

2019

INDUSTRIAL INSIGHTS

Issue: 5/2019



WOOD BASED INDUSTRIES & FURNITURE



Human Resources Development Fund (HRDF)

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WHAT'S INSIDE?

HRDF Industrial Insights Report is intended to share the latest training related updates and insights for various industries in Malaysia. This report will be crucial for HRDF and other associated stakeholders to learn from the present issues and work towards improving the nation's human capital development. This report will highlight the general industry outlook, training trends under HRDF and employers' qualitative feedback. This report covers the importance of the industry, training overview, industry demographics, related skill areas, academic qualifications for the current workforce, training challenges and their impacts.

Instead of taking the traditional social science research approach, 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. Using HRDF's internal data as well as selected employer's qualitative feedback, insights and recommendations will be provided for the reader's enlightenment.

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

MANUFACTURER OF WOOD & WOOD PRODUCTS & CORK

INDUSTRY OUTLOOK AT GLANCE

APPROVED INVESTMENTS IN THE WOOD & WOOD PRODUCTS AND FURNITURE & FIXTURES INDUSTRY FOR 2018

TOTAL INVESTMENT

Furniture and Fixtures (RM555.5 mil)

Wood & Wood Products (RM317.1 mil)

Other Wood-based Products & Materials (RM137.9 mil)

Panel Products (RM116.6 mil)

Moulding and Builders' Carpentry and Joinery (RM62.6 mil)

The Government through NATIP (the National Timber Industry Policy) has set an annual growth target of 6.4% for the timber export industry, which is estimated to be worth RM25.6 billion by 2020, comprising 60% value-added downstream products and 40% primary products. Out of this target, exports of furniture products are expected to record RM12 billion by 2020.

Source: Malaysia Investment Performance Report 2018, MIDA

MANUFACTURER OF WOOD IN HRDF

FACT 1: The Wood based industry expanded up to 86.3% of the total levy collected where 27.0% of them are located at East Malaysia.



659
Employers



50,971
Employees



RM5,620,265
Levy Collected



86.3%
Levy Disbursed

Employers Data as of September 2019

NUMBER OF HRDF REGISTERED EMPLOYERS ACCORDING TO STATES IN 2018

Johor	Sarawak	Selangor	Pahang	Sabah	Perak	Kedah	Kelantan
119 (18.1%)	114 (17.3%)	70 (10.6%)	65 (9.9%)	62 (9.4%)	59 (9.0%)	38 (5.8%)	29 (4.4%)
Penang	N.Sembilan	Terengganu	Melaka	KL	Perlis	Putrajaya	Labuan
27 (4.1%)	24 (3.6%)	24 (3.6%)	13 (2.0%)	13 (2.0%)	1 (0.2%)	1 (0.2%)	0 (0.0%)

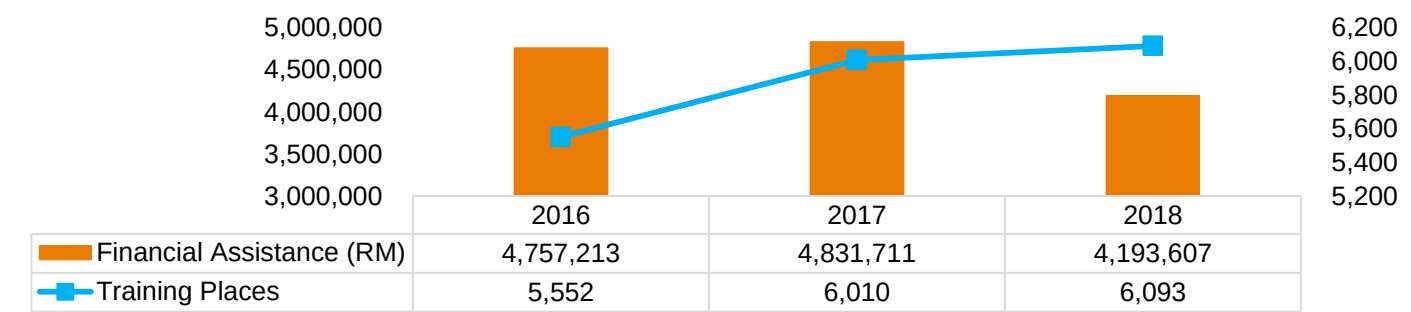
Quick Takeaways & Highlights

This industry continues to be a significant contributor to the Malaysian economy, of which locally-owned companies are concentrated in Sarawak, Johor and Selangor. Out of 659 registered companies, 605 (92%) are from Small and Medium Enterprises (SMEs). Based on levy utilisation rate, this subsector has been categorised as active subsector in up-skilling and re-skilling their workers although most of them are SMEs.

