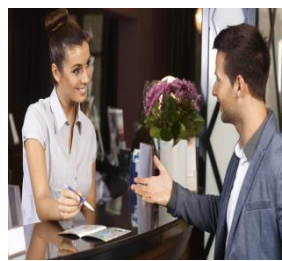


HUMAN RESOURCES DEVELOPMENT FUND (HRDF) INDUSTRIAL INSIGHTS REPORT

HOTEL
FOOD AND BEVERAGE SERVICES
FOOD AND BEVERAGE MANUFACTURING





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GENERAL OVERVIEW

HRDF Industrial Insights Report is intended to share the latest training related updates and insights for various industries in Malaysia. More importantly, the report will be crucial for HRDF and other related stakeholders to learn from the industries on their human capital issues and take measures to improve, and thus contribute to more effective human capital development for the nation. This report will highlight the general industry outlook, training trends under HRDF and employers' qualitative feedback on training. Among the contents on industrial insights are; the importance of industry, training overview, industry demographics, related skills areas, academic qualification of current workforce and challenges in training and their impacts.

Instead of taking the traditional social science research approach, the method for this report adopted an action research approach inspired by Kurt Lewin's process, with the aspiration of inducing changes in HRDF to better meet the changing needs of employers registered under HRDF. HRDF's internal data as well as selected employer's qualitative feedback, insights and recommendations are provided for the reader's enlightenment.

Nevertheless, it should be noted that since the contents of this report are confined to the context of the selected HRDF subsectors and their registered employers, there is a limitation on the extent of how the contents can be generalized to the overall industries.

This issue focuses on these three (3) industries:

-  Hotel
-  Food and Beverage Services
-  Food and Beverage Manufacturing

GENERAL OUTLOOK

GDP: DIRECT CONTRIBUTION

Malaysia’s tourism sector is one of the 12 National Key Economic Areas (NKEAs) and the direct contribution of Travel & Tourism industry to the national GDP was RM65.7 billion which was 4.8% of total GDP in 2017.

Source: Travel & Tourism Economic Impact 2018 Malaysia

IMPORTANCE OF THE INDUSTRY

The scope of the tourism management industry is growing concurrently with the world’s expanding economy. The number of hotels in Malaysia has risen gradually over the past 10 years until 2017. The data from the National Property Information Centre (Napic) showed that the existing supply of hotels as in 2017 was a total number of 3,126 hotels (246,564 rooms), which increased by 921 hotels or 41.8% from the total of 2,205 hotels (151,904 rooms) recorded in 2007.

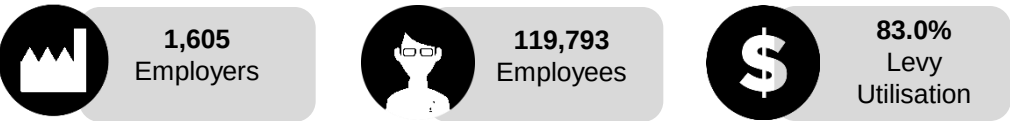
TRAINING OUTLOOK

OVERVIEW

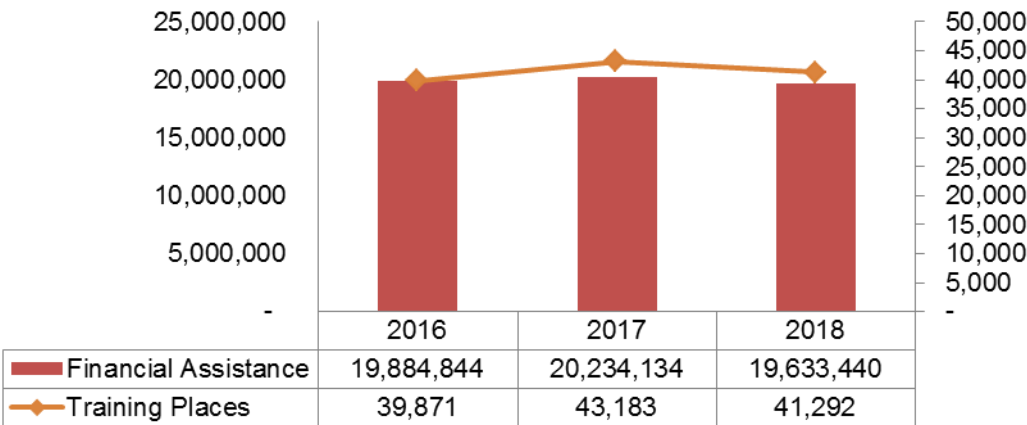
Definition: In general, hotel refers to the provision on a fee basis, lodging, in hotels, inns, boarding-houses, rent houses, chalets, resorts or other similar places, either open to the general public or restricted to members of a particular organisation.

Source: Pembangunan Sumber Manusia Berhad Act 2001

DEMOGRAPHIC PROFILE OF HOTEL SUBSECTOR REGISTERED UNDER PSMB



There were 1,605 registered employers with 119,793 employees in the Hotel industry registered with Pembangunan Sumber Manusia Berhad (PSMB). The total establishments comprise 74.0% of Small and Medium Enterprises (SME) and 26.0% of large employers. In terms of levy utilisation status, the Hotel industry expanded up to 83.0% of the total levy collected. The detailed breakdown of training places and financial assistance approved for the Hotel industry starting from the year of 2016 to 2018 are as per the chart below:



QUICK TAKEAWAYS
AND HIGHLIGHTS

Tourism is one of the world’s largest industries, with over 313 million jobs worldwide, or 9.9% of total direct or indirect employment in 2017.

Source: Travel & Tourism Economic Impact 2018 Malaysia

Training trend of Hotel Industry was consistent with the average of 83% levy utilisation over three (3) years. On the contrary, out of 119,793 employees registered, only 34% of them participated in training programmes. Although Hotel is categorized as an active subsector, PSMB should give more focus especially on Small and Medium Hotels to encourage them to develop their human capital.

All information (in tables, charts and analytical text) are derived from PSMB internal database (grant and details of employers) for year 2018.

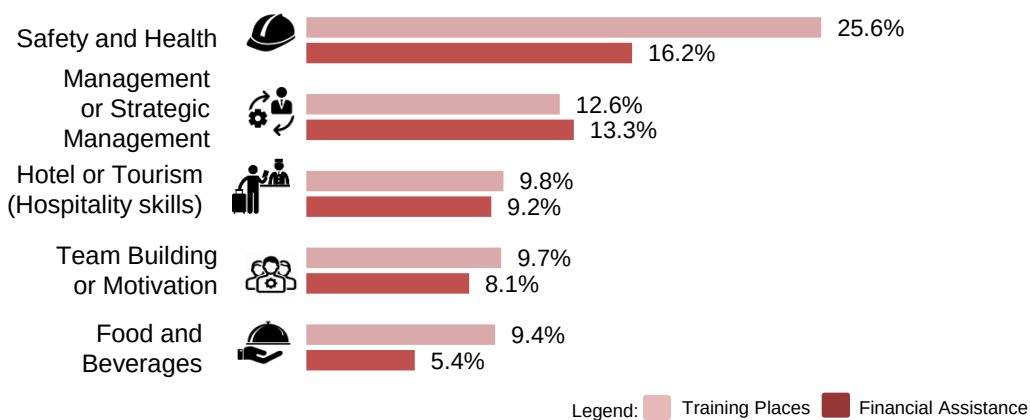
NUMBER OF TRAINING PLACES BY STATE OF EMPLOYERS

							
KL	Selangor	Pahang	Sabah	Penang	Johor	Kedah	Melaka
10,547 (25.5%)	5,604 (13.6%)	4,960 (12.0%)	4,026 (9.8%)	3,840 (9.3%)	3,161 (7.7%)	2,152 (5.2%)	1,735 (4.2%)
							
Sarawak	N.Sembilan	Perak	Terengganu	Putrajaya	Labuan	Kelantan	Perlis
1,517 (3.7%)	1,194 (2.9%)	891 (2.2%)	759 (1.8%)	616 (1.5%)	144 (0.3%)	110 (0.3%)	36 (0.1%)

The figure above outlines the number of training places attended by the employees of Hotel industry, according to states . The highest representation of training places was from Kuala Lumpur (25.5%), followed by Selangor (13.6%) and Pahang (12.0%). Overall, there were 41,292 training places approved in year 2018 for this industry.

SKILL AREA

Most of the employers in this industry require their employee to have Safety and Health skills. On the other hand, there are higher expectations for the Team Management or Strategic Management skills, followed by Hotel or Tourism (Hospitality skills), Team Building or Motivation as well as for Food and Beverage. The chart below shows the distribution of skill areas according to training places and financial assistance approved.



Below are the public type course fees per training day approved under this industry, divided into three (3) categories:

Courses Cost: 90th Percentile

- Adaptive Leadership: Leading an Agile Workforce for the 21st Century RM1,300 (1 day)
- Digital Marketing Masterclass RM1,300 (1 day)
- Employment Insurance System Act 2017 and its Regulation RM1,300 (1 day)

Courses Cost: Median

- Finance Bootcamp RM464 (1 day)
- Transfer Pricing, Tax Audits & Investigations RM464 (1 day)
- Amalan Persekitaran Berkualiti 5S RM450 (1 day)

Courses Cost: 10th Percentile

- Update on GST Transitions & SST + Income Tax Common Mistakes and Audit Findings RM27 (1 day)
- Food & Beverage Cost Control RM26 (1 day)
- Kursus Pengendalian Makanan RM25 (1 day)

QUICK TAKEAWAYS
AND HIGHLIGHTS

The statistics show that the employers located in major states that contributed to the tourism industry (e.g. KL, Selangor, Pahang, Sabah and Penang) have higher rate of participation in training. As there is an indication of correlation between hotel and tourism; thus, training in hotel industry has corresponded accordingly. Therefore, the likelihood of trainings in Hotel Industry is more encouraged within an active tourism environment.

