

IEM Employment Survey 2009/2010 Report



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THE IEM Employment Survey was conducted during the second half of 2009. A total of 1183 responses were received out of the 15,000 forms that were sent out, a response that was 12% lower than the survey that was done in 2007/2004. Figures 1 to 4 show the distribution of responses by the IEM Membership Grade, membership with the Board of Engineers, Malaysia, age and gender of participants. Figures 4 to 8 represent the distribution of their employment status, highest degree achieved, categories of discipline, where they had obtained their engineering qualifications and the name of the universities they studied at. The survey results highlighted several interesting points to note and ponder.

For instance, 2.7% or 32 people were employed overseas during the period the survey was conducted. There was a drop in the percentage of those self employed which may reflect the tough economic condition in the country. Only 4.8% of the respondents have obtained a PhD, which suggests that many engineers prefer to

continue practicing instead of pursuing the pinnacle of academics. Alternatively, this could also be attributed to the uncertainty in the world economy at the time, which prompted many organisations to cut down on spending. The 5.1% increase in local graduates compared to 2007 suggests there are more opportunities in local tertiary education, perhaps with the increase of foreign institutions offering engineering courses locally.

It is also interesting to note that 51% of the respondents are of the opinion that the fundamentals of the undergraduate course are adequate for work; 45.9% were taught communication skills as part of the undergraduate curriculum; and 92.3% answered positively when asked if engineering was their own choice. One may ask what happened to the 49% of those who did not think that the fundamentals of the undergraduate course are adequate for work? Are they struggling in their jobs, thinking of changing profession or have taken own initiatives to better equipped themselves? Similarly, with only 45.9%

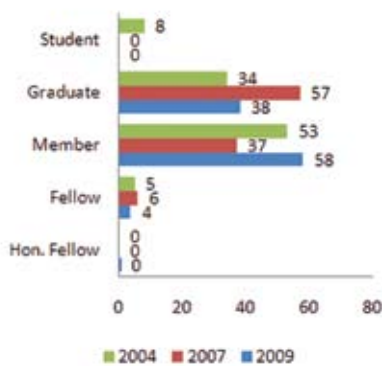


Figure 1: IEM membership grade (%)

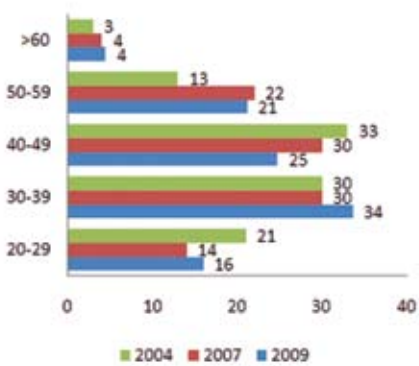


Figure 2: Ages (%)

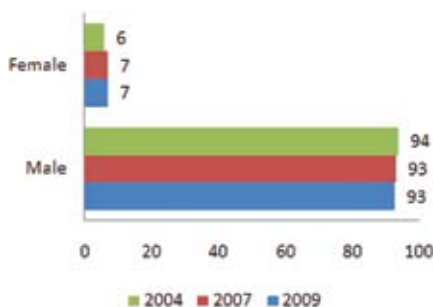


Figure 3: Genders (%)

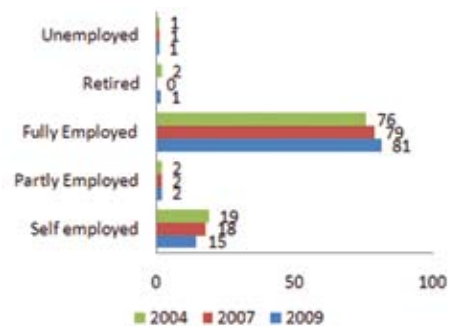


Figure 4: Employment status (%)

being taught communication skills, can it be inferred that the majority would always face problems communicating in the job market?

KEY PROFILES OF RESPONDENTS

The key profiles of the respondents may be summarised as follows:

- 48.2% in the civil/structural discipline
- 57.6% are members of IEM
- 60.6% are members of the Board of Engineers, Malaysia
- 33.4% of respondents are between the age of 30-39
- 92.5% are male respondents
- 7.1% are female respondents
- 81.1% are fully employed
- 14.5% are self employed
- 0.2% are unemployed
- 43.1% are overseas graduates
- 1.4% did twinning programs

MAJOR HIGHLIGHTS

The following are the salient features from the survey results:

- 1) Graduates take an average of **XX** months to secure employment in the job market (**Figure a**)
- 2) More engineers are employed in the **YYY** sectors (**Figure a**)
- 3) The average annual salary in 2008 was lower than those in 2007 (Figure 11)
- 4) Engineers with one to five years of experience fare better in the manufacturing sector than in ICT, while those with 30 years of experience are better paid in the oil and gas sector as well as trading services (Figure 12)
- 5) The research & development sectors pay young engineers better than the rest, while those with more than 30 years of experience are better paid by getting involved at the management level (Figure 13)
- 6) As for the general perception that being self-employed offers better reward, the latter may not be from the financial perspective alone because the average salary was reported to be lower than those under full employment. However, the reward or satisfaction may be in other forms such as better flexibility to manage other activities, especially for those who are active in the community and non-governmental organisations (NGOs) (Figure 14)
- 7) Engineers holding PhD qualifications are generally better remunerated
- 8) Almost 30% of those who participated in the survey considered themselves poorly paid. About 40% indicated that they did not get any encouragement

