

Manufacturing Industry Insights: Online Job Vacancies Uncovered in Malaysia

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Introduction

In today's era, individuals utilize the Internet for a multitude of reasons, such as learning, communication, establishing online businesses, searching for employment opportunities, and acquiring knowledge. Besides facilitating access to information, the Internet also aids recruiters in efficiently identifying candidates for vacant positions advertised on official job vacancy sites. According to the Employment Statistics report DOSM 2024, a job vacancy refers to a position that exists and is ready to be filled but remains unfilled. To select suitable candidates for these positions, companies engage in active recruitment practices, which may include posting job listings, issuing announcements, collaborating with employment agencies, and conducting interviews.

Various recruitment strategies exist, encompassing print advertising, college recruiting, job fairs, posters, social media, job boards, and employer websites (Nanthini, 2015). Referring to Nanthini's (2015) study, banners were favored by three (3) out of ten (10) respondents as an effective recruitment method, particularly for positions such as production workers and lorry drivers, which are often in demand by companies. Rises in economic activity can impact the overall number of job openings, with notable effects observed in 2020. The onset of the COVID-19 pandemic led to a decline in job vacancies due to workforce reductions, cost-saving measures, and the closure and layoffs of certain companies or factories. The manufacturing sector accounted for the largest number of total job vacancies, with services and agriculture sectors following behind. Within the manufacturing sector, the sub-sector with the highest number of job vacancies from 2018 to 2022 was in electrical, electronic, and optical products.



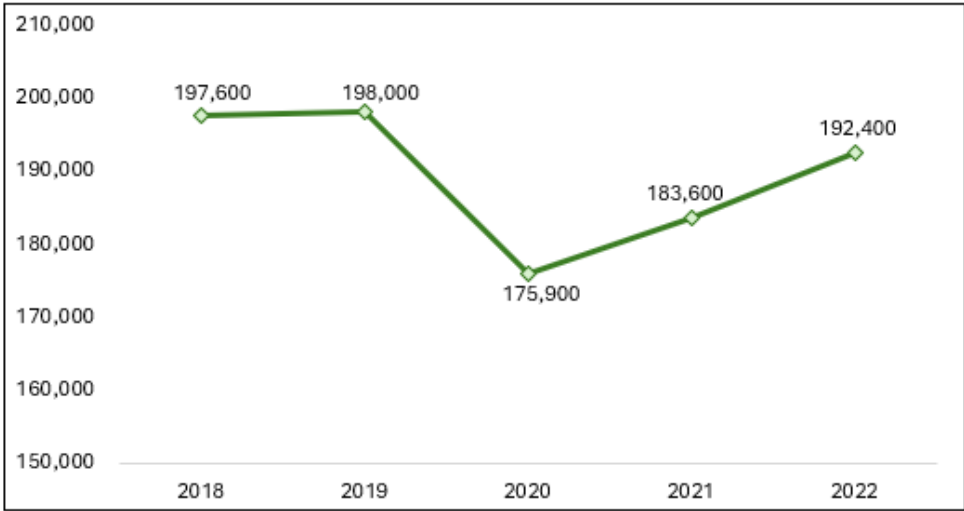
Regarding required skills, the majority of job openings in the manufacturing sector necessitate semi-skilled workers, including clerical support workers, service and sales workers, and other semi-skilled positions. Furthermore, data from ILMIA, DOSM indicate that within the manufacturing sector, the most prominent job vacancies advertised online for skilled categories were in the professional category, while for semi-skilled categories, plant and machine operators, assemblers, and clerical support workers were the most frequently sought after.

Scenario of Job Vacancies in Malaysia

An overview of job vacancies in Malaysia can be found in the Employment Statistics report published annually by DOSM. Based on the report, the highest number of job vacancies was in 2019 with about 198,000 job vacancies, while the lowest was in 2020 about 175,900 job vacancies as shown in **Chart 1**. Before COVID-19 occurred, job vacancies that were offered increased from 2018 to 2019 due to increases in economic activity, which led to an increased demand for workers. During the COVID-19 outbreak, the total number of job vacancies was lower than in other years because most of the firms had ceased operations and laid off their employees. Companies have stopped hiring new employees and reduced the number of working hours for existing employees to allow their companies to continue operating (Lim, 2020). Meanwhile, after the COVID-19 pandemic, the total number of job vacancies in Malaysia increased from 2020 to 2022. According to a press statement by DOSM (2023), Malaysia's economy in 2022 has grown by 8.7 per cent higher than the previous year, which has been largely contributed by the service sector (10.9 per cent), followed by the manufacturing sector (8.1 per cent) and the mining and quarrying sector (3.4 per cent). Hence, COVID-19 affected the total number of job vacancies, especially in 2020.



