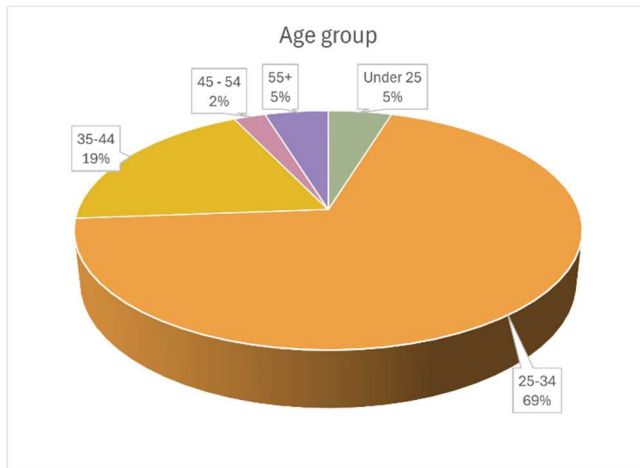


Civil Engineers Past Scale Survey Findings

Age distribution

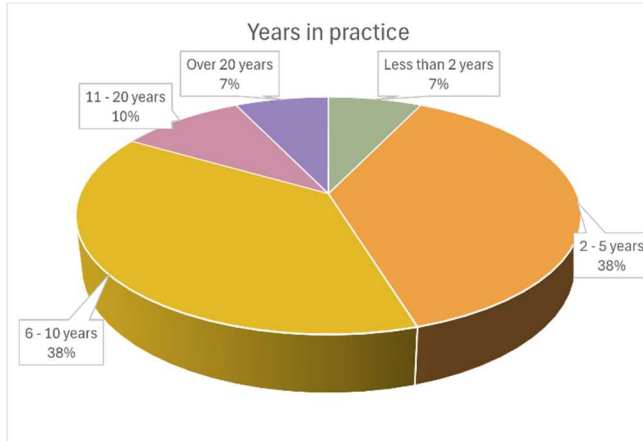


The age distribution of engineers surveyed reveals a workforce dominated by younger professionals, with a striking 69% falling within the 25–34 age bracket. This suggests a vibrant, early-career demographic likely fueled by recent graduates and young practitioners entering the field. The 35–44 age group follows at 19%, indicating a steady but smaller cohort

of mid-career engineers. Notably, representation drops sharply beyond age 44—only 5% are aged 55 and above, and a mere 2% fall within the 45–54 range. This imbalance may point to challenges in retaining experienced professionals, gaps in succession planning, or barriers to long-term career progression. Overall, the data underscores the need for targeted support across age groups—mentorship for younger engineers, incentives for mid-career retention, and inclusive policies that encourage senior professionals to remain active and engaged in the profession.

Years in engineering practice

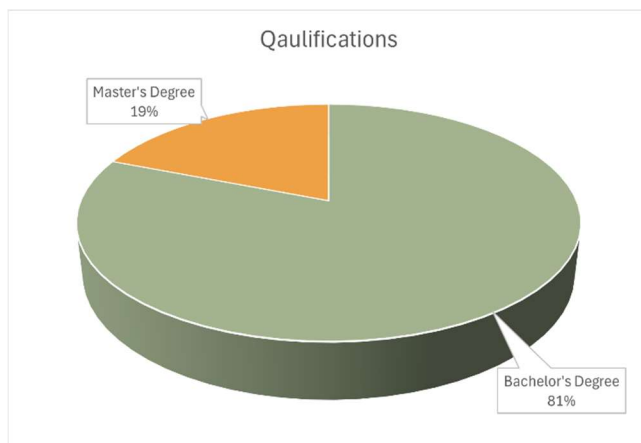
The graph depicting years in practice among surveyed engineers reveals a



workforce primarily composed of early- to mid-career professionals. A combined 76% of respondents have between 2 to 10 years of experience, evenly split between the 2–5 year and 6–10 year categories at 38% each. This suggests a strong presence of relatively new entrants and emerging professionals who are likely shaping the current dynamics of the field. In contrast, only 10% of engineers have 11–20 years of experience, and just 7%

report practicing for over 20 years—indicating a sharp decline in representation among more seasoned practitioners. Similarly, those with less than 2 years of experience also make up just 7%, pointing to a modest influx of newcomers. Overall, the data highlights a profession dominated by younger engineers with limited long-term experience, raising important considerations for mentorship, leadership development, and retention strategies to ensure continuity and institutional knowledge within the engineering community.

