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SOFT SKILLS REQUIREMENT FOR QUANTITY SURVEYING GRADUATES

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ABSTRACT

Soft skills, also known as interpersonal or people skills, are personal attributes and qualities that enable individuals to interact effectively and harmoniously with others. They play a crucial role in various aspects of life, including social interactions and work performance. Soft skills complement and enhance an individual's hard skills, which are specific technical abilities related to a particular job or task. Hard skills, or the technical prerequisites for a profession, are complimented with soft skills. Moreover, soft skills like creativity, leadership, critical thinking, communication, time management, teamwork and problem solving are crucial in the workplace, especially in companies that deal with people directly or involve teamwork. They are highly valued by employers when they are hiring new employees because possessing strong soft skills can significantly contribute to an individual's success and overall effectiveness in the job. However, the employers appear hesitant in hiring graduates that lack generic characteristics such as solid communication skills, leadership and teamwork. Therefore, this study conducted to identify the soft skills requirement for quantity surveying graduates. 186 questionnaires survey were distribute via google form to the quantity surveyor graduates and 178 respondent were collected. Then, SPSS version 29 was used to analyse the data and produce the outcome. Based on the findings of the research, it suggests that "responsibility" is a crucial soft skill that graduates in quantity surveying need to possess. This finding highlights the significance of being responsible for every decision and action made by quantity surveyors in their professional roles.

Keywords: quantity surveyor, quantity surveyor graduates, soft skills requirement

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INTRODUCTION

Quantity surveyors play a vital role in various stages of a facility's life cycle, and their work involves a combination of engineering, construction, and economics expertise (Olanrewaju, 2015). As the construction industry becomes more competitive and the demand for quantity surveyors increases, employers are not only looking for technical skills but also value graduates who possess strong soft skills. According to Yap et al (2022), having technical competencies is essential for a quantity surveyor to perform their tasks effectively, but soft skills are equally important in ensuring success in their roles. These soft skills enable quantity surveyors to work efficiently with clients, stakeholders, and project teams, fostering positive relationships and contributing to the overall success of construction projects. In addition, as stated by Mahdzir et al (2021), employers nowadays are looking for graduates who are able to cope with change and well-developed individual.

According to (Mustapa et al., 2022), the challenges faced by recent graduates in finding employment may be attributed to a lack of relevant soft skills competencies. Graduates can overcome challenges by improve their employability skills. According to Abd Rahman et al., (2020), even after a year is over, nearly 60 percent of graduates are still unemployed. The reason of this severe unemployment issue is because of lacks of job skills (Hossain et al., 2018). Shafie et al. (2014), Tang (2019) and Weston (2020) added that to succeed in the quantity surveying industry, graduates should focus not only on developing their technical skills but also on nurturing their soft skills. Continuously improving communication, leadership, and problem-solving abilities can set them apart in the competitive job market and make them valuable assets to employers and construction companies. As the profession continues to evolve, quantity surveyors who embrace both technical expertise and strong soft skills are better equipped to thrive in their careers and meet the demands of a dynamic and competitive industry. Moreover, as stated by Uddin (2021), graduates should develop their soft skills according to current requirement or otherwise the graduates may not be able to find and keep jobs. Hence, the objective of this study is to identify the soft skills requirement for quantity surveying graduates.

LITERATURE REVIEW

Soft skills are personality traits that enhance social interactions, work performance, and interpersonal traits like friendliness, cheerfulness, and social grace. They complement hard skills, which are specialized to a specific task or activity. Soft skills also play a significant role in companies, especially those dealing with people directly. They help individuals adapt and behave constructively, enabling them to handle daily challenges. Soft skills development is crucial for job success, as employers often seek specific skills like creativity, leadership, critical thinking, communication, time management, teamwork, and problem-solving (Patacsil & Tablatin, 2017) . Despite the increasing demand of the labour market, employer still seem to have difficulty in filling several difficulties in filling several vacancies because of the claim that majority graduates are not employable and lack skills (Okolie & Asfa, 2017). Azmi et al., (2018) added that university students have been lacking certain skills such as soft

skills especially problem solving and communication skills, difficulty in applying knowledge and lack of English communication skills. Therefore the quantity surveying graduates need to prepare at least basic soft skills before they enter the working industry. Thus, section will discuss the soft skills required for quantity surveying graduates.