Chart 1: Total Number of Job Vacancies, 2018 - 2022



Source: Employment Statistics, DOSM

Economic activity, according to DOSM, includes five main sectors namely agriculture, mining and quarrying, manufacturing, construction, and services. The highest number of job vacancies by economic activity recorded in 2022 was manufacturing, which had 107,500 job vacancies, followed by agriculture (31,700), construction (23,300), and mining and quarrying (400), while services (37,400) were the highest in 2018, as shown in **Table 1**. This is because the manufacturing and services sector continue to be the main drivers of the national economy in the 12th Malaysia Plan (Ministry of International Trade and Industry, 2021). However, in 2020, vacancies in the manufacturing, construction, and services sectors decreased compared to other years. This is caused by the implementation of the Movement Control Order (MCO) in March 2020, which also affected economic activity, especially in the manufacturing sector, and decreased exports due to factory closures (DOSM, 2020). This also affects unemployment and reduces job openings.

Table 1: Number of Job Vacancies by Economic Activity, 2018 – 2022

Economic Activity	2018	2019	2020	2021	2022
Agriculture	25,900	28,400	29,500	29,800	31,700
Mining & Quarrying	300	300	400	400	400
Manufacturing	112,700	109,400	97,800	103,600	107,500
Construction	21,400	22,800	21,200	22,000	23,300
Services	37,400	37,100	27,000	27,900	29,400

Source: Employment Statistics, DOSM

Job Vacancies in the Manufacturing Sector

Manufacturing is the process of creating products with the use of tools, labor, machinery, and raw materials. Malaysia's manufacturing industry not only produces raw materials into finished goods but also makes a major financial investment in the nation (Rehman, Au Yong & Choong, 2021). The Eleventh Malaysian Plan, which runs from 2016 to 2022, will incorporate policies aimed at refocusing the manufacturing industry to generate high-value, diverse, and complex products (Strategy Paper 19: Energising Manufacturing Sector, n.d.). In an evaluation of the competitiveness of 17 economies as a manufacturing hub, Malaysia comes in fourth place, ahead of Asian nations like China and Japan (Klynveld Peat Marwick Goerdeler, 2020). Results in **Table 2**, **Chart 2**, and **Table 3** are established based on the Malaysia Standard Classification of Occupations (MASCO), which is the national standard for occupational classification in this nation.

Table 2: Number of Job Vacancies by Sub-sectors in Manufacturing, 2018 - 2022

	Sub-sector	2018	2019	2020	2021	2022
1	Food processing, beverages & tobacco products	16,300	12,300	13,300	12,400	13,500
2	Textiles, wearing apparel & leather products	3,800	4,100	3,100	2,900	3,200
3	Wood products, furniture, paper products & printing	15,500	17,200	10,300	12,800	13,500
4	Petroleum, chemical, rubber & plastic products	24,600	20,700	18,400	19,900	20,600
5	Non-metallic mineral products, basic metal & fabricated metal products	17,400	14,400	12,900	14,100	13,800
6	Electrical, electronic & optical products	24,700	30,200	31,000	31,900	33,100
7	Transport equipment, other manufacturing & repair	10,400	10,400	8,700	9,500	9,800
	Total	112,700	109,400	97,800	103,600	107,500

Source: Employment Statistics, DOSM

Table 2 displays the number of job vacancies in manufacturing sub-sectors during the past five years, from 2018 to 2022. The cumulative number of vacancies shows a lower number in 2020 but rises from 97,800 to 107,500 in 2022. The manufacturing sub-sector in Malaysia continues to have the largest number of job vacancies in the electrical, electronic, and optical product categories compared to others.