4.0% of programmes are offered for professional certificates. More certification based programmes are needed to upskill the workers in the Hotel Industry.

Three (3) future skillsets required for this industry are as follows:

- People Management
 - Statistical Analysis & Data Mining
 - Revenue Management
- Source: Skills Framework for Hotel and Accommodation Services by Skills Future: Singapore Workforce Development Agency, 2016

All information (in tables, charts and analytical text) are derived from PSMB internal database (grant and details of employers) for year 2018.

**QUICK TAKEAWAYS
AND HIGHLIGHTS**

There is an indication that all level of occupations in the Hotel subsector requires Communication Skills as part of their Non-Technical area of skills.

All information (in tables, charts and analytical text) are derived from qualitative survey entitled "HRDF Training Needs Survey".

It should be noted that the empirical results reported has limitations as it does not cover all the employers within the selected industries.

HOTEL

Report Overview

FEEDBACK FROM SURVEY

A qualitative survey was conducted within the hotel industry with an objective to identify individually the current skills and training needed for the industry and the future challenges, training needs and their impact on the industry caused by external factors (e.g. technology disruption). Employers from both large and SMEs responded to the survey. It should be noted that the empirical results reported has limitations as it does not cover all the employers within the selected industries.

SKILL AREA

The list below reveals the top five (5) areas of skills or training needed by some of the employers in Hotel industry for technical and non-technical skills according to job positions (by MASCO). It shows that this subsector requires the employees to obtain relevant occupational or industrial specialized and technical skills.

MASCO	TECHNICAL	NON-TECHNICAL
Skilled Workers	1. Data Analysis 2. Culinary 3. Food and Beverage Services 4. Guest Interaction 5. Maintenance Engineering	1. Communication Skills 2. Customer Service Skills 3. Leadership Skills 4. Managing Workforce 5. Supervisory Skills
Semi-Skilled Workers	1. Housekeeping 2. Kitchen Helper 3. Computer Skills 4. Gardening 5. Hospitality	1. Teamwork Skills 2. Project Management Skills 3. Decision Making Skills 4. Emotional Intelligence 5. Critical Thinking Skills
Low Skilled Workers	1. Administrative/Clerical 2. Cleaning Operation for Stewarding 3. First Aid Training 4. Food Handling 5. Front Office	1. Communication Skills 2. Customer Service Skills 3. Problem Solving Skills 4. Teamwork Skills 5. Presentation Skills

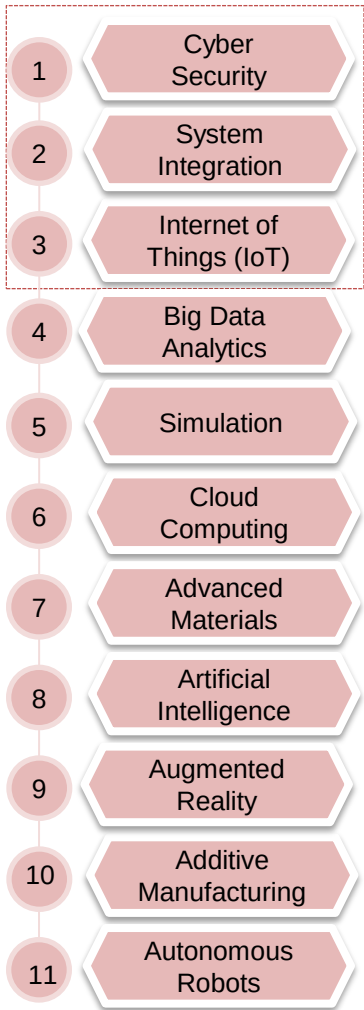
Based on the above list, there is an indication that employers within this sub-sector require their professionals and management to be well-rounded in diverse skills from technical to non technical skills.

The respondents also noted that the most needed technical skill for this subsector is "Data Analysis" skills adding to a specific industry skills such as "Housekeeping", which has been the top rated skills in semi-skilled job categories. One of the observation that can be highlighted was the concerns of respondents on the emergence of Industry 4.0 in this subsector which may cause disruptions. The hotel industry is one of the data rich industry that captures huge volume of different types of data, including video, audio and web data where the effective use of analytics might contribute to the future industry's growth. Respondents from the Hotel industry have given top priority to IR 4.0 type skills.

Likewise, "Communication Skills" are the most preferred non-technical skills among all the job categories. This is relevant as communication plays a very important role in the hospitality industry. The customers are not only paying for the food, room, or product, but they're also paying for the service, and communication as an integral part of service.

INDUSTRY 4.0

As the hotel industry is currently amidst a technological transformation which will fundamentally change the way people live and work, the expectations on skill sets become much higher. It is difficult to predict precisely how this transformation will impact different industries and countries.



Based on the feedback received, for instances, 51.2% of the respondents require their employees to be skilled in “Cyber Security”, “System Integration” and “Internet of Things (IoT)” areas to support the revolution.

The respondents noted that the most important pillar in Industry 4.0 is “Cyber Security” as the Hotel industry was a popular target for cyber attacks with access to customers’ financial data. Therefore, many hospitality companies are reconsidering their cyber security infrastructure to reduce the number of attacks.

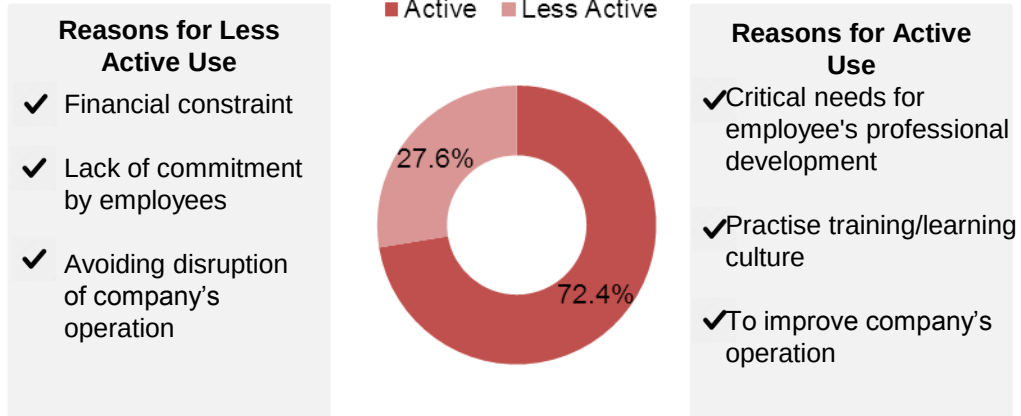
Most of the respondents also require their hotels to be incorporated with Internet of Things (IoT), because the technology offers a number of crucial benefits that are specifically relevant to the hotels industry. So far, the main use of the IoT within the hospitality industry has centred on hyper-personalisation. For example, Hilton and Marriott carried out a slightly different experiment on the perspective of ‘connected room’ concept, where users are able to control most of the room’s features from their mobile phone, or provided tablet. This might allow guests to control the heating, ventilation and air conditioning systems from one place, or even just specifying a temperature and allow various devices to regulate the temperature of the room automatically .

QUICK TAKEAWAYS
AND HIGHLIGHTS

51.7% of respondents rated “Cyber Security”, “System Integration” and “Internet of Things” (IoT) skills as the most important skills.

UTILISATION OF HRDF LEVY

When the question of participation in training was raised, there was an indication that 72.4% of the employers were actively using HRDF levy while 27.6% were less actively utilizing their levy for the reasons mentioned below:



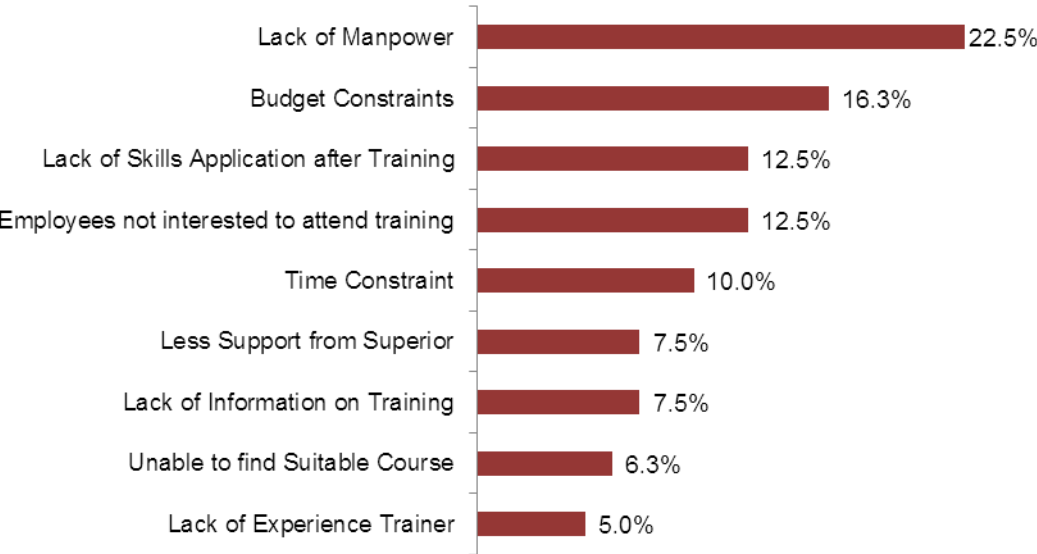
More than half of the respondents were aware about training needs, learning and development.