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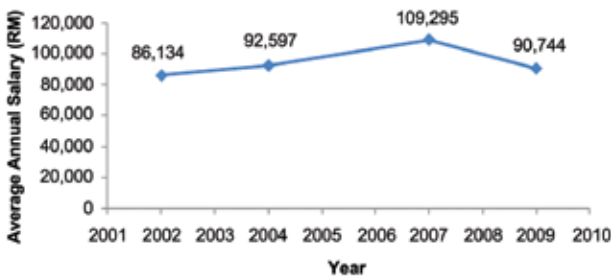


Figure 11: Average annual salary of 2002,2004,2007 and 2009

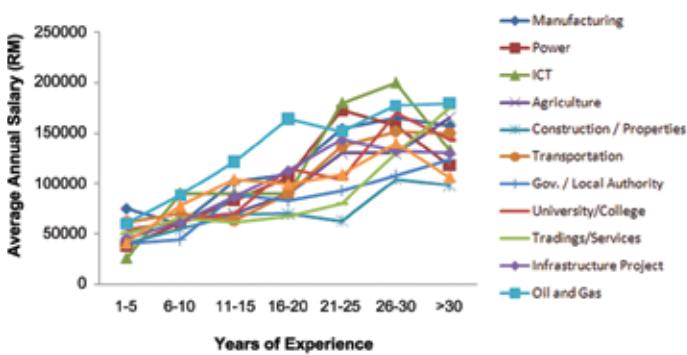


Figure 12: Average annual salary according to years of experience by employment sector

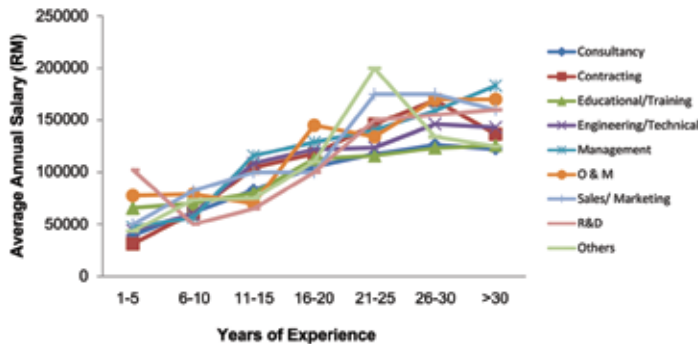


Figure 13: Average annual salary according to years of experience by job description

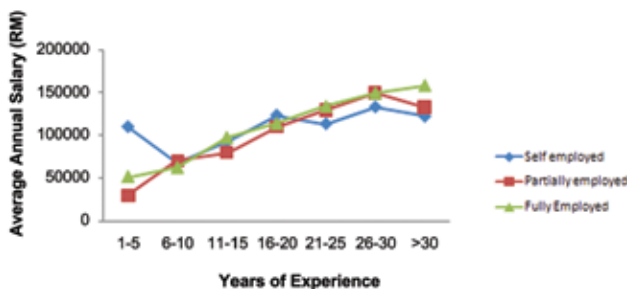


Figure 14: Average Annual Salary According to Years of Experience by Employment Status

to obtain Professional qualification, and more than 20% of this group indicated that they may move to other employment. This will be a lost to the engineering profession which is still in need of many professional engineers

- 9) As for the working condition, about 80% considered their jobs as challenging and competitive. While 78% considered their job stressful, 59% of those participants considered their jobs as rewarding
- 10) The general feedback from the women members is rather disturbing to say the least as it reflects the prejudicial nature of many in the engineering practices. About 27% of the female respondents indicated that they had experienced some forms of sexual harassment, of which 7% experienced sexual harassment at the workplace, either in the office or at site. More should be done to weed out this kind of unacceptable behaviour in the engineering environment
- 11) About 30% of female engineers felt that they were not given due recognition because of their gender although 70% of them were given opportunities to participate in high profile projects
- 12) The majority of the respondents agreed that engineering courses need major improvement to match industry requirements. Teaching professional ethics at the university level and learning an additional language are the other two areas considered as ways to enhance the quality of graduates and the engineering profession
- 13) The majority of the engineers agreed that nuclear power is the way forward for this country provided adequate safety measures are put in place. The respondents also generally agreed for IEM to play a major, if not leading, role in the development of nuclear power in this country.

CONCLUSION

In conclusion, the survey, which was carried out during the global economic downturn, indicated that the engineering profession could be easily affected by the economic performance. The subsequent effect on those employed by the industry is almost a foregone conclusion. Much work still needs to be done to address the issue on the wellbeing of engineers, especially those employed in the 'low paying sector'. Similarly, no stone should be unturned to ensure that women engineers are given equal opportunity as far as employment and roles in carrying out an engineering function is concerned. This survey result has set forth a few action plans for the IEM to consider and implement. ■