In Malaysia, occupation is classified according to the MASCO 2020, which is based on the International Standard Classification of Occupations 2008 (ISCO-08). This classification was improved in line with the transformation of the work process, areas of specialization, and the complexity and dynamics of skills and tasks. The occupation is categorized into nine (9) categories. The category of occupation is regrouped into three (3) levels of skills as shown in **Table 3** below.

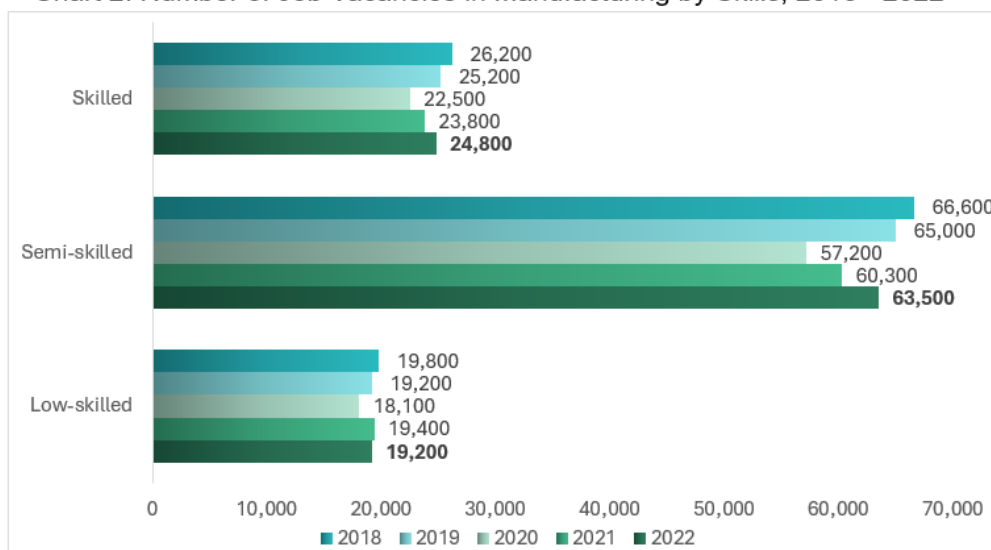
Table 3: Categories of Skills

Categories of Skills	MASCO 2020
Skilled	1. Managers 2. Professionals 3. Technicians and associate professionals
Semi-skilled	4. Clerical support workers 5. Service and sales workers 6. Skilled agricultural, forestry, livestock and fishery workers 7. Craft and related trades workers 8. Plant and machine operators and assemblers
Low-skilled	9. Elementary occupations

Source: Employment Statistics, DOSM

Chart 2 indicates that the manufacturing sector requires a large number of semi-skilled workers. It seems that there is an obvious rise in skilled and semi-skilled job vacancies from 2021 until 2022. According to **Table 2**, semi-skilled workers include clerical support staff, service and sales personnel, skilled workers in agriculture, forestry, livestock, and fisheries, craft and related trades workers, and operators and assemblers of plant and machinery. Skilled workers include managers, professionals, technicians, and associate professionals.