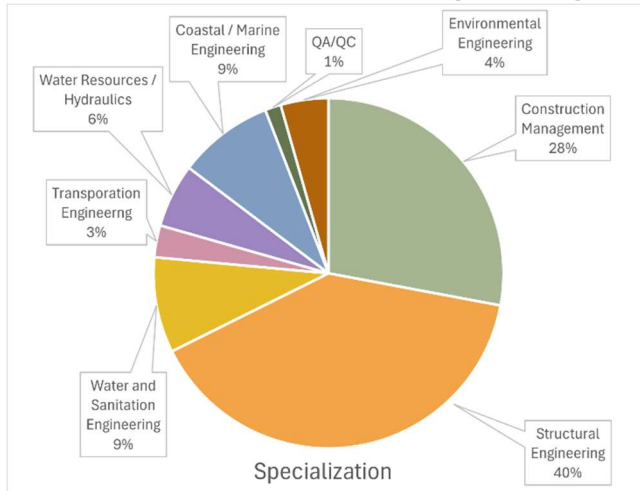
Qualifications



The graph shows that the vast majority of engineers surveyed—81%—hold a Bachelor's degree, while only 19% have attained a Master's degree. This suggests that undergraduate education remains the primary qualification for engineering practice, with relatively fewer professionals pursuing advanced degrees, possibly due to industry norms or limited incentives for postgraduate specialization.

Specialization

The graph on declared specializations among surveyed engineers reveals a strong concentration in structural engineering, which accounts for 40% of respondents.

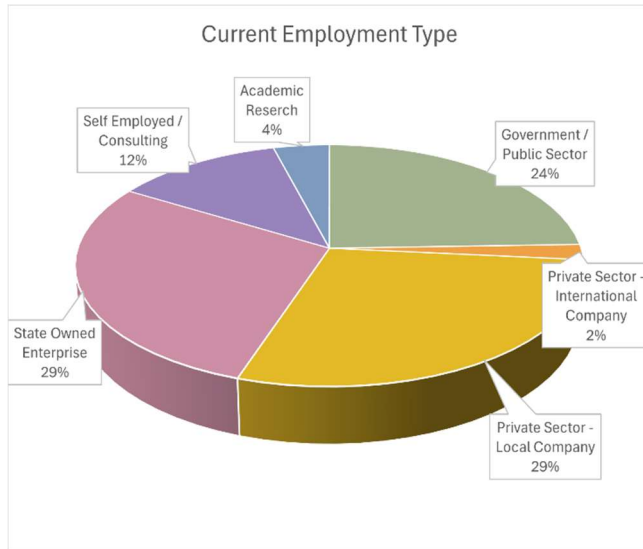


This suggests that structural design remains the dominant focus within the profession, likely driven by ongoing infrastructure development and demand for resilient built environments. Construction management follows at 28%, highlighting the importance of project oversight and execution skills in the field. Together, these two areas represent over two-thirds of the surveyed population. Other

specializations are more modestly represented: water and sanitation engineering and coastal/marine engineering each account for 9%, reflecting niche but vital roles in environmental and public health sectors. Water resources/hydraulics (6%), environmental engineering (4%), and transportation engineering (3%) show limited engagement, possibly due to fewer local projects or specialized training pathways. QA/QC appears at just 1%, indicating minimal focus on quality assurance roles. Overall, the data suggests a workforce heavily oriented toward structural and construction disciplines, with limited diversification across other technical domains.