All information (in tables, charts and analytical text) are derived from qualitative survey entitled “HRDF Training Needs Survey”.

It should be noted that the empirical results reported has limitations as it does not cover all the employers within the selected industries.

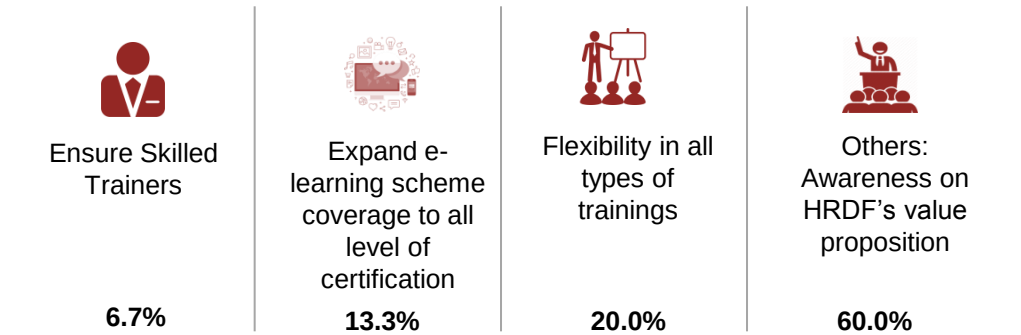
CHALLENGES IN TRAINING

The employers were requested to provide detailed feedback pertaining to the organisational challenges faced in training. Based on the analysis, the feedback given by the employers on the challenges in trainings have been classified into nine (9) themes, as described below. Majority of the respondents (22.5%) highlighted the “Lack of Manpower” was one of the major challenges that they faced followed by “Budget Constraints” (16.3%) and “Lack of Skills Application after Training” (12.5%).



IMPROVEMENT ON HRDF EXISTING SCHEME

Overall, there were four (4) suggestions to improve current HRDF training schemes offered, in which, 20.0% of the respondents suggested to provide flexibility in source of training funding specifically related to this subsector. Apart from that, 13.3% of the employers are also looking for e-learning coverage to all levels of certification.



QUICK TAKEAWAYS
AND HIGHLIGHTS

There is an indication that daily operation is one of the limitation and challenges for Hotel industry employers to send their employees to training.

Others: Awareness on HRDF's value proposition consists of HRDF overall functions, which also includes the application system, Act and etc.

All information (in tables, charts and analytical text) are derived from qualitative survey entitled “HRDF Training Needs Survey”.

It should be noted that the empirical results reported has limitations as it does not cover all the employers within the selected industries.

FOOD AND BEVERAGE SERVICES

Report Overview

GENERAL OUTLOOK

The Food and Beverage (F&B) services sector is a relatively new sector considered in Malaysia. It has a market size of RM24.78 billion and a growth rate of 7%-10%.

Source: Food & Beverage Sector 2017/2018 by British Malaysian Chamber of Commerce

IMPORTANCE OF THE INDUSTRY (HALAL INDUSTRY)

The current trend suggests that the Malaysian F&B services sector is experiencing a paradigm shift. The integration of classical Asian style “food stalls” and western style restaurants produces a nuance of food and service in the industry which is unique in Malaysia. Numerous aspects make Malaysia attractive within the F&B sector and one of them is the Halal Food industry. The concept of halal F&B has now migrated across the borders and not only dominated by certain groups. Hence, it is not surprising that as a first step the government has provided a total of 200 million working capital to the small and medium entrepreneurs in halal product industries to provide encouragement to develop halal industry in Malaysia (Haspaizi, 2013).

The development and introduction of international standards contributed in strengthening Malaysia as a hub for the production of halal products and their certification are internationally recognized (MITI, the Third Industrial Master Plan Food/2006-2020). Accordingly, standards-related research for halal products are being applied throughout the country and the world. In terms of halal products, Malaysian government also emphasizes on the human aspect, practices and strong commitment at all levels of the supply chain. Malaysia has the aspirations to become a global hub for the production and trade of Halal F&B. As a modern Islamic country at the forefront of economic development, Malaysia has an unparalleled potential.

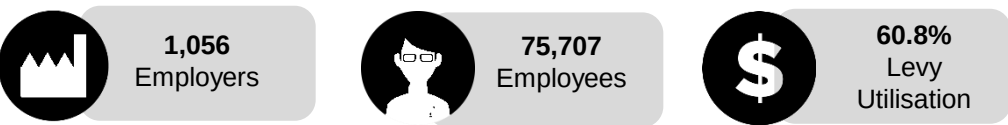
TRAINING OUTLOOK

OVERVIEW

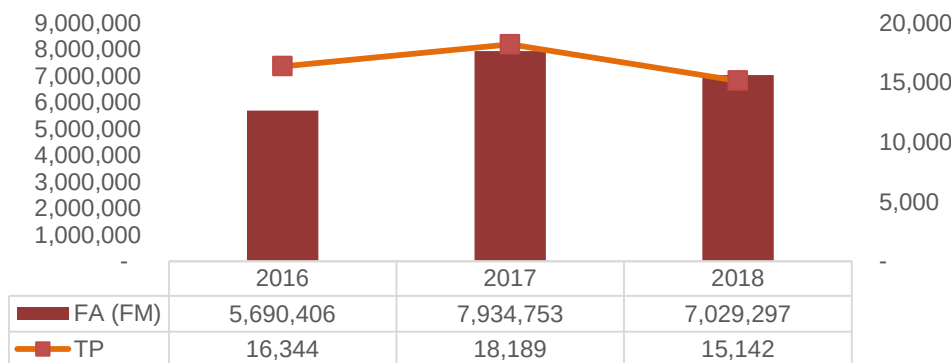
Definition: Food and Beverage service, that is, any business or activity of any description involving food or drink provision services for customers or for an event (but excluding food and beverage manufacturing activities).

Source: Pembangunan Sumber Manusia Berhad Act 2001

DEMOGRAPHIC PROFILE OF FOOD AND BEVERAGE SERVICES SUBSECTOR REGISTERED UNDER PSMB



There were 1,056 establishments with 75,707 employees within the Food and Beverage Service Industries registered with Pembangunan Sumber Manusia Berhad (PSMB). Of the total establishments, 89.0% were Small and Medium Enterprises (SME) and 11.0% were large employers. In terms of levy utilisation status, the Food Manufacturing and Beverage Industries expanded up to 60.8% of the total levy collected. The detailed breakdown of training places and financial assistance approved for Food Manufacturing and Beverage industries starting from year 2016 to 2018 are as per the chart below:



QUICK TAKEAWAYS AND HIGHLIGHTS

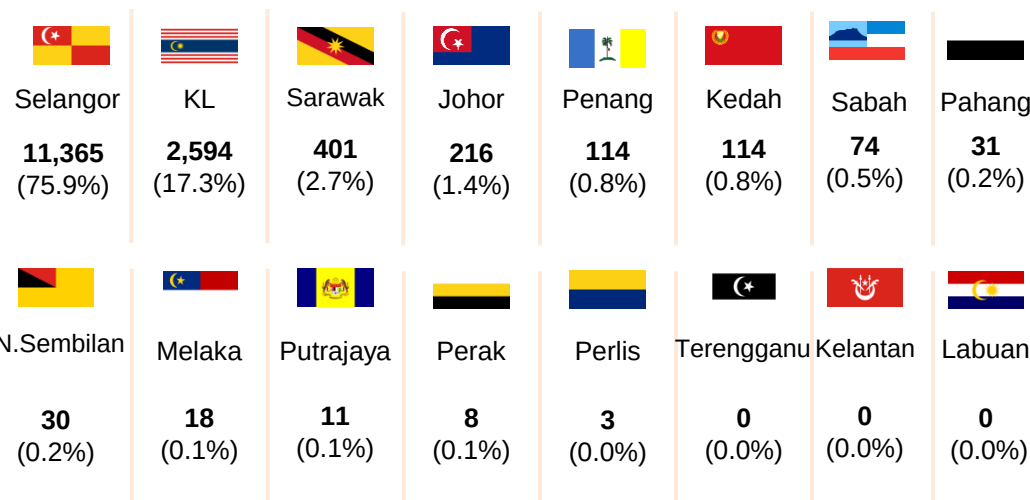
Since over 60.0% of the Malaysian population are Muslims, food and ingredients used in the foodservice sector must be Halal certified by the Department of Islamic Development (JAKIM).

Source: British Malaysian Chamber of Commerce, Malaysian Industry Report 2018/2019

Compared to previous year, the training trend for this subsector decreased by 17% from 18,189 (2017) to 15,142 (2018). The trend is also not in tandem with the growth of the number of employees.

All information (in tables, charts and analytical text) are derived from PSMB internal database (grant and details of employers) for year 2018.