MANUFACTURER OF WOOD & WOOD PRODUCTS & CORK

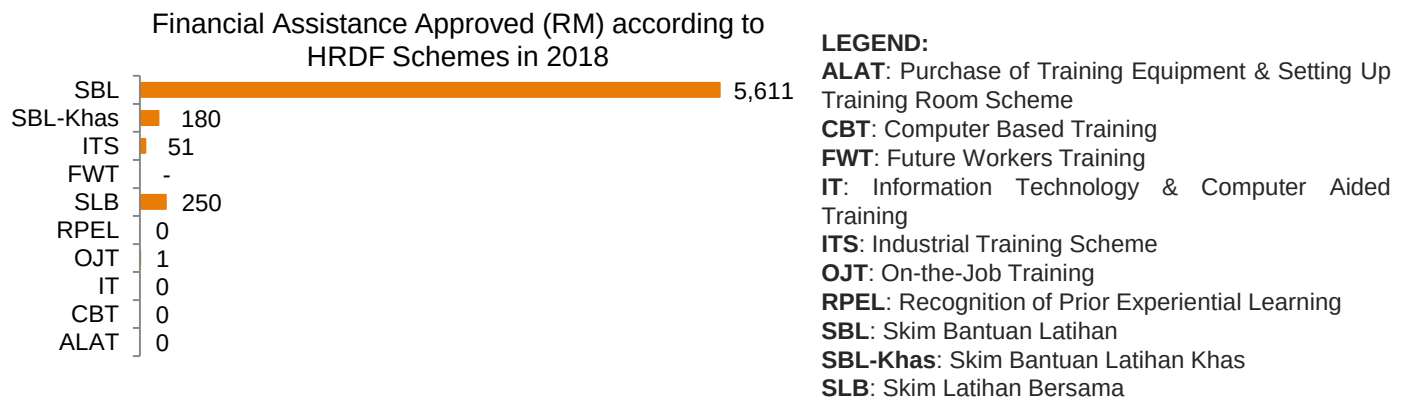
TRAINING OVERVIEW

FACT 2: The trend of training places increased by 9.7% from 5,552 (2016) to 6,093 (2018), however, the financial assistance decreased by 11.8%.



HRDF LEVY SCHEMES

FACT 3: Skim Bantuan Latihan (SBL) is the most utilised scheme by Wood Base employers in 2018.



COURSE FEES (PER DAY)

FACT 4: Training programmes related to Safety and Health are the lowest per day cost programmes compared to other training programmes.

Highest Cost	Medium Cost	Lowest Cost
Implementing ERM as a Strategic Management Tool (RM1,300) Succession Planning and Career Development Master class (RM1,300) Market Risk, Credit & Operational Risk (RM1,300)	MBRS For preparers:Financial Statements (RM400) Ms. Excel 2016 Advanced (RM400) Bringing Business to Newer Heights in 2019 (RM398)	Managing OSH Challenge in Malaysia (RM75) Health Risk Assessment (RM100) Malaysia Commuting Accident and Road Safety Seminar (RM125)

Quick Takeaways & Highlights

The investment of training in terms of number of approved training (training places) for Wood industry has increased over three (3) consecutive years as this industry is transitioning up the value chain by becoming Original Design Manufacturers (ODMs) and Original Brand Manufacturers (OBMs), of which producing high value-added furniture with creative and unique design aesthetics.

MANUFACTURER OF WOOD & WOOD PRODUCTS & CORK

SKILL AREAS

FACT 5: Safety & Health is the highest skill areas trained by Wood Industry in year 2018.