Employment type

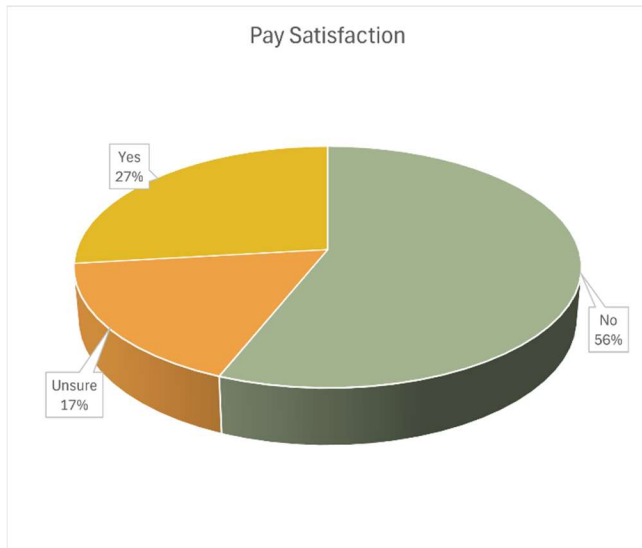
When combining private sector and state-owned enterprise employment in the



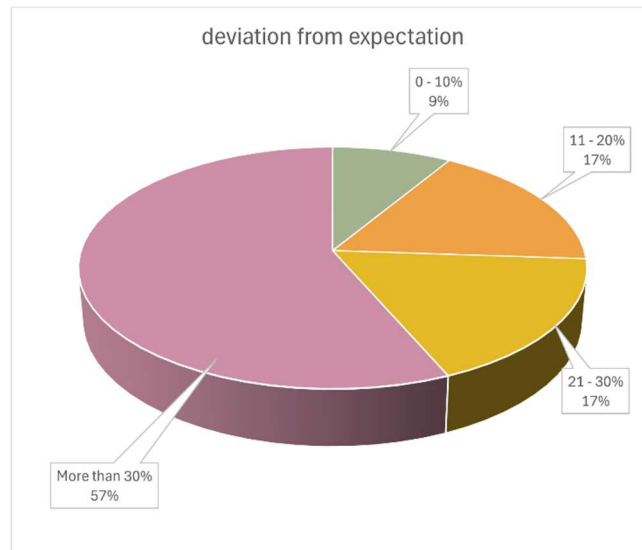
analysis, the data shows that a majority, 33% of engineers surveyed are employed in these commercially oriented sectors. This suggests that a significant portion of the engineering workforce operates within business-driven environments, whether locally or internationally. The government and public sector follows closely at 24%, indicating a strong presence of engineers in civil service and public infrastructure roles. Self-employment and consulting account for 12%, reflecting a growing trend toward

independent practice and flexible career models. Overall, the data highlights a workforce split between commercial and public domains, with room to strengthen private-sector pathways and support entrepreneurial and research-driven careers.

General Satisfaction with pay

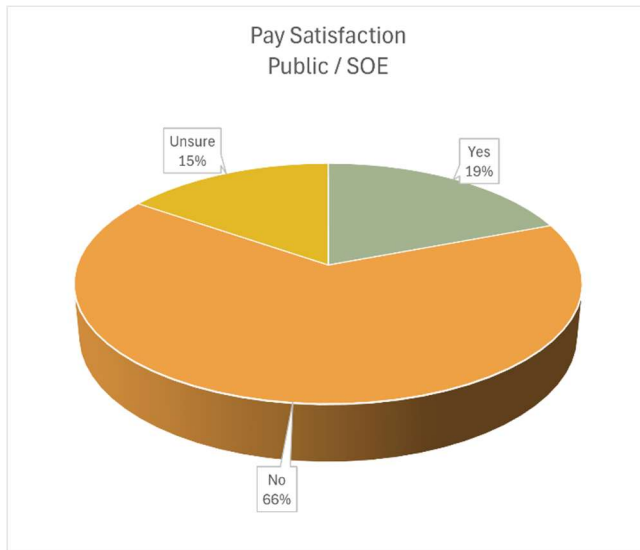


The data shows a small dissatisfaction with the respondents pay. With slightly over a quarter satisfied with their pay, and a significant number seem to be unsure about their pay expectations.