Soft Skill Requirement

The soft skills required by quantity surveying graduates are as follows:

Responsibility

Quantity surveyors must be responsible because they are in charge of project costs, budgets, and financial resources. Besides, they are also in charge of forecasting costs accurately, tracking spending, and ensuring that projects are finished within financial limitations. Furthermore, quantity surveyors are accountable for supplying accurate and dependable information regarding cost to clients, stakeholders, and project teams. Ali et al (2016) supported that the main QS must be able to effectively convey cost estimates, project progress, and financial implications, as it is one of their responsibilities to the client. Therefore, recruiters hire graduates with responsibility skills, as they create positive impact on the work environment. And the end result is a place where leaders respected while employees feel motivated to work (Karusena et al., 2015)

Good Manners

Good manners are essential in the quantity surveying profession, as they contribute to a positive professional image and successful interactions. When dealing with clients, coworkers, and stakeholders, good manners help establish rapport, build respectful relationships, and create a pleasant work environment. Cooperative etiquette, such as active listening and valuing others' contributions, fosters collaboration and a harmonious atmosphere. Graduates who display good manners enhance their professional relationships, contribute to a constructive work environment, and earn trust and respect in their industry. Tang et al. (2019) emphasize that graduates with good manners handle situations graciously, respecting diverse perspectives and offering creative solutions.

Self Confidence

Confidence is essential for quantity surveying graduates as it enables them to believe in their abilities, communicate effectively, take bold actions, tackle challenges, explore opportunities, and make informed decisions. According to Shayan et al. (2019), this confidence empowers them to face obstacles, take on responsibilities, and handle difficult situations with assurance. According to Al Asefer and Zainal Abidin (2021), confident graduates in quantity surveying engage confidently with clients, stakeholders, and project teams, enhancing professional relationships and decision-making. By developing self-confidence, graduates can excel in their careers, build strong professional networks, and achieve lasting success in the field. Furthermore, without self confidence the employees may fear speaking up to share

their ideas and may be uncomfortable while presenting and they may have failed to convince the clients (Buheji & Buheji, 2020)

Critical Thinking

Critical thinking is a vital skill for quantity surveying graduates, allowing them to approach problems in a logical and analytical manner. They can analyze project requirements, evaluate risks, and explore cost-saving options. Joseph et al. (2020) highlight that graduates must critically analyze information from various sources, including project specifications, drawings, and financial data, to make well-informed decisions based on evidence and a deep understanding of project dynamics.

Mustapa et al. (2022) stated that with critical thinking skills, graduates can examine multiple perspectives, weigh pros and cons, and assess potential outcomes. This expertise aids in identifying underlying causes, evaluating potential solutions, and determining feasibility, leading to innovative approaches in resolving project challenges, minimizing disruptions, and optimizing project outcomes.

Professional Ethics and Morals

Adnan et al. (2017) highlight the significance of professional ethics and morality in the quantity surveying profession. Graduates with strong ethical standards exhibit honesty, transparency, and ethical conduct in their interactions with clients, stakeholders, and colleagues. Upholding these values fosters trust, builds a positive professional reputation, and fosters long-term partnerships. As quantity surveying graduates are responsible for tasks such as contract administration, tendering processes, and cost negotiations, adhering to ethical principles like fairness, impartiality, and objectivity ensures equitable practices and instills trust in their professional relationships. In addition, Acs et al. (2020) said graduates must be responsible and show good attributes in working place and any other environment.

Time Management Skills

Quantity surveying graduates must possess effective time management skills to prioritize tasks, allocate time efficiently, and meet deadlines, as emphasized by Yap et al. (2022). Organizing their time allows them to handle various responsibilities and deadlines, ensuring proper attention to all aspects of their work. Accurate planning and scheduling are essential for project success, aiding in resource allocation, identifying bottlenecks, and enabling proactive problem-solving. Time management also equips graduates to handle interruptions and unexpected changes, enabling them to adapt, re-prioritize tasks, and make necessary adjustments. By mastering time management, quantity surveying graduates contribute to project success, uphold their professional reputation, and achieve optimal outcomes in their field. The graduates should practice time management skills because according to Aliksieieva et al (2021), it ensures increased productivity, high quality work, improved confidence in one's ability to do their job efficiently and on time delivery.