 TRAINING PLACES	 Safety and Health (1,452)	 Audit or Tax (725)	 Quality & Productivity (708)	 Management / Strategic Management (583)	 Maintenance / System Control (396)
 FINANCIAL ASSISTANCE (RM)	 Safety and Health (702,500)	 Audit or Tax (542,072)	 Management / Strategic Management (387,251)	 Quality & Productivity (298,441)	 Accounting / Finance (227,237)

EMPLOYERS FEEDBACK ON TRAINING NEEDS

FACT 6: Training on Mechanical or Machine handling skills required by skilled and semi-skilled workers of this industry.

MASCO	TECHNICAL	NON-TECHNICAL
Skilled Workers	1. Engineering 2. Computer handling Skills 3. Machine handling skills 4. Graphic Designer 5. Accountancy	1. Leadership 2. Project Management 3. Interpersonal skills 4. Employee Development
Semi-Skilled Workers	1. Quality Control 2. Information Technology 3. Safety and Health 4. Accountancy 5. Mechanical skills	1. Sales and Marketing 2. Communication skills 3. Leadership 4. Problem solving 5. Time Management
Low Skilled Workers	1. Documentation skills 2. Safety and Health 3. Production 4. Driving skill	1. Safety skills 2. Interpersonal skills 3. Communication Skills

Quick Takeaways & Highlights

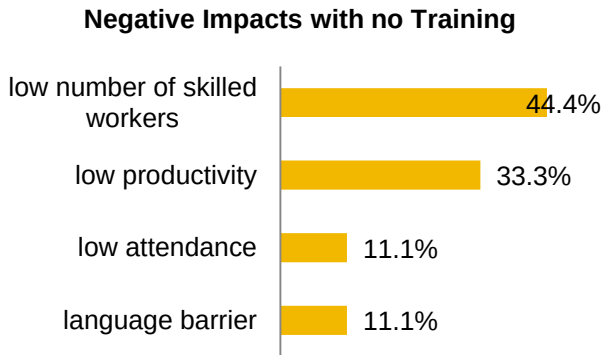
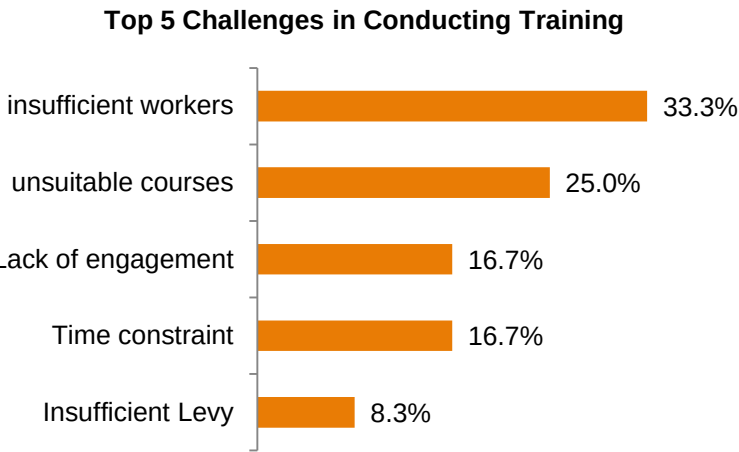
Safety and Health are the high demand courses and skills that have been trained on for the year 2018. This might be due to the historical background of wood products industry that considered to be one of the most dangerous sector for manufacturing employees. Workers are exposed to hazards ranging from falling trees to debarkers, saws and nail guns while working under pressure for high productivity.

Source: Safety in the Wood Products Industry report by Judd H. Micheal and Janice K.Wiedenbeck.

MANUFACTURER OF WOOD & WOOD PRODUCTS & CORK

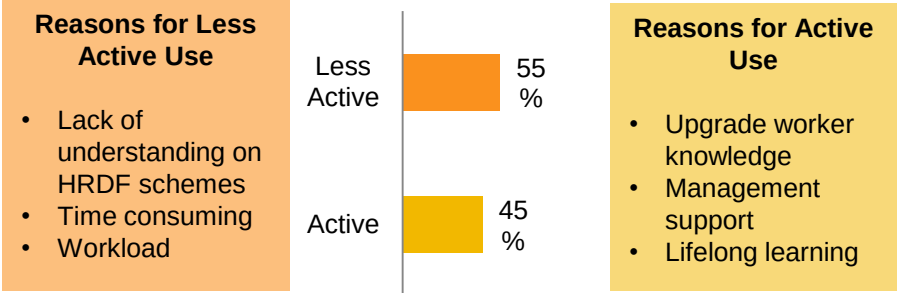
CHALLENGES IN TRAINING

FACT 7: The biggest challenge highlighted was “Insufficient workers”.