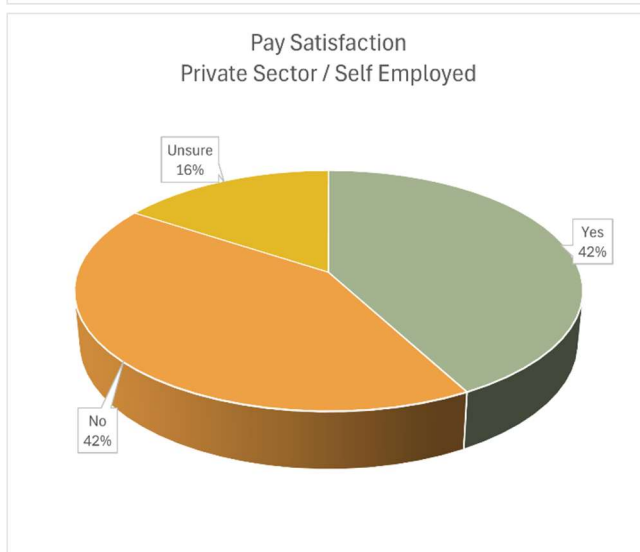
Of those that responded to a dissatisfaction with their pay, a majority indicated that they would like a 30% or more increase in their pay packages.

Pay satisfaction by public / private employment



The comparison between pay satisfaction among engineers in public sector/state-owned enterprises and those in private sector/self-employment reveals a notable disparity in sentiment.

Among public and SOE employees, a significant majority, 66% express dissatisfaction with their pay, while only 19% report satisfaction and 15% remain unsure.



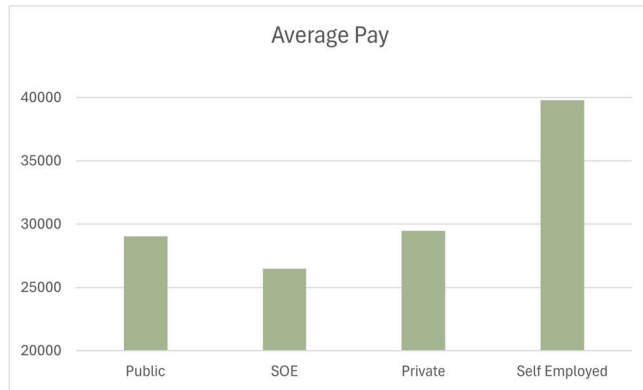
This suggests systemic issues in compensation structures within government-linked roles, potentially contributing to morale and retention challenges.

In contrast, engineers in the private sector or self-employed show a more balanced outlook: 42% are satisfied, 42% dissatisfied, and 16% unsure.

This parity indicates greater variability in earnings, likely influenced by market dynamics, negotiation flexibility, and

entrepreneurial success. While private sector roles may offer higher earning potential, they also carry risks and uneven outcomes. Overall, the data highlights that engineers in public roles are more consistently dissatisfied with their compensation, whereas those in private or independent practice experience a wider range of satisfaction levels, pointing to differing incentives and structural conditions across sectors.

Average Pay by employment Type



The bar chart comparing average pay across employment types shows that self-employed engineers earn the highest, with average pay exceeding 40,000. Public sector and private sector engineers have similar earnings, both slightly above 30,000, indicating comparable compensation despite differing work environments. State-owned enterprise (SOE)

employees earn the least, with average pay falling below 30,000. This suggests that while public and private sector roles offer moderate income levels, self-employment presents greater earning potential, likely tied to project-based work, flexibility, and entrepreneurial success. The lower pay in SOEs may contribute to dissatisfaction and could signal a need for review of compensation structures.