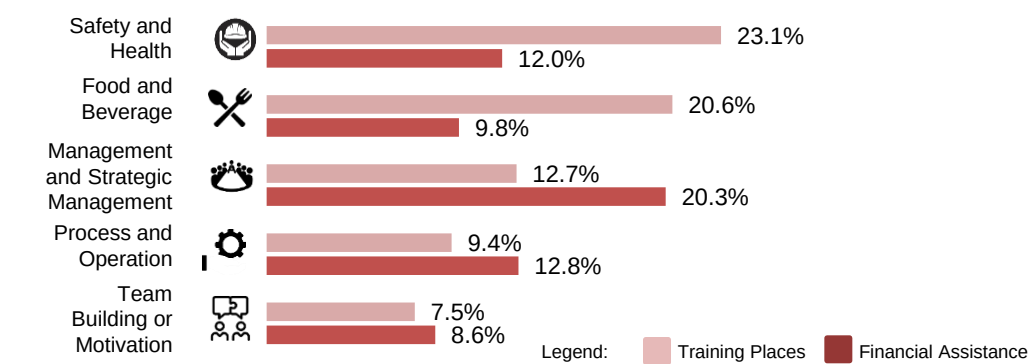
NUMBER OF TRAINING PLACES BY STATE OF EMPLOYERS



The figure above outlines the number of training places attended by the employees of Food & Beverage Services, according to states. The highest representation of training places was from Selangor state (75.9%), followed by Kuala Lumpur (17.3%) and Sarawak (2.7%).

SKILL AREA

Most of the employers in this industry require their employees to have Safety and Health skills. On the other hand, there are higher expectations for Food and Beverage skills, followed by Management and Strategic Management, Process and Operation as well as for Team Building or Motivation skills.



Below are the public type course fees per training day approved under this industry, divided into three (3) categories:

Table with 3 sections: Courses Cost: 90th Percentile, Courses Cost: Median, and Courses Cost: 10th Percentile. Each section lists 3 courses with their respective fees and durations.

QUICK TAKEAWAYS AND HIGHLIGHTS
Employers in Central (Kuala Lumpur and Selangor) regions are more active (93.2%) compared to other regions as 44% of the F&B companies are located in the Central region.

“Safety and Health” skills remains to be paramount in this industry as it is well regulated and vital for customer’s confidence in the food handling processes. In addition, increasing health awareness among the public further contributed to the need for such skills.

The average cost fee for the training programme under this industry was RM658.

FOOD & BEVERAGE SERVICES

Report Overview

FEEDBACK FROM SURVEY

A qualitative survey was conducted in F&B services industry with an objective to identify individually the current skills and trainings needed for the industry and identify the future challenges, training needs and their impact on industry caused by external factors (e.g. technology disruption). Employers from both large and Small and Medium Enterprises (SME) responded to the survey. It should be noted that the empirical results reported has limitations as it does not cover all the employers within the selected industries.

SKILL AREA

The table below reveals the top five (5) areas of skills or training needed by the respondents for both technical and non-technical skills according to job positions (following MASCO). It shows that this subsector requires the employees to obtain relevant occupational or industrial specialized and technical skills.

MASCO	TECHNICAL	NON-TECHNICAL
Skilled Workers	1. Quality Assurance skills 2. Culinary Arts 3. Information Technology 4. Food Handling 5. Accounting and Cost Control	1. Supervisory & Management skills 2. Problem Solving skills 3. Purchasing skills 4. Marketing skills 5. Safety and Health skills
Semi-Skilled Workers	1. Safety and Health 2. Customer Service 3. Food Service 4. Culinary Arts skills 5. Maintenance skills	1. Management skills 2. Communication skills 3. Time Management 4. Human Resource skills 5. Teamwork skills
Low Skilled Workers	1. Hospitality skills 2. Language skills 3. Safety and Health 4. Creative and Innovative skills 5. Quality and Productivity skills	1. Working Attitude 2. Customer Service skills 3. Time Management skills 4. Teamwork 5. Packaging

Based on the above table, there is an indication that employers in this subsector require their professionals and management to be well-rounded in diverse skills from technical to non technical skills.

The respondents noted that the most needed technical skill for this industry are “Quality assurance” and “Safety and Health”. These two (2) skills are needed to address the poor hygiene practices and lack of management in providing proper hygiene facilities for both the employees and customers at food establishments. This situation is proven when the Ministry of Health (MOH) Malaysia has conducted 289,919 checks on food premises nationwide as of May 2018 and found that 5,587 (2%) of the premises, which include restaurants and food outlets, were unclean and were shut down under Section 11 of the Food Act 1983.

Source: The Star, 30th May 2018

While, for the non-technical skill, “Supervisory and Management skills” are the most preferred skills among all job categories as the supervisor is responsible for managing the Food and Beverage Department in order to create a dining experience that will ensure guest’s satisfaction.

QUICK TAKEAWAYS AND HIGHLIGHTS

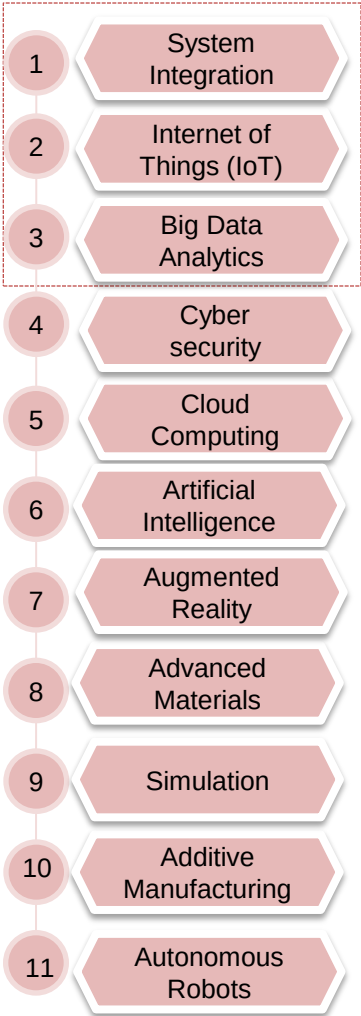
Apart from food handling and services skills, employers from Food and Beverage Services also indicated that customer service is one of the critical skill required in this industry. Skills emphasized in this subsector remains occupational and industry specific, awareness incorporating technology into the industry remains limited as of now.

All information (in tables, charts and analytical text) are derived from qualitative survey entitled “HRDF Training Needs Survey”.

It should be noted that the empirical results reported has limitations as it does not cover all the employers within the selected industries.

INDUSTRY 4.0

As the industries in general are currently amidst a technological transformation which will fundamentally change the way people live and work, the expectations on skill sets are much higher. It is difficult to predict precisely how this transformation will impact different industries and countries.

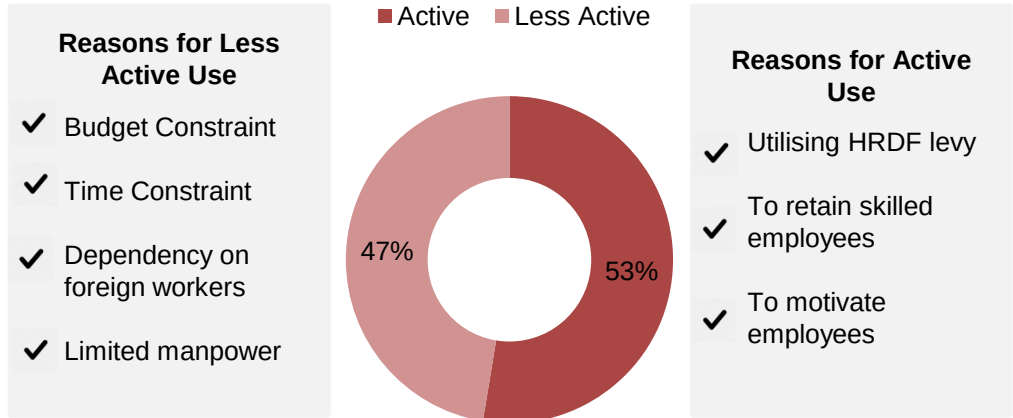


For instances, there is an indication that only 28.6% of the registered employers in F&B services required their employees to be skilled in “System Integration”, “Internet of Thing (IoT)” and “Big Data Analytics” areas to support emerging innovations. The statistic indicated that the respondents were not ready to face the Industry 4.0.

Nonetheless, as the industry increasingly emphasize the food safety measures as an important part of providing quality food and beverage products for the end consumer and a vital role in maintaining compliance, different food regulation organisations and governmental agencies are starting to request more detailed monitoring and record keeping to ensure the consistency of food safety. In conjunction, system integration and IoT-enabled food and beverage solutions to help companies remain compliant while providing the best quality products.

UTILISATION OF HRDF LEVY

When the question of participation in training was raised, 52.6% of the respondents cited that they were actively using the HRDF levy while 47.4% were less actively utilizing their levy due to few reasons mentioned below:



QUICK TAKEAWAYS
AND HIGHLIGHTS

The percentage of respondents require their employees to be skilled in Industry 4.0 is lower because they are in a service industry.