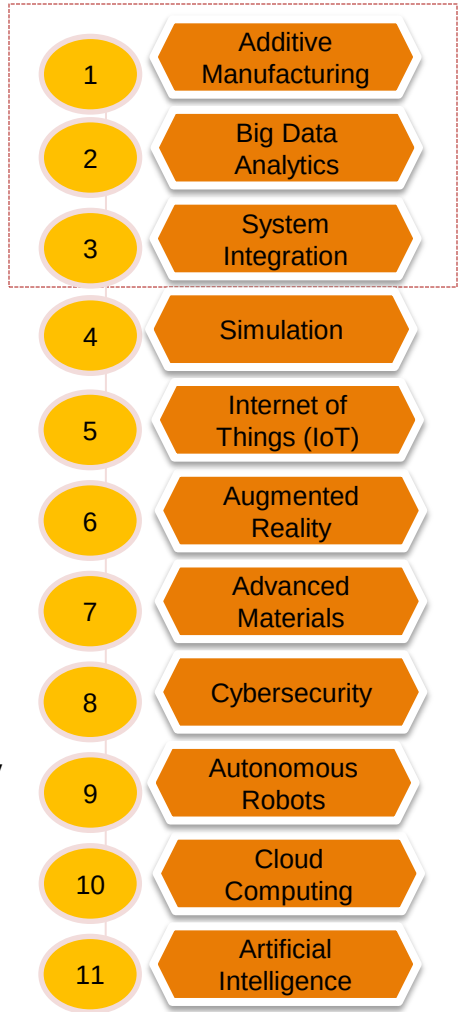
UTILISATION OF HRDF LEVY

FACT 8: 55% of the respondents cited that they were less actively using their HRDF levy.



INDUSTRY 4.0 FOR WOOD INDUSTRY

FACT 9: The registered employers in Wood-based subsector required their employees to be skilled in “Additive Manufacturing”, “Big Data Analytics” and “System Integration” areas to support emerging innovations.

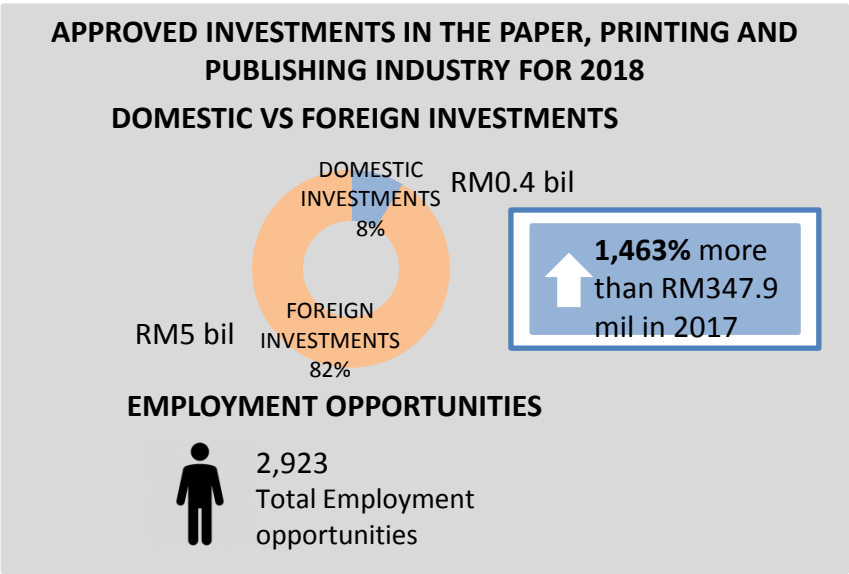


Quick Takeaways & Highlights

33.3% of the respondents in Wood-based industry indicated that the main constraint of sending their employees for training is due to the manpower constraint. Nonetheless, they also agreed that the failure of sending their employees for up-skilling and re-skilling activities may lead to low number of skilled workers produced. As for IR4.0, the industry agreed that it will take time for the industry to build up the capacity to become fully automated. The respondents choose “Additive Manufacturing”, commonly known as 3D printing as their priority in IR4.0 as this area leading the industry to rethink where and how they conduct their manufacturing activities.