Chart 2: Number of Job Vacancies in Manufacturing by Skills, 2018 - 2022



Source: Employment Statistics, DOSM

Job Vacancies Advertised Online in the Manufacturing Sector

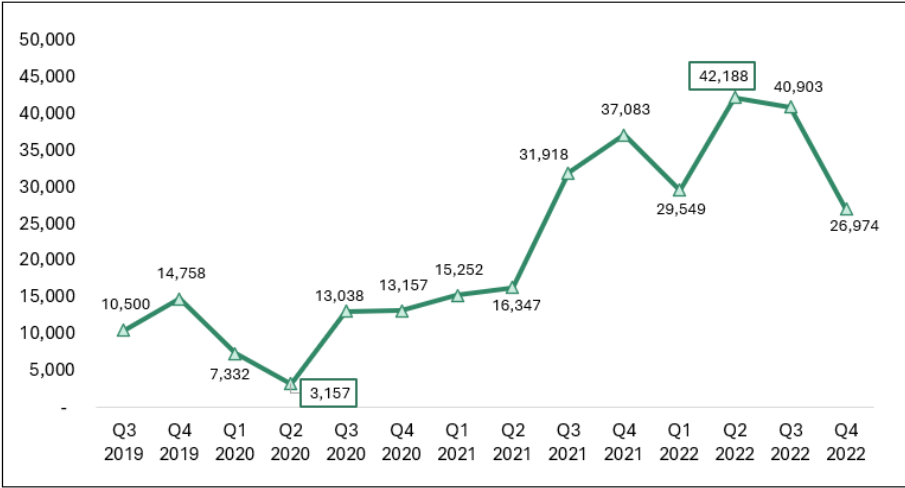
Online job boards offer significant assistance to job seekers by facilitating the discovery of available positions that match their criteria and building connections with recruiters. Various social media platforms serve as valuable sources regarding online job openings. They serve as digital showcases, showcasing individuals' skills, accomplishments, and professional backgrounds. Maintaining a carefully crafted online profile in a saturated job market can enhance visibility and increase the likelihood of being noticed by potential employers. In addition, it is essential for establishing trust and nurturing professional relationships.

Chart 3 displays the number of job vacancies advertised online according to each year by quarter. The upward and downward trends have been shown from 2019 to 2022. The trend shows a decrease (78.6%) in the second quarter of 2020, which represents the lowest number of job vacancies advertised, especially during the COVID-19 phases. However, this trend shows a gradual increase from the third quarter of 2020 to the fourth quarter of 2021. The highest number of job vacancies advertised online in manufacturing was recorded in the second quarter of 2022.

Hensvik, Barbanchon and Rathelot (2021) have found that the COVID-19 pandemic has a large negative impact on economic activity, including the labor market. The number of job vacancies posted online in Sweden and Europe has dropped by 40%.



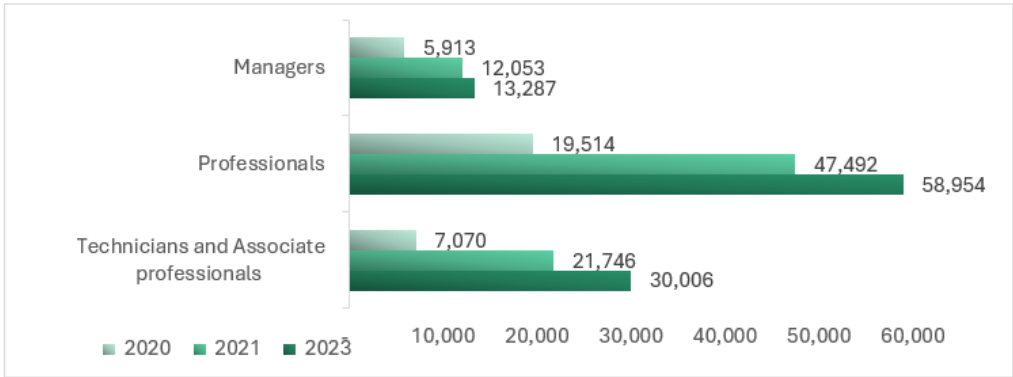
Chart 3: Number of Jobs Vacancies Advertised Online in the Manufacturing Sector, Q3 2019 – Q4 2022



Source: Big Data Analytics, Job Market Insights, ILMIA, DOSM

The level of skills may be used to determine the qualifications for the new position. The number of job vacancies advertised online by skilled category is displayed in **Chart 4**. In 2023, professionals represented the largest number of job advertisements, at 58,954, indicating more experts are being hired at present. In 2020, there were 5,913 job advertisements in the manager category, which was the lowest amount. The COVID-19 pandemic may be the reason for the decline in hiring at that time.