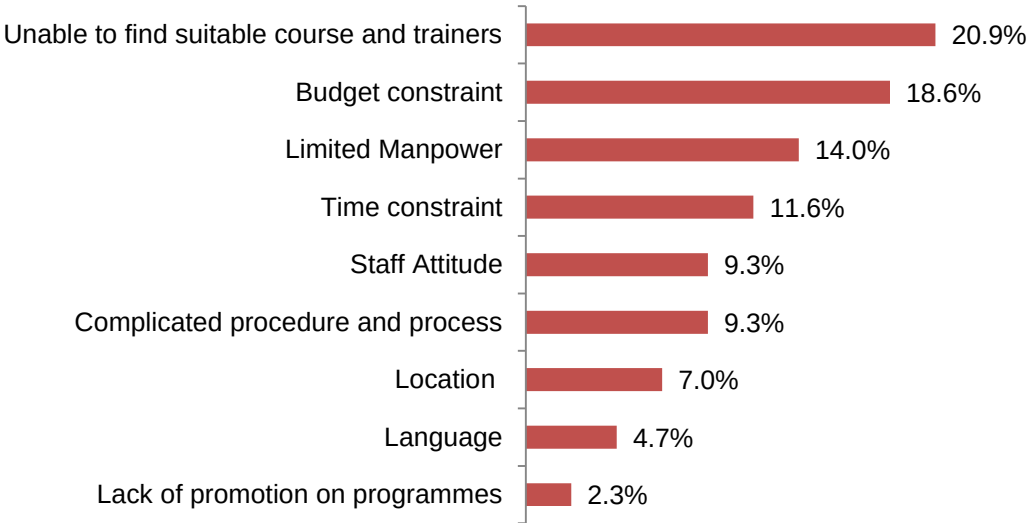
The responding employers in this industry also highlighted that the reason for being less active in utilizing HRDF levy is the dependency on foreign workers and limited manpower especially in the kitchen.

All information (in tables, charts and analytical text) are derived from qualitative survey entitled “HRDF Training Needs Survey”.

It should be noted that the empirical results reported has limitations as it does not cover all the employers within the selected industries.

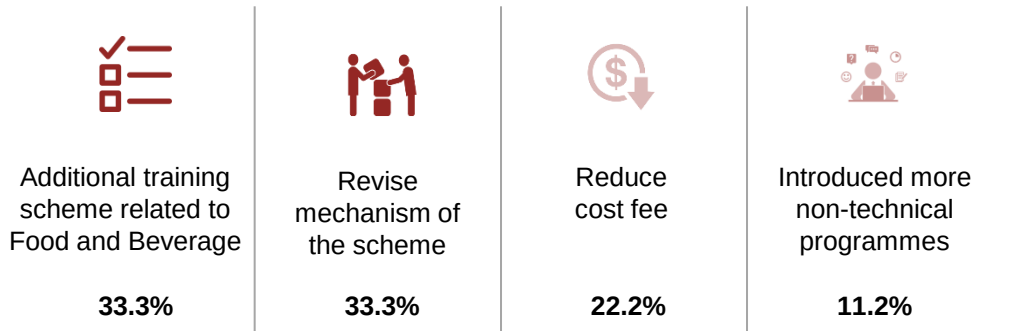
CHALLENGES IN TRAINING

The employers provided detailed feedback pertaining to the organisational challenges faced in training. Based on the analysis, the feedback given by the employers on the challenges in trainings have been classified into nine (9) themes, as described below. A majority of the respondents (20.9%) highlighted that they were “Unable to Find Suitable Courses and Trainers” were the major challenges that they faced followed by “Budget Constraint” (18.6%) and “Limited Manpower” (14.0%).



IMPROVEMENT ON HRDF EXISTING SCHEME

Overall, there were four (4) suggestions to improve current HRDF training schemes offered. 88.8% of the respondents suggested to have additional training schemes specifically related to food and beverage services and call for revisions to be implemented on existing scheme as well as for cost fee. Apart from that, the employers also indicated that non-technical programmes need to be emphasized.



QUICK TAKEAWAYS
AND HIGHLIGHTS

The biggest challenge highlighted by the respondents was the inability to find suitable courses and expert trainers.

Non-technical training such as customer service and communication skills are the critical skill areas indicated by the respondents in this industry.

All information (in tables, charts and analytical text) are derived from qualitative survey entitled “HRDF Training Needs Survey”.

It should be noted that the empirical results reported has limitations as it does not cover all the employers within the selected industries.

FOOD AND BEVERAGE MANUFACTURING

Report Overview

GENERAL OUTLOOK

GDP: DIRECT CONTRIBUTION

The Malaysian Food and Beverage (F&B) manufacturing sector has developed into one of the significant contributors to Malaysia's economy with revenues amounting to RM140.42 million in 2018 and an annual growth rate of 7.6%.

Source: British Malaysian Chamber of Commerce, Malaysian Industry Report 2018/2019

IMPORTANCE OF THE INDUSTRY

Malaysia's F&B manufacturing sector reflects its diverse multi-cultural population. The Government's continuous efforts to increase food production and liberalise trade have meant that most Malaysians have access to a wide selection of local and imported F&B products today. In the recent national Budget of 2018, tabled by Malaysia's Finance Minister, the F&B manufacturing sector was considered as one of the "winning sectors" that is expected to gain benefit from Budget 2018 as the reduction of personal income tax and special payment to civil servants will increase house-hold disposable income. Considering the overall growth of the sector, the future of Malaysia's F&B sector is promising. Malaysia is certainly an attractive destination for global companies seeking to expand their F&B business in the Asian region.

Source: British Malaysian Chamber of Commerce, Malaysian Industry Report 2018/2019

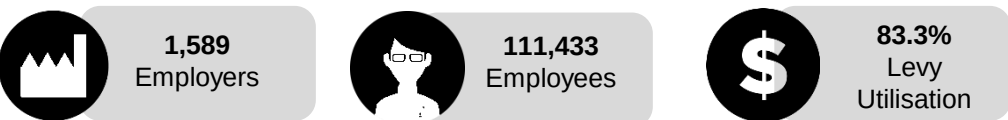
TRAINING OUTLOOK

OVERVIEW

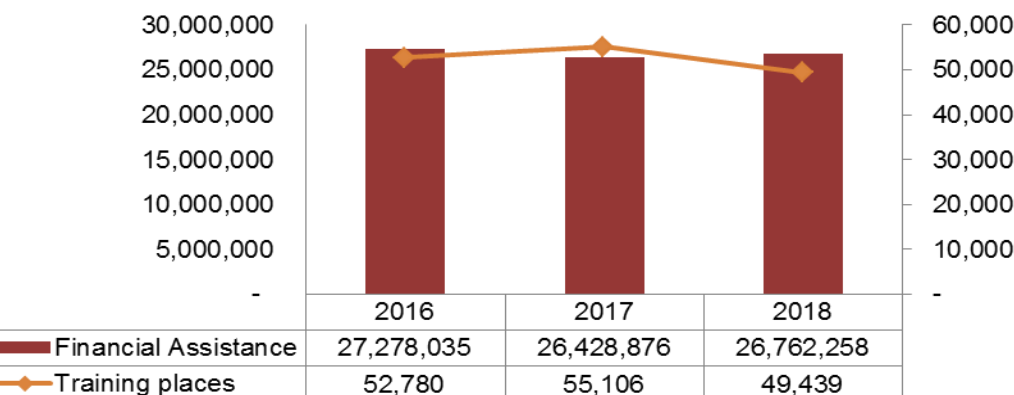
Definition: Malaysia's food processing sub-sector includes all companies involved in value-added activities which utilizes agricultural or horticultural products, such as the manufacturing of cocoa & chocolate products, fishery products, cereals & cereal products, and processed fruit & vegetables. This sub-sector is transitioning from the use of conventional processes to the use of emerging technologies.

Source: Malaysian Investment Development Authority (MIDA) website

DEMOGRAPHIC PROFILE OF FOOD AND BEVERAGE MANUFACTURING SUBSECTOR REGISTERED UNDER PSMB



There were 1,589 establishments with 111,433 employees in Food Manufacturing and Beverage Industries registered with Pembangunan Sumber Manusia Berhad (PSMB). Of the total establishments, 92% were Small and Medium Enterprises (SME) and 8% were large employers. In terms of levy utilisation status, the Food Manufacturing and Beverage Industries expanded up to 83.3% of the total levy collected. The detailed breakdown of training places and financial assistance approved for F&B manufacturing industry starting from year 2016 to 2018 are as per the chart below:



QUICK TAKEAWAYS AND HIGHLIGHTS

Malaysia's food processing sector is growing at about 5% annually. The food processing sector consists of not only domestic players but also foreign companies.

Source: British Malaysian Chamber of Commerce, Malaysian Industry Report 2018/2019

The chart shows financial assistance increased by (1.2%) even though the number of training places approved decreased from 10% to 49,439 (2018) from 55,106 (2017). This indicates either the course fee for training under F&B manufacturing has increased overtime, or the types of training invested is changing.

All information (in tables, charts and analytical text) are derived from PSMB internal database (grant and details of employers) for year 2018.