MANUFACTURER OF PAPER AND PAPER PRODUCTS

INDUSTRY OUTLOOK AT GLANCE



The paper, printing, and publishing industry recorded a tremendous jump in growth as compared to its performance in 2017. A total of 30 projects were approved with investments of RM5.4 billion in 2018, or a massive 1,463 per cent increase over 2017's figure of RM347.9 million.

Source: Malaysia Investment Performance Report 2018, MIDA

MANUFACTURER OF PAPER AND PAPER PRODUCTS IN HRDF

FACT 1: The Paper and Paper Products industry utilised up to 69.7% of the levy collected where the highest distribution of employers is at Selangor with 28.9%.



Employers Data as of September 2019

NUMBER OF HRDF REGISTERED EMPLOYERS ACCORDING TO STATES IN 2018

 Selangor 121 (28.9%)	 Johor 90 (21.5%)	 Penang 74 (17.7%)	 Melaka 34 (8.1%)	 Perak 29 (6.9%)	 Kedah 21 (5.0%)	 KL 15 (3.6%)	 N. Sembilan 9 (2.1%)
 Sarawak 8 (1.9%)	 Perlis 6 (1.4%)	 Sabah 6 (1.4%)	 Pahang 5 (1.2%)	 Kelantan 1 (0.2%)	 Terengganu 0 (0.0%)	 Putrajaya 0 (0.0%)	 Labuan 0 (0.0%)

Quick Takeaways & Highlights

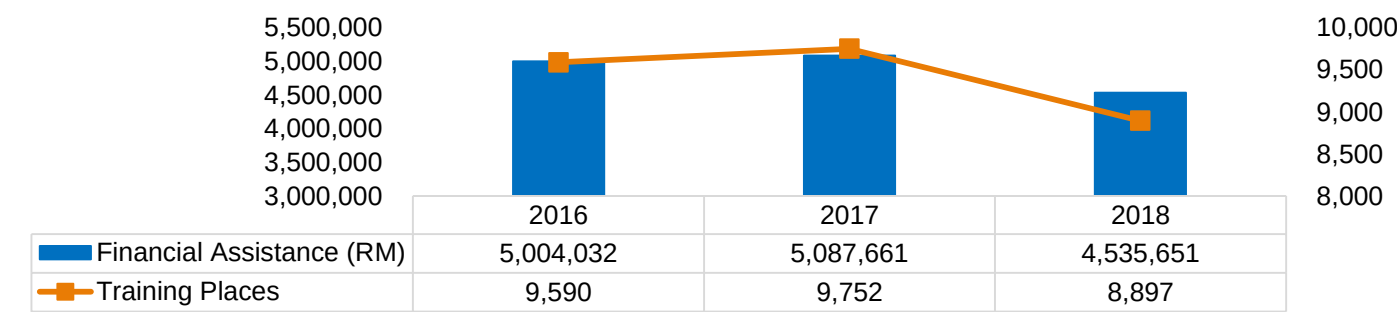
Production of paper primarily uses wood as its raw material. Recently, the use of fibre from recycled paper products have increased significantly due to the rise of demand for packaging paper. Some major companies in the industry include Muda Papermills Sdn Bhd., Nibong Tebal Personal Care Sdn. Bnd., GS Paper & Packaging Sdn.Bhd., and Pascorp Paper Industries Berhad