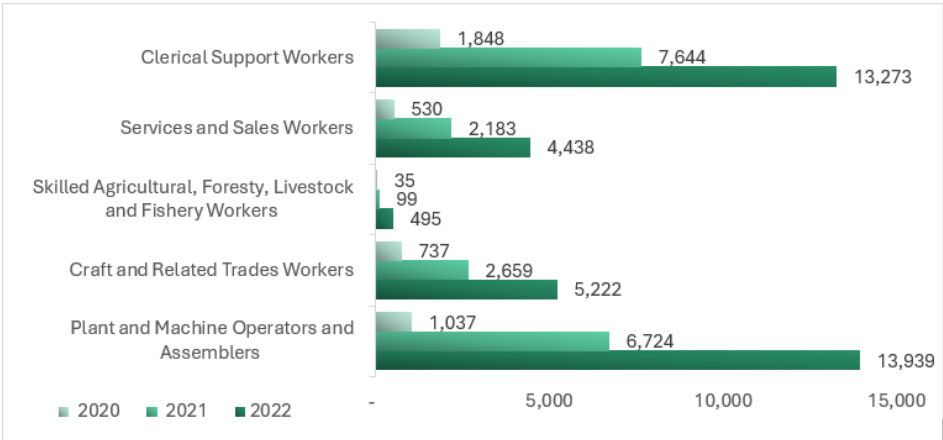
Chart 4: Number of Job Vacancies Advertised Online by Skilled Category, 2020 – 2022



Source: Big Data Analytics, Job Market Insights, ILMIA, DOSM

The semi-skilled job category refers to a level of proficiency in a particular occupation that requires some training or experience. **Chart 5** displays the highest number of job vacancies advertised online in the plant and machine operator category in 2022. There is a slight difference in the clerical support workers category, which represents the second-highest value in the graph.

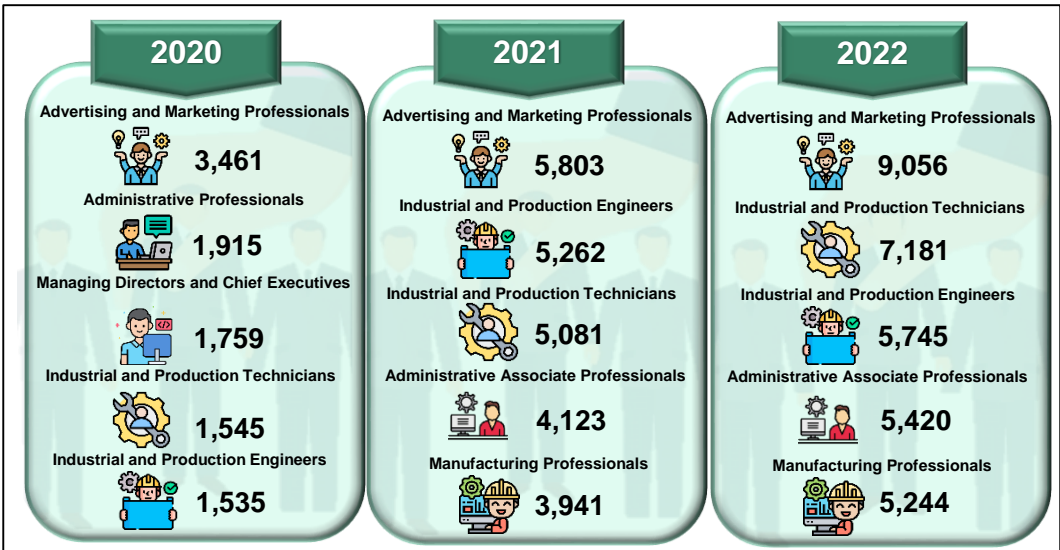
Chart 5: Number of Job Vacancies Advertised Online for Semi-skilled Category, 2020 - 2022



Source: Big Data Analytics, Job Market Insights, ILMIA, DOSM

There is a list of 402 occupations based on four (4) digits, in MASCO 2020 in Manufacturing, 224 occupations were in the skilled category and 178 occupations were in the semi-skilled category. Throughout the years 2020 to 2022, the occupation of Advertising and Marketing Professionals stood out with the largest number of job vacancies advertised, escalating from 3,461 in 2020 to 9,056 in 2022, as stated in **Figure 1**. In contrast, Administrative Professionals, Managing Directors, and Chief Executives experienced relatively stable demand, with modest fluctuations across the years. Industrial and Production Technicians saw a notable increase in demand, peaking at 7,181 vacancies in 2022, compared to 1,545 in 2020. Meanwhile Industrial and Production Engineers maintained a strong presence throughout.