Problem Solving

Quantity surveying professionals encounter diverse challenges during the project life cycle, necessitating strong problem-solving abilities to identify, analyze, and address them. These skills enable them to find practical solutions to issues such as cost overruns, contractual disputes, design complexities, and unforeseen changes. As Tang et al. (2019) point out, quantity surveyors must thoroughly study project requirements, financial data, and relevant information to identify the underlying causes of difficulties. Creativity and originality are vital for effective problem-solving, enabling them to devise innovative solutions that reduce costs, enhance efficiency, and mitigate risks. Through their problem-solving skills, quantity surveyors significantly contribute to the success of construction projects and play a pivotal role in achieving project objectives. According to Suarta et al., (2017), to be able to compete in these difficult times, the graduates must be able to find logical solutions to problems and must also be able to find effective solutions.

Teamwork Skills

Adekunle et al., (2019) highlight the significance of teamwork skills in quantity surveying projects. Graduates with strong teamwork abilities can communicate, collaborate, and coordinate effectively within diverse teams. Active listening, clear communication, and constructive feedback help ensure that all team members understand project requirements, specifications, and goals. This leads to enhanced project management, optimized time frames, reduced conflicts, and successful achievement of milestones. Overall, teamwork skills contribute to professional development, learning, and the overall effectiveness of quantity surveying projects. According to Suarta et al (2017), teamwork involves building relationships and working together with others, using several important skills and habits, such as making decisions and respecting different opinions in a healthy way. This explains why many companies want to hire people with team skills. Moreover, Rahmat et al (2018) stated that companies need graduates who can work well with group members and nurture employees who demonstrate the ability to work well in groups and teams.

Organization

Quantity surveying graduates need strong organizational skills to effectively handle extensive amounts of information, such as cost estimation, budgeting, contracts, and project documentation. As emphasized by Shafiei & Said (2012), these skills facilitate efficient project management, task prioritization, time management, and timely completion of assignments. Organizational skills play a pivotal role in project management, accuracy, communication, and adherence to contractual requirements, leading to improved efficiency, precision, and teamwork in quantity surveying projects.

Communication Skills

Effective communication skills are crucial for quantity surveying graduates to effectively engage with stakeholders, including clients, contractors, architects, engineers, and team members. Ali et al (2016) said graduates must grasp project requirements, specifications, and objectives, actively listen, ask questions, and seek

clarification when necessary. They must also communicate complex concepts and technical knowledge in a concise and accessible manner. Writing abilities are essential for project reports, communications, and documentation, ensuring comprehensive and well-documented information. Overall, strong communication contributes to the success of quantity surveying projects and establishes graduates as competent and trustworthy field professionals. Employers often look for graduates with communication skills in the labor market (Khalid et al., 2014). Suarta et al (2017) has the same view point, the ability to communicate is one of the qualities of work skills needed by graduates to successfully enter the working industry. Good communication are required to avoid and resolve conflicts, able to convey and receive information clearly and able to read the audience (Ting et al., 2017).

Leadership Skills

Quantity surveying graduates often hold leadership positions, guiding teams, managing projects, and making critical decisions. According to Kashyap (2019), leadership is the ability to motivate and positively influence others to achieve goals. Strong leadership abilities enable graduates to inspire, encourage, and persuade people to achieve project objectives. Graduates with strong leadership abilities can plan, organize, and oversee project activities, provide clear direction, and ensure project objectives are met efficiently. In times of crisis, strong leadership abilities can steer teams through uncertainty, make sound judgment, and encourage resilience. They can manage conflicts, negotiate settlements, and keep team members motivated during difficult times. Overall, strong leadership qualities are crucial for quantity surveying graduates, resulting in a positive work atmosphere, project success, innovation, and team empowerment. Graduates should develop and lead individual or activities and also addressing challenging situations (Li et al., 2019).

Capability to Work Independently

Joseph et al (2020) emphasize the importance of working autonomously in quantity surveying projects. This allows graduates to efficiently manage their workload, meet deadlines, and contribute to the project's success. Graduates with this ability exhibit self-motivation, self-control, and a strong work ethic. They can prioritize work, manage time, and stay focused on project objectives without constant supervision. Additionally, autonomy improves flexibility and adaptability, as graduates can operate in diverse environments and teams. Graduates who work independently contribute to the project's success by delivering excellent work, adapting to changing conditions, and accepting responsibility for their obligations.