Source: Malaysia Investment Performance Report 2017, MIDA

MANUFACTURER OF PAPER AND PAPER PRODUCTS

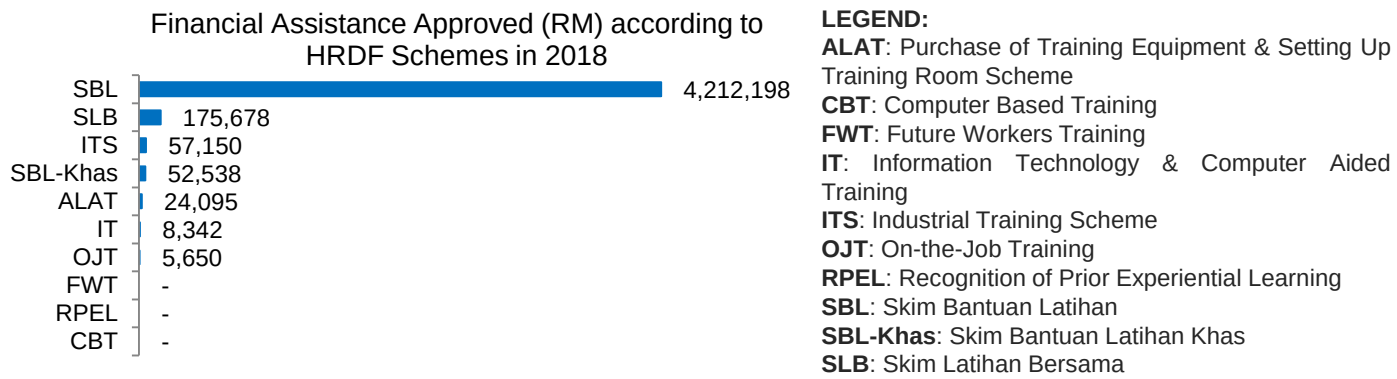
TRAINING OVERVIEW

FACT 2: Financial assistance and training places approved show the highest record in 2017 but decreased in 2018 by 10.8% and 8.8% respectively.



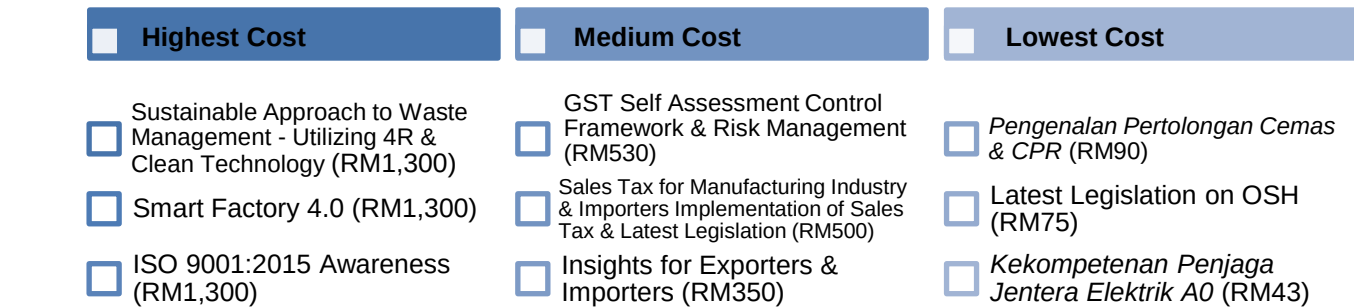
HRDF LEVY SCHEMES

FACT 3: Joint Training Scheme (SLB) is the second highest scheme approved for Paper and Paper Products employers in 2018.



COURSE FEES PER DAY

FACT 4: Paper and Paper Products employers mostly invested on courses related to import, export and taxes at medium cost in 2018.



*training fee/pax/day

Quick Takeaways & Highlights

65.6% of the training attended by employees of Manufacturer of Paper and Paper Products is Public courses that related to current technology at highest cost in 2018. Based on Malaysia Investment Performance Report, 2018 produced by MIDA, it has been stated that technology used by Malaysian paper manufacturers is considered to be out-dated compared to other global manufacturers. It is encouraged that local players to upgrade themselves by venturing into new technologies in order to adapt to disruptive changes for operational sustainability.

MANUFACTURER OF PAPER AND PAPER PRODUCTS

SKILL AREAS

FACT 5: Safety & Health is the highest skill area trained by Paper and Paper Products employers in 2018.

TRAINING PLACES	 Safety & Health (3,213)	 Quality & Productivity (1,483)	 Audit / Tax (664)	 Team Building / Motivation (628)	 Management / Strategic Management (452)
FINANCIAL ASSISTANCE (RM)	 Safety & Health (1,177,240)	 Quality & Productivity (576,664)	 Team Building / Motivation (353,852)	 Audit / Tax (351,131)	 Management / Strategic Management (330,995)

EMPLOYERS FEEDBACK ON TRAINING NEEDS

FACT 6: Training on communication skills required by all level of workers.