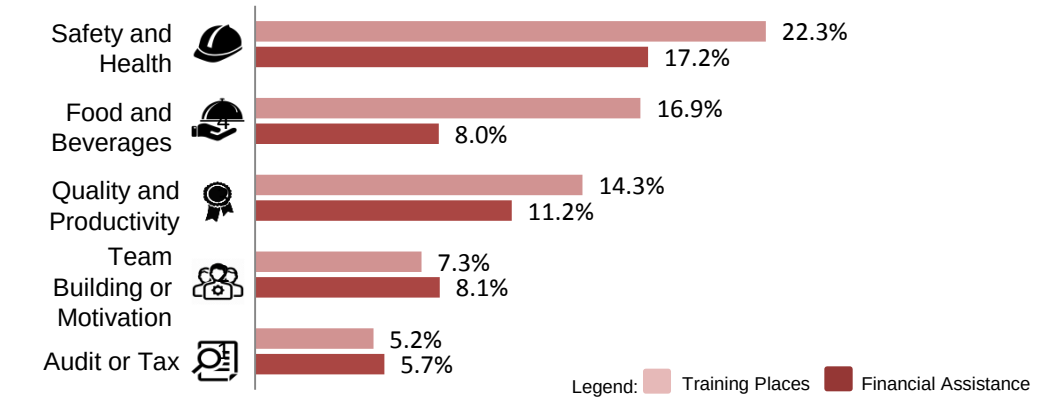
NUMBER OF TRAINING PLACES BY STATE OF EMPLOYERS

Table with 8 columns representing states: Selangor, Johor, KL, Perak, Melaka, Penang, Sarawak, Kedah, Sabah, N.Sembilan, Perlis, Pahang, Terengganu, Labuan, Kelantan, Putrajaya. Each row shows the number of training places and its percentage of the total.

The figure above outlines the number of training places attended by employees of Food Manufacturing & Beverage Industries, according to states. The highest representation of training places was from Selangor state (34.7%), followed by Johor (25.7%) and Kuala Lumpur (11.7%). Overall, there were 49,439 training places approved in year 2018 for this industry.

SKILL AREA

Most of the employers of this industry require their employee to have Safety and Health skills. On the other hand, there are higher expectations for Food and Beverages skills, followed by Quality and Productivity, Team Building or Motivation skills as well as the Audit or Tax skills. The chart below shows the distribution of skill areas according to training places and financial assistance approved.



Below are the public type course fees per training day approved under this industry, divided into three (3) categories:

Table with 3 sections: Courses Cost: 90th Percentile, Courses Cost: Median, and Courses Cost: 10th Percentile. Each section lists specific courses and their associated costs and durations.

QUICK TAKEAWAYS AND HIGHLIGHTS

The F&B manufacturing cluster is the fifth largest industry in Selangor, food manufacturing has attracted more than RM12 billion of investment throughout the years and produced over 33,000 of job opportunities; whereas the beverage sector has attracted about RM1.3 billion (including tobacco) of investment. In Selangor, many larger companies have been producing food products for decades, which successfully catered for both domestic and overseas markets.

Source: Invest Selangor Website

Overall, the cost fee for training programmes under "Food & Beverage" skill areas were lower compared to the cost fee for training programmes under "Quality and Productivity".

The average cost fee for the training programme under this industry was RM384.

FOOD AND BEVERAGE MANUFACTURING

Report Overview

FEEDBACK FROM SURVEY

A qualitative survey was conducted in the F&B manufacturing industry with an objective to identify individually the current skills and trainings needed for the industry and identify the future challenges, training needs and their impact on industry caused by external factors (e.g. technology disruption). Employers from both large and Small and Medium Enterprises (SME) responded to the survey. It should be noted that the empirical results reported has limitations as it does not cover all the employers within the selected industries.

SKILL AREA

The table below reveals the top five (5) areas of skills or training needed by respondents within this subsector for both technical and non-technical skills according to job positions (following MASCO). It depicts that this subsector requires the employees to obtain relevant occupational or industrial specialized skills and technical skills.

MASCO	TECHNICAL	NON-TECHNICAL
Skilled Workers	1. Quality Control skills 2. Boiler skills 3. Engineering skills 4. Research & Development Food Science skills 5. Halal Regulation	1. Planning & Management skills 2. Leadership skills 3. Human Resources skills 4. Communication skills
Semi-Skilled Workers	1. Quality Control skills 2. Production skills 3. Administration / Microsoft Office skills 4. Safety & Health skills 5. Supervisory skills	1. Communication skills 2. Teamwork 3. Time Management skills 4. Marketing skills
Low Skilled Workers	1. Safety & Health skills 2. Production skills 3. Basic computer skills 4. Food Safety skills 5. Packaging skills	1. Communication skills 2. Working Attitude 3. Teamwork

Based on the above table, there is indication that employers within this subsector require their professionals and management to be well-rounded in diverse skills from technical to non technical skills.

The respondents indicated that the most needed technical skills for them are “Quality Control” and “Safety and Health”, where they were the top rated skills of the job categories. Both mentioned skills were similar with the Food and Beverage services as food safety is one of the top priority in this industry.

The responding establishments also indicated that “Halal Regulation” was in the top five (5) critical skills needed by the industry since Malaysia is aiming towards becoming the world’s leading halal hub, as targeted in the Third Industrial Master Plan, 2006 – 2020. Thus, it is critical for the industry to have well-trained human resource that is capable of facilitating knowledge and expertise in this area.

Source: National Occupational Skills Standard: Halal Auditing

While, for the non-technical skill, “communication skills” are the most preferred skills among all job categories that encourage interaction and information flow not only from top management to the workforce, but also from the workforce and upwards.

QUICK TAKEAWAYS AND HIGHLIGHTS

The technical skill required frequently for skilled and semi-skilled workers is “Quality Control” while in the non technical area the shortcoming identified is “Communication skill”.

All information (in tables, charts and analytical text) are derived from qualitative survey entitled “HRDF Training Needs Survey”.

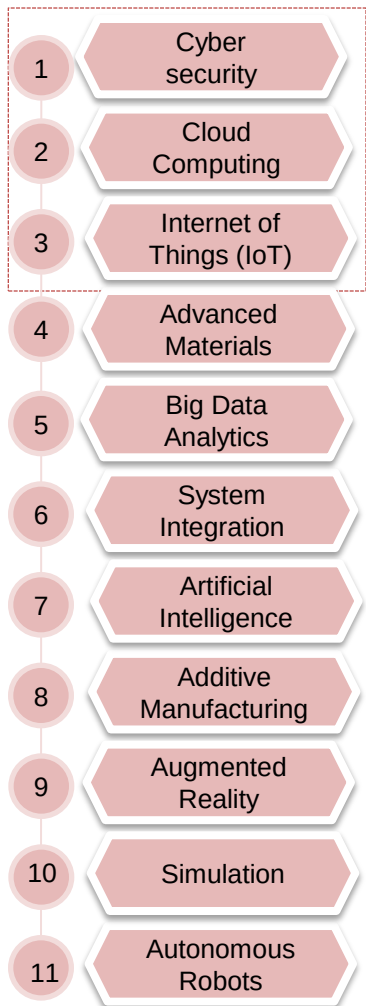
It should be noted that the empirical results reported has limitations as it does not cover all the employers within the selected industries.

FOOD AND BEVERAGE MANUFACTURING

Report Overview

INDUSTRY 4.0

As the overall industry is currently amidst a technological transformation which will fundamentally change the way people live and work, the expectations on skill sets is much higher. It is difficult to predict precisely how this transformation will impact different industries and countries.



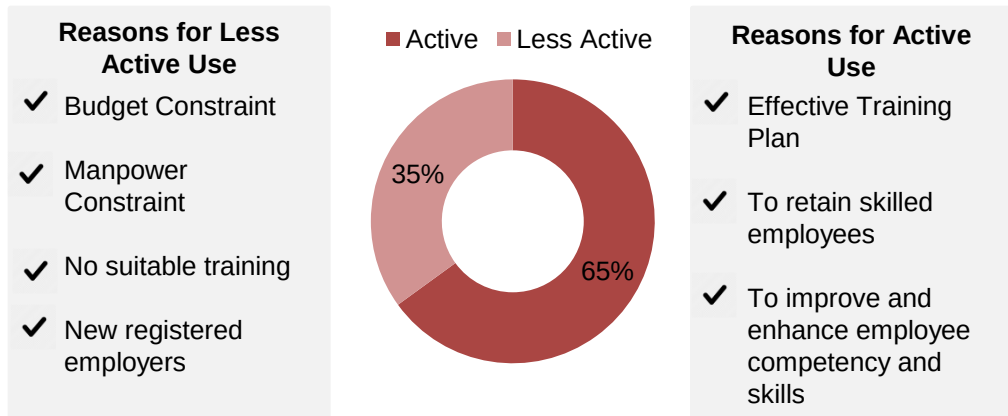
The survey results indicated that, for instances, 57.7% of the respondents require their employees to be skilled in “Cyber security”, “Cloud Computing” and “Internet of Things (IoT)” areas to support the revolution.

The food and beverage industry is susceptible to cyber security threats and attacks as any other industries. The need to secure corporate private networks and intellectual property is at an all-time high, as it’s the need to protect the food supply.

Companies within the food and beverage industries also face unique challenges as they often experience harsh production environments and strict regulatory requirements. The Internet of Things (IoT) helps food and beverage companies to gain greater visibility over their manufacturing, production, and transportation processes to provide higher quality products for end consumers while maintaining the operational efficiency and remaining compliant with governmental regulations.