Figure 1: Top 5 Job Vacancies Advertised Online in Manufacturing by Skilled Category, 2020 – 2022

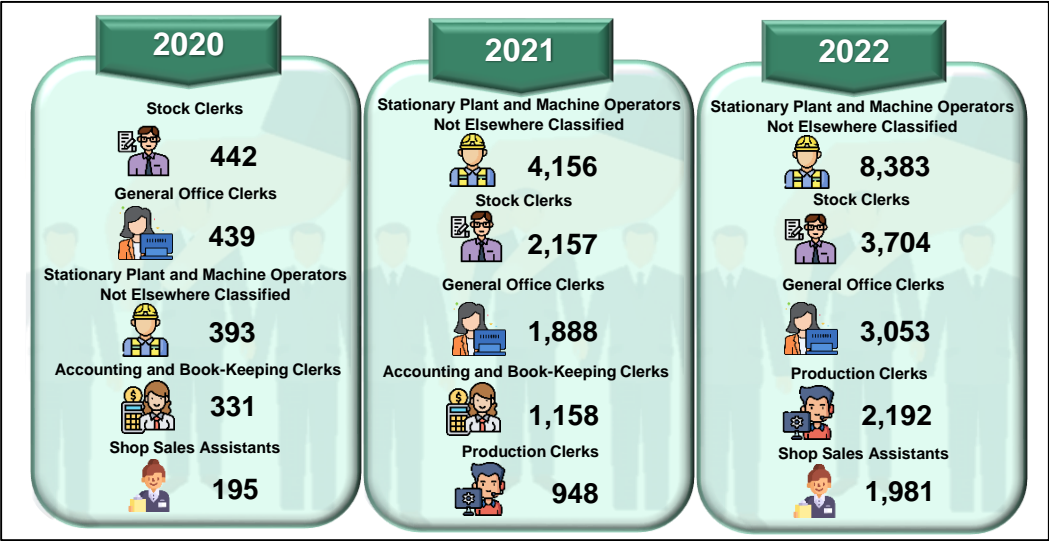


Source: Big Data Analytics, Job Market Insights, ILMIA, DOSM



Based on **Figure 2**, the demand for Stationary Plant and Machine Operators not Elsewhere Classified exhibited remarkable growth, escalating from 393 vacancies in 2020 to 8,383 in 2022. Stock Clerks also experienced significant expansion, nearly doubling from 442 vacancies in 2020 to 3,704 in 2022. General Office Clerks saw a notable rise in demand, maintaining consistent vacancies throughout the years. Accounting and Book-Keeping Clerks remained sought after, though there was a slight decrease in vacancies from 2021 to 2022. Production Clerks emerged as a new area of demand, with vacancies steadily increasing each year from 948 (2021) to 2,192 (2022). Conversely, Shop Sales Assistants witnessed fluctuations in demand, peaking in 2020 and showing a slight decline thereafter.

Figure 2: Top 5 Job Vacancies Advertised Online in Manufacturing by Semi-Skilled Category, 2020 – 2022



Source: Big Data Analytics, Job Market Insights, ILMIA, DOSM

Conclusion

This study has obtained the trend of job vacancies in the manufacturing sector from 2018 to 2022. Even though there was a decrease in labour demand due to the significant economic downturn caused by the COVID-19 pandemic in 2020, manufacturing continued to be the primary source of job demand in Malaysia. While the manufacturing sector, which holds the majority of employment, faced a substantial decline during the pandemic, it has not completely recovered to its pre-pandemic level yet. Despite this, employment in the sector has seen gradual growth.

Malaysia has successfully attracted significant investments in its manufacturing sector, thanks to its diversified economic activity, robust manufacturing infrastructure, well-developed infrastructure and connectivity, proactive government policies, and diligent workforce. Within the manufacturing sector, there are various skilled and semi-skilled job roles crucial for the success of manufacturing professionals.

According to this study's findings, the highest number of job vacancies advertised online are in semi-skilled categories compared to others. Semi-skilled occupations entail positions that require a certain level of fundamental understanding, experience, or training for effective performance. In today's job market, utilizing online job vacancies has emerged as one of the most efficient methods for securing employment, surpassing traditional approaches.

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