MASCO	TECHNICAL	NON-TECHNICAL
Skilled Workers	1. Electrical Engineering 2. Maintenance Management 3. Printing Technology 4. Production Engineering 5. Wastewater engineering	1. Quality Control 2. Human Resource 3. Sales & Marketing skill 4. Accounting/Finance 5. Communication skill
Semi-Skilled Workers	1. Computer Technology 2. Maintenance skill 3. Machine Operation 4. Art Production 5. Graphic Designing	1. Sales & Marketing skill 2. Communication skill 3. Administration/Clerical 4. Relationship Management 5. Report Writing
Low Skilled Workers	1. Machine Operation 2. Production 3. Maintenance skill 4. Packing 5. Forklift Driving	1. Safety & Health 2. Quality Assurance 3. Store Management 4. Time Management 5. Communication skill

Quick Takeaways & Highlights

The nature of work in Paper and Paper Products Manufacturing industry requires the employees to be equipped with Safety and Health skills. Occupational Safety and Health Act 1994 states that it is necessary for all employers to protect health, safety and welfare of the employees working for them. The maintenance of plant and systems of work to be safe is part of the skill required for Skilled, Semi-Skilled and Low-Skilled workers. If the number of accidents reduce, the cost can be reduced as well.

MANUFACTURER OF PAPER AND PAPER PRODUCTS

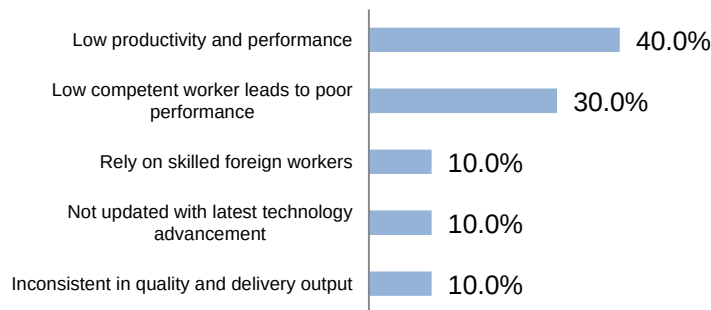
CHALLENGES IN TRAINING

FACT 7: The biggest challenge highlighted was commitment from employees in attending training.