UTILISATION OF HRDF LEVY

When the question of participation in training was raised, 65.0% of the respondents cited that they were actively using the HRDF levy while 35.0% less actively utilizing their levy due to few reasons mentioned below:



QUICK TAKEAWAYS AND HIGHLIGHTS

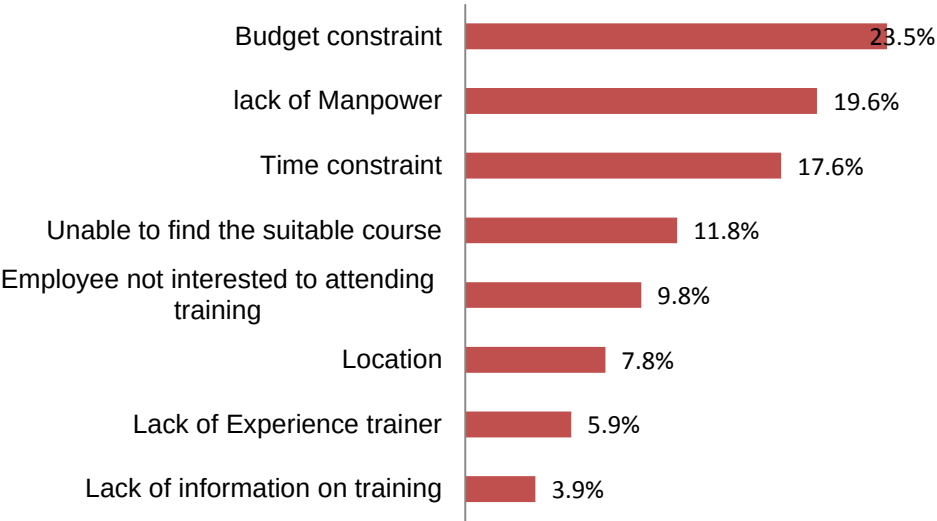
65% of the employers understand the importance of training and has effective training plans for their employees.

All information (in tables, charts and analytical text) are derived from qualitative survey entitled “HRDF Training Needs Survey”.

It should be noted that the empirical results reported has limitations as it does not cover all the employers within the selected industries.

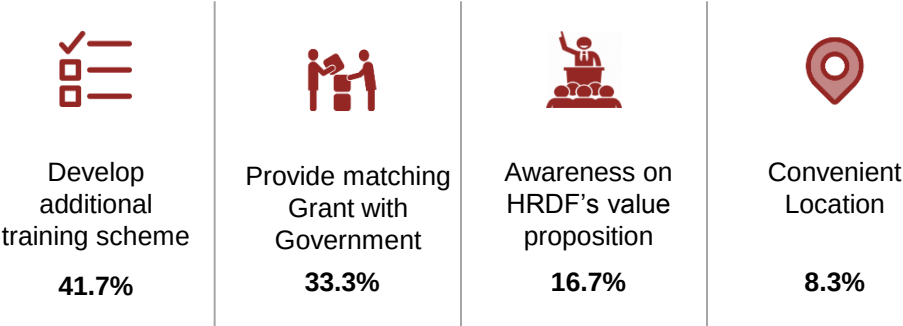
CHALLENGES IN TRAINING

The employers provided detailed feedback pertaining to the organisational challenges faced in training. Based on the analysis, the feedback given by the respondents on the challenges in trainings have been classified into eight (8) themes, as described below. A majority of the employers (23.5%) highlighted that “Budget Constraint” was one of the major challenges that they faced followed by “Lack of Manpower” (19.6%) and “Time Constraint” (17.6%).



IMPROVEMENT ON HRDF EXISTING SCHEME

Overall, there were four (4) suggestions to improve current HRDF training schemes offered. 41.7% of the employers suggested to have additional training schemes specifically related to this subsector on Food handling and manufacturing. Apart from that, 33.3% of employers are seeking for matching grants from the government.



QUICK TAKEAWAYS
AND HIGHLIGHTS

Budget constraint (23.5%) was one of the major challenges faced by the employers.

PSMB needs to initiate new training schemes to cater for the needs of the industry.

All information (in tables, charts and analytical text) are derived from qualitative survey entitled “HRDF Training Needs Survey”.

It should be noted that the empirical results reported has limitations as it does not cover all the employers within the selected industries.

ANALYSIS BY GEOGRAPHY AND ESTABLISHMENT SIZE

16.2% out of 26,281 PSMB registered employers in year 2018 were from Hotel, Food and Beverage services and Food and Beverage Manufacturing industries. In terms of establishment size, these three (3) subsectors have lower representatives that were large establishments compared to Small and Medium Enterprises. Most of the registered employers within these subsectors are located in Central Malaysia which are Kuala Lumpur, Selangor and Putrajaya.

OVERALL TRAINING ACTIVITIES

In terms of levy utilisation, two (2) subsectors have reportedly been active in training in which the levy utilisation for both sub-sectors were 80.0% and above, while the employers under Food and Beverages services were less active as the levy utilisation for year 2018 was only at 60.8%. Based on the feedbacks received from the study, the main challenge faced by the F&B services subsector in training was the inability to find suitable course and expert trainers. They also encourage PSMB to introduce additional training schemes related to Food and Beverage. One (1) section has been added in this insight report, **“Strategic Initiative Schemes”** to inform the registered employers on the training schemes available at PSMB.

In order to encourage the registered employers to participate in HRDF training programmes, several initiatives have been put in place. Among the initiatives that are currently being conducted by PSMB are; customer engagement, revise training scheme mechanisms and identify training needs through the Sectorial Training Committee platform.



LEARNING AND DEVELOPMENT PERSPECTIVES

The report indicated that “Safety and Health” skill remains to be paramount within these industries as it is well regulated and vital for customer’s confidence in food handling processes especially in Hotel industry.

Apart from that, “Food and Beverage” skill was ranked second in terms of importance by both the F&B Services and F&B Manufacturing Industries as this is industry specific skill for them. While, for the Hotel industry, they highlighted that “Management / Strategic Management” skill was the second most important skill for them due to the strong competition in the hospitality industry, strategic management in the hospitality industry, or creating effective plans and processes to have a successful hospitality business, which is critical to company’s success.

While, for Food and Beverage manufacturing, the employers indicated that “Quality and Productivity” skill is also among the important skill to them. By undertaking effective inspections and controls in the production processes and operations, companies in the food industry can reduce their production costs considerably.

HOTEL	FOOD AND BEVERAGES SERVICES	FOOD AND BEVERAGES MANUFACTURING
		
1 Safety and Health	1 Safety and Health	1 Safety and Health
2 Strategic Management	2 Food & Beverages	2 Food & Beverages
3 Hotel / Tourism	3 Strategic Management	3 Quality & Productivity

QUICK TAKEAWAYS
AND HIGHLIGHTS

Sectorial Training Committee (STC) is a platform to identify training needs that corresponds with the advancement of technology, system and process in the sub-sectors that are covered under the PSMB Act, 2001 in order to enhance the employers’ levels of productivity and competitiveness.

All information (in tables, charts and analytical text) are derived from PSMB internal database (grant and details of employers) for year 2018 and “HRDF Training Needs Survey”.

It should be noted that the empirical results reported has limitations as it does not cover all the employers within the selected industries.

TOWARDS INDUSTRY 4.0

Industry 4.0 refers to production or manufacturing based industries digital transformation, driven by connected technologies. Industry 4.0 introduces what is referred to as “smart factory” in which cyber physical systems monitor real time physical progress of the factory and able to make decentralised decisions. Other terminology includes Smart Manufacturing. Some regard Industry 4.0 as a subset of the Fourth Industrial Revolution.

Source: Ministry of International Trade and Industry website

PSMB’S REGISTERED EMPLOYERS READINESS FOR INDUSTRY 4.0

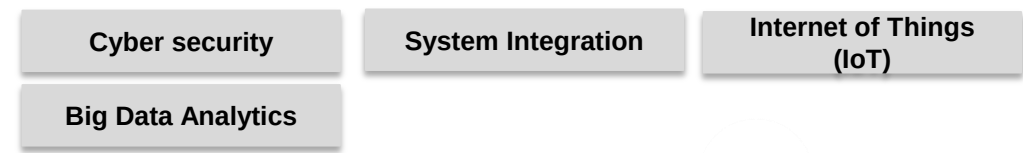
A key question is how ready PSMB registered employers are for Industry 4.0. The findings based on “HRDF Training Needs Survey” indicated that below 50% of the surveyed companies in these three (3) subsectors are considering to participate in training related Industry 4.0 next year. This finding shows that the food and beverage services industry may not be completely ready to embrace Industry 4.0 as majority of PSMB employers are from Small and Medium Enterprises (SMEs).

For F&B Manufacturing sector, the employers require their employees to be skilled in “Cyber Security”, “Cloud Computing” and “Internet of Things (IoT)” areas to support the revolution, while for Services sector, the main skills required are “Cyber Security” and “Internet of Things”, apart from “System Integration” and “Big Data Analytics” skills.

Three (3) main skills required by Manufacturing sector to support the revolution 4.0:



Four (4) main skills required by Services sector to support the revolution 4.0:



As the complexity of the job increases, the respondents indicated that “Internet of Things (IoT)” is one of the major skill needed by the Beverage industries regardless of Manufacturing or Services sector as it incorporates technology to collect information about processes, equipment performance and supplies and orders. Apart from that, “Cyber security” becomes even more important to these industries with increased connectivity, data exchange through the use of Industrial Internet of Things as they hold customer’s data to be protected.

While for Food and Beverage Manufacturing, the respondents indicated that “Cloud Computing” also one (1) of the skill required to support the revolution 4.0. Cloud computing was driving the food industry as a whole and specifically cloud infrastructure act as a backbone in gathering and analysing data through the food supply line management: from the field where the crop grows, the warehouses that store it, the containers that ship it to, the consumer that buys it. This is a viable alternative to previous costly investments in hardware and software, allowing the industry to react faster in shifting environments in the marketplace and gain a competitive advantage.