Ability to Teach

Quantity surveying graduates possess expertise in cost estimation, budgeting, and project management (Adekunle et al, 2019). They can share their knowledge with colleagues, junior team members, and stakeholders, contributing to the profession's growth. They can serve as mentors, advisers, and advisers, fostering a supportive work atmosphere and team success. Teaching is crucial for leadership growth, as it allows for knowledge sharing, effective communication, mentorship, and teamwork.

Graduates who teach can build a learning culture, advance their knowledge, and become influential leaders in the field.

RESEARCH METHODOLOGY

The quantitative method will be used to collect the data in this research :

Data Collection

This research uses a questionnaire as a quantitative data collection instrument to gather primary data. The questionnaire is developed based on a literature review, essential for achieving the research objectives successfully. The target respondents are quantity surveyors working in companies registered with the Board of Quantity Surveyor Malaysia (BQSM) in Wilayah Persekutuan Kuala Lumpur. The sampling technique employed is Simple Random Sample, and the sample size is determined using the Krejcie and Morgan table, resulting in 186 respondents from a population size of approximately 360. However, the return respondents is only 178 respondents because of the time constraints in collecting data.

Data Analysis

In this research, SPSS will be used to analyze the data collected from the respondents. The program will conduct an assessment of the data gathered from the distributed surveys. Bar charts and pie charts will be created to visually explain the results summary. Descriptive analysis, including averages, standard deviations, and frequency distributions, will be performed. The data were evaluated using standard deviation and mean procedures to rank the components in order of relevance.

FINDINGS AND DISCUSSIONS

Background of Respondent

Table 1 : Background Of The Respondents

Description	Frequencies	Percentage (%)
1. Company that respondents currently working at		
Quantity surveyor's firm	64	36.0
Contractor's company	40	22.5
Developer's company	23	12.9
Others	51	28.7

2. Age		
20-29 years old	110	61.8
30-39 years old	46	25.8
40-49 years old	15	8.4
More than 50 years old	7	3.9
3. Working experience		
Less than 5 years	108	60.7
5-10 years	53	29.8
10-15 years	9	5.1
More than 15 years	8	4.5

Table 1 show the background of the respondents which is company that respondents currently working at, age of respondents and working experience. Based on the data that were returned from the respondent, it shows that 64 (36.0%) from Quantity Surveyor's Firm, 40 (22.5%) from Contractor's Company, 23 (12.9%) from Developer's Company and 51 (28.7%) from others company such as real estate company, government firm, oil and gas company and more. The highest respondent who are participate in this questionnaire is from quantity surveyor's firm and the lowest respondent who participate in this questionnaire is from developer's company.

The question for age is important to determine the respondent's experience in the industry. The range of age of respondents is categorized into four categories, which are 20-29 years old, 30-39 years old, 40-49 years old and more than 50 years old. From the result above, we can see that the highest respondent is age from 20 to 29 years old which is 110 frequency and 61.8%. The second highest respondent is at the age of 30-39 years old which 46 respondents (25.8%) and respondent with the age 40-49 years old have frequency of 15 and percentage of 8.4%. However only 7 number of respondents who is on the age of more than 50 years old and percentage is 3.9%.

The last for background of respondents is working experience of respondents. From the result obtained, it shows that the highest working experience of the respondent is less than 5 years which is 108 number of respondent and 60.7%. Next, the respondent who have 5-10 years experience is the second highest with the frequency of 53 and 29.8%. Then, the respondent who have 10-15 years working experience represent 9 number of respondent with percentage of 4.5%. The least working experience between the respondent is more than 15 years represent 8 number of respondent and percentage of 4.5%.

