared to how the CM department has designed the curriculum for the 'Specialty Contracting' (CM 411) course. An important element of this research is to provide a better understanding of the gaps still existing between the Cal Poly CM department curriculum and the MEP contracting companies desired level of BIM fluency in their employees.



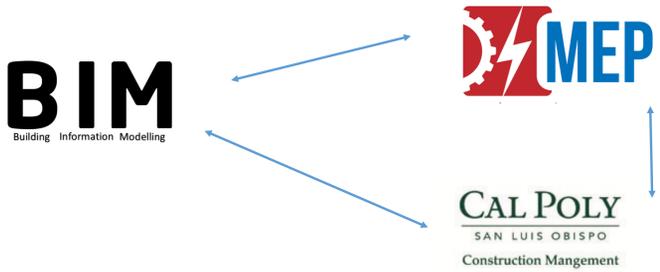
Survey sent MEP Industry, 9 responses.
 (Langstaff, 2018)

What software applications does your company use for MEPP modeling/detailing

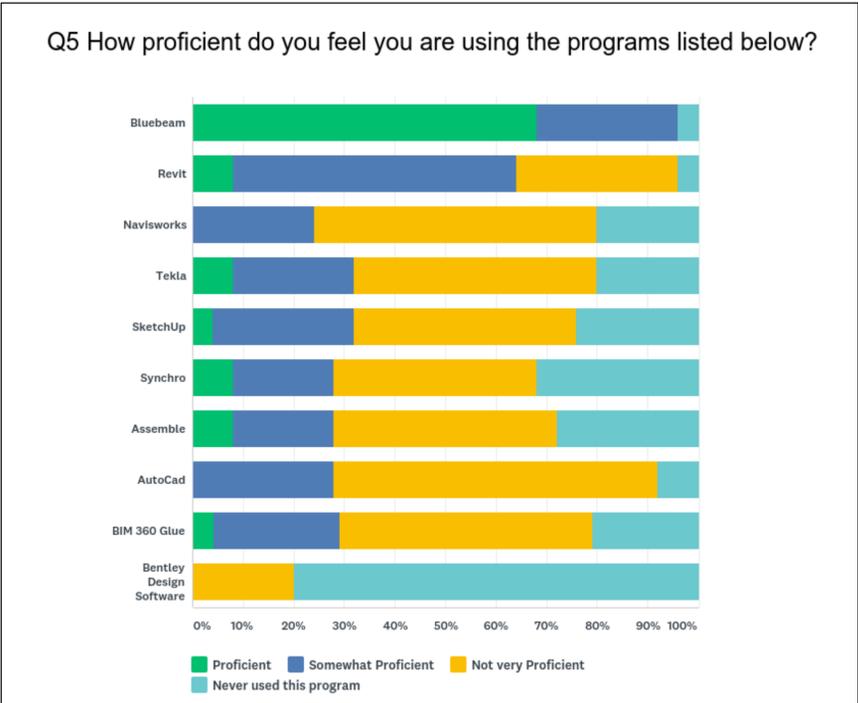


Survey sent to AEC industry, 39 responses.
 (Truebeck Construction, 2018)

Key Words: BIM, implementation, MEP, mechanical electrical plumbing, Construction Management, Cal Poly



Summary Conclusion:
 MEP contractor's utilization of BIM is a complex topic and there are many variables to explain why a company decides to use, or not use, certain software. Based on my findings, fluency in BIM is not an indicator of success in the MEP industry if the goal is to become a PM/PX. Data supports that Cal Poly students are proficient in BIM, but should have more exposure to programs like: Revit, Navisworks, AutoCad, and BIM360 Glue, if they wish to work for an MEP contractor.



Survey sent Students, 25 responses.
 (Langstaff, 2018)