For both the service sectors, they indicated “System Integration” and “Big Data Analytics” were driving their industry to support the revolution as tourism is one of the world’s largest industries, thus it needs the fastest tools to manage the unpredictable volume of requests seen today.

QUICK TAKEAWAYS
AND HIGHLIGHTS

All information (in tables, charts and analytical text) are derived from PSMB internal database (grant and details of employers) for year 2018 and “HRDF Training Needs Survey”.

It should be noted that the empirical results reported has limitations as it does not cover all the employers within the selected industries.

STRATEGIC INITIATIVE SCHEMES

Report Overview

QUICK TAKEAWAYS AND HIGHLIGHTS

The unemployment rate in first quarter of 2019 remained unchanged at 3.3% since September 2018. The number of unemployed individuals stood at 502.6 thousand. Out of that figure, 137.4 thousand individuals (27%) are diploma and degree holders.

Source: Statistik Pekerjaan & Perburuhan Siri 19 Bil.1/2019, Kementerian Sumber Manusia.

This section discusses the initiative taken by PSMB in terms of training and schemes offered to PSMB registered employers. The section also examines the current human capital issues that will impact their employees / future workers across different job categories and industries.

1 Graduates Enhancement Programme for Employability 2.0 (GENERATE 2.0)

PREVIOUS ACHIEVEMENTS

93% trainees employed after completion of training.

RM2,299 average entry salary received by the trainees.

ABOUT THE SCHEME

The proposed Graduates Enhancement programme for Employability or in short to be known as 'GENERATE', is an initiative specifically designed to equip, develop and assist fresh and unemployed graduates with the relevant skill-set and knowledge as required by the industry thus enhancing their potential employability through two (2) types of programmes, which are Management-Associate and Technical-based trainings.

This programme has been introduced since the year of 2015 to cater the requirements of pre-employment training programmes to provide opportunities for employers to train their future workers with the required skills and competencies before entering the employment as permanent workers.

OBJECTIVES

- ✓ Relevant skill set and knowledge as required by the industries;
- ✓ Explore new route for trainee career market;
- ✓ Relevant working experience that can enhance their employability; and
- ✓ Job placement.

TARGET GROUP

-  Malaysian graduates whom have successfully acquired their Diploma, Degree; and
-  Remained unemployed for at least 3 months and above after the completion of studies; or
-  Newly recruited graduates in HRDF registered companies (within 1 year after the completion of studies).

2 Industry Certification ("INCERT")

ABOUT THE SCHEME

The proposed "INCERT" scheme is to enable businesses to elevate the economic value chain through professional certification programmes for local workers of registered employers.

OBJECTIVES

- ✓ To provide opportunity for Malaysian employees to increase their skills by participating in high value added professional certification that would enhance their career development;
- ✓ To provide platform for HRDF registered employers to accelerate the up-skilling of Malaysian employees to support Human Capital Development at specific areas determined by the Government in order to achieve the National Agenda; and
- ✓ To provide employers with high skilled Malaysian workforce which will allow them to explore business opportunities in higher value chain industry through up-skilling courses focusing on Knowledge Intensiveness that encompasses knowledge-based, high-technology and high value-added products or activities to maintain competitiveness in the global market.

The target group of "INCERT" programme is the Malaysian employees under HRDF registered employers.

All information are derived from PSMB website.

3 SME GRADUATES' SCHEME

ABOUT THE SCHEME

This proposed scheme is to develop leadership, management skills, analytical, and creative decision-making competencies of SME business owners and Chief Executive Officers.

OBJECTIVES

- ✓ To develop management skills as well as analytical and creative decision-making competencies for SME owners;
- ✓ To produce a generation of SME owners who have the ability to cut through the complexity of organisational life to lead and inspire their subordinates to higher levels of achievement by being fluent and integrated into new innovative thinking in their daily life; and
- ✓ To provide opportunities for Malaysian SME owners to enhance the acquisition of business fundamentals and strengthen their current competencies in business management skill.

TARGET GROUP

-  SME Business Owners or
-  Chief Executive Officers (CEOs)

4 RECOGNITION OF PRIOR EXPERIENTIAL LEARNING (RPEL)

ABOUT THE SCHEME

This proposed scheme is to certify in-service local workers with a secondary or lower education qualification levels to be recognised for their current competencies and skills acquired from their years of experience and on-the-job training based on the standards determined by the Department of Skills Development, Malaysia.

OBJECTIVES

- ✓ To provide opportunities for Malaysian workers with education level of secondary or lower to be recognised for their current competencies in particular skill areas based on their work experience, and thus facilitate them for job promotion and better income;
- ✓ To help in improving the average monthly income of workers to support Malaysia in becoming a developed and high-income nation by 2020 by having a competent workforce;
- ✓ To contribute to the growth of skilled workers in the country to 35% by 2020 by producing and recognising trained and qualified skilled workers to enhance the competitiveness of local industries in the global market.

TARGET GROUP

-  Malaysian workforce
-  Individuals who possess qualifications less than diploma or Level 4 or equivalent and
-  Have relevant years of experience as determined by certification body

QUICK TAKEAWAYS
AND HIGHLIGHTS

All information are derived from PSMB website.

3 SISTEM LATIHAN DUAL NASIONAL - APPRENTICESHIP

PREVIOUS ACHIEVEMENTS

“74% trainees employed after completion of training.”
“RM1,202 average entry salary received by the trainees.”

ABOUT THE SCHEME

This proposed scheme is to increase the supply of skilled workers to the Industry by training the school leavers and enabling them to be job-ready for registered employers. The programmes under this Scheme were developed based on the National Occupational Skills Standard by Jabatan Pembangunan Kemahiran, Malaysia.

OBJECTIVES

- ✓ To train school leavers with specific skills that would enable them to work with PSMB employers upon completion of training; and
- ✓ To increase the supply of skilled workers through strategic collaboration with the industries registered with HRDF.

TARGET GROUP

-  Apprentices selected from PMR/PT3; or
-  SPM school leavers

Details and Guidelines of these five (5) Strategic Initiatives’ Schemes are available on HRDF’s website at www.hrdf.com.my .

QUICK TAKEAWAYS
AND HIGHLIGHTS

All information are derived from PSMB website.

Skilled Workers	Comprised of Managers, Professionals and Technician and Associate Professionals
Semi-skilled Workers	Comprised of clerical support workers, service and sales workers, skilled agricultural, forestry and fishery workers, craft and related trade workers, and plant and machine operators and assemblers.
Low Skilled Workers	Comprised of elementary occupations.
Technical Skills	i. ii. Involves high-end computer programmes and hands-on / practical trainings. Practical and specific teachable or training programmes that can be defined and measured as required in a given context of task or activity.
Non Technical Skills	i. Not related to or involving science or technology.

Eleven (11) Pillars of Industry 4.0

Additive Manufacturing Advancing with the use of new materials opening completely new possibilities.	Artificial Intelligence (AI) Technology that will supplement smart factory towards networked factory, in which data from supply chains, design teams, production lines and quality control are linked to form a highly integrated and intelligent engines.	Big Data Analytics Big data techniques are being applied in manufacturing industries to improve customer experience and product quality, realise energy efficiencies, and conduct predictive maintenance.	Advanced Materials New materials and nano-structures are being developed that allow for beneficial material properties and allow for massive customisations and development of products that were not possible until now.
Cyber security Embed security functionality into the IoT devices with sophisticated cybersecurity.	Simulation Simulate manufacturing processes using different production settings to find the optimal way to manufacture a product.	Cloud Computing Leverage cloud based product design, simulation, artificial intelligence and big data solutions to improve production processes and build products better suited for customers.	Augmented Reality Application can be found in the delivery of information and training or used to deliver part replacement instructions to maintenance staff in the field.
Internet of Things (IoT) Technology embodies an unprecedented proliferation of sensors and connectedness among the sensors possible to envisage entirely autonomous systems that revolutionise manufacturing.	Autonomous Robots Machinery and robots can do more on its own and technology that allows systems to think, act and react autonomously to help contribute to a company's competitiveness, productivity and profitability.	System Integration Achieving end-to-end digital integration across the entire industry value chains.	

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It should be noted that this report has limitations as it does not cover all the employers within the selected industries. In the meantime, HRDF aspires to have continuous improvement in our industrial insights. Therefore, if you are an employer, we welcome your input by participating in our survey through the URL: <https://bit.ly/2GL0S9w>. Your input will be incorporated into our future publications of HRDF industrial insights. Thank you very much.

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Human Resources Development Fund (HRDF)

INDUSTRIAL INSIGHTS' REPORT SNAPSHOT

Issue: 2/2019

HRD LEVY UTILISATION IN 2018



CHALLENGES IN TRAINING



Unable to find suitable courses



Budget Limitation



Manpower constraint

TOWARDS INDUSTRY 4.0

Main skills required by Manufacturing & Service sectors to support Industry 4.0:



Cyber security



Cloud Computing



Internet of Things (IoT)



System Integration



Big Data Analytics

CRITICAL SKILLSETS



Food & Beverages
(e.g. culinary art)



Safety & Health



Strategic Management



Hotel / Tourism
(e.g. housekeeping)



Quality & Productivity

[Click Here for FULL REPORT](#)

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