Soft Skills Requirement for Quantity Surveying Graduates

Table 2 : Mean and Rank for Soft Skills Requirement for Quantity Surveying Graduates

The Soft Skills Requirement for Quantity Surveying Graduates	Mean	Standard Deviation	Rank
Responsibility	4.68	0.546	1
Self Confidence	4.60	0.576	2
Critical Thinking	4.60	0.605	3
Good Manners	4.60	0.615	4
Professional Ethics and Moral	4.58	0.579	5
Problem Solving	4.54	0.602	6
Time Management Skills	4.54	0.638	7
Organization	4.53	0.621	8
Teamwork Skills	4.53	0.630	9
Communication Skills	4.52	0.622	10
Leadership Skills	4.48	0.666	11
Capability to Work Independently	4.47	0.639	12
Ability to teach	4.44	0.689	13

FINDINGS

According to Table 2, the mean range for soft skills requirement for quantity surveying graduates is 4.44 and 4.68, which is classified as very high in the mean score analysis. The most chosen soft skill by respondents with the highest mean value of 4.68 is responsibility. The second, third and fourth rank are shared with the same mean value of 4.60 by three soft skills requirements which are good manners, self-confidence and critical thinking. However this soft skills then rank by standard deviation which made self confidence in second rank, critical thinking in third rank and good manners in fourth rank. Next, fifth rank with the mean value of 4.58 is professional ethics and moral. For the rank sixth and seventh also shared by another two soft skills requirement with the mean value is 4.54. Also this requirement's rank also determine by the standard deviation which problem solving in sixth rank and time management skills in seventh rank.

Then, the other shared same value of the mean is 4.53, the soft skills requirement involved teamwork skills. However the rank is determined by standard deviation which organization in eight rank and teamwork skills in ninth rank. For the tenth rank is communication skills with the 4.52 value of mean and eleventh rank is leadership skills with the value of mean by 4.48. Next, the capability to work independently is at the rank of twelve with a value of mean is 4.47. Lastly, the last place in the list of soft skills required for quantity surveying graduates is the ability to teach with the lowest mean value which is 4.44.

DISCUSSION

The most chosen soft skills requirement for quantity surveyor graduates is responsibility with the highest mean 4.68. Responsibility is indeed crucial soft skills needed by quantity surveyor graduates. Shafie et al (2014) was agreed that the responsibility is important soft skills for quantity surveyor and quantity surveyors must take ownership of their work and be responsibility for their actions. They should ensure that they deliver accurate and reliable cost estimates, financial reports and project project evaluation. Taking responsibility for their decisions and actions is essential for building trust and credibility with clients and project stakeholders. Overall, responsibility are necessary for quantity surveyor graduates to succeed in their profession.

However, the lowest mean of ability to teach which is 4.44 and this soft skills is stated by Shafie et al (2014) and Adekunle et al (2019) was not agreed by the respondent. Nevertheless, they may have another opinions that make they think that this type of soft skills are not essential to the quantity surveyor. It is because the quantity surveyor only focus with the related skills such as time management, integrity, organization and more.

CONCLUSION

The soft skills of quantity surveying graduates are very important before they enter the working industry, especially responsibility. Working in quantity surveying is not an easy job as they need to hold many roles in the construction industry. Soft skills are essential for quantity surveying graduates in today's professional environment. These skills include effective communication, teamwork, problem-solving, adaptability, time management, emotional intelligence, and leadership. Quantity surveying also needs to possess time management skills, organization and teamwork and collaboration skills. Strong organizational and time management skills are necessary for quantity surveyors to handle multiple projects, meet deadlines, and prioritize tasks effectively. They must be able to manage their time efficiently, maintain accurate documentation, and handle project budgets meticulously. Furthermore, teamwork and collaboration skills are necessary for quantity surveyors to collaborate with multidisciplinary teams and coordinate project activities. They need to work well with architects, engineers,

and contractors to ensure smooth project execution and timely completion. This research is limited to the quantity surveyor only. It is therefore good to expand the research to include the architect and engineer's perspective as recommendation for future investigation. It is because the quantity surveyor's job is required them to also work with the architect and engineer and their opinions might be slightly different from the quantity surveyor. In addition, further research is recommended to examine strategies for improving the soft skills of quantity surveying graduates. This paper aims to establish a significant contribution about requirement of soft skills for quantity surveying graduates and by looking at various literature in the relevant area and also give an awareness to the quantity surveying graduates about the importance of the soft skills for them to prepare before enter the working industry.

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Surat kami : 700-KPK (PRP.UP.1/20/1)

Tarikh : 20 Januari 2023

Prof. Madya Dr. Nur Hisham Ibrahim
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Tuan,

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Kelulusan daripada pihak tuan dalam perkara ini amat dihargai.

Sekian, terima kasih.

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