Top Challenges in Conducting Training

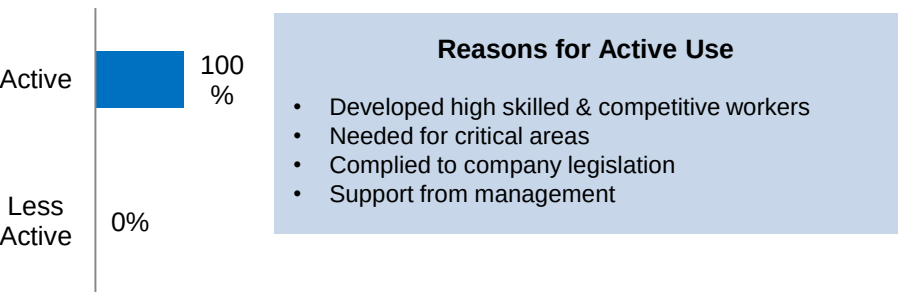


Negative Impacts with no Training



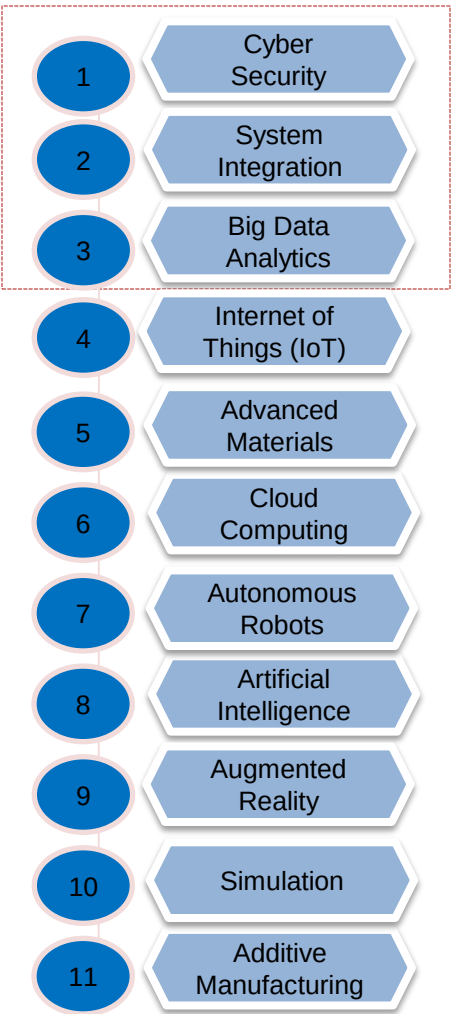
UTILISATION OF HRDF LEVY

FACT 8: 100% of the respondents cited that they were actively using their HRDF levy.



INDUSTRY 4.0 FOR MANUFACTURER OF PAPER AND PAPER PRODUCTS

FACT 9: Manufacturer of Paper and Paper Products employers required their employees to be skilled in “Cyber security”, “System Integration” and “Big Data Analytics” areas to support emerging innovations.



Quick Takeaways & Highlights

Compared to the actual levy utilisation rate and the perception of employers of Paper and Paper Products Manufacturing industry, the actual levy utilisation is at 69.7% which is lower than what was viewed by the representative of employers in the industry.

MANUFACTURER OF FURNITURE AND FIXTURES EXCEPT PRIMARILY OF METAL

INDUSTRY OUTLOOK AT GLANCE

8th
largest exporter of furniture in the world, 80% of which is wood-based.

Large market export to:



Given the Government’s directive to promote the production of high-value-added products, the industry is encouraged to focus on creativity and innovation in their production processes, moving up the value chain to become **original design manufacturers (ODMs)** and **original brand manufacturers (OBMs)**.

Source: Malaysia Investment Performance Report 2018, MIDA

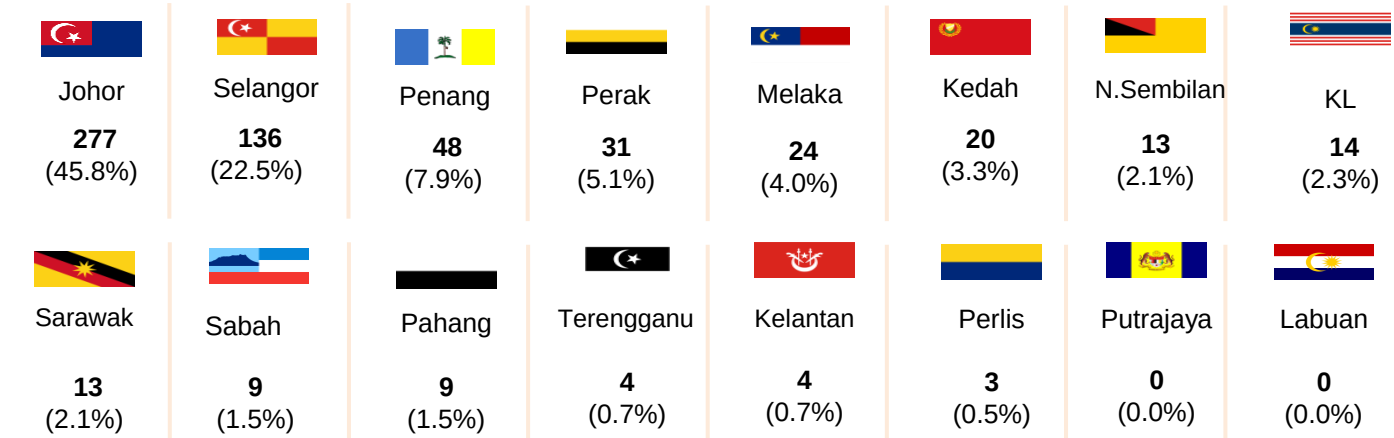
MANUFACTURER OF FURNITURE AND FIXTURES EXCEPT PRIMARILY OF METAL IN HRDF

FACT 1: The Furniture based industry expanded up to 62.8% of the total levy collected where 45.8% of them located at Johor.



Employers Data as of September 2019

NUMBER OF HRDF REGISTERED EMPLOYERS ACCORDING TO STATES IN 2018



Quick Takeaways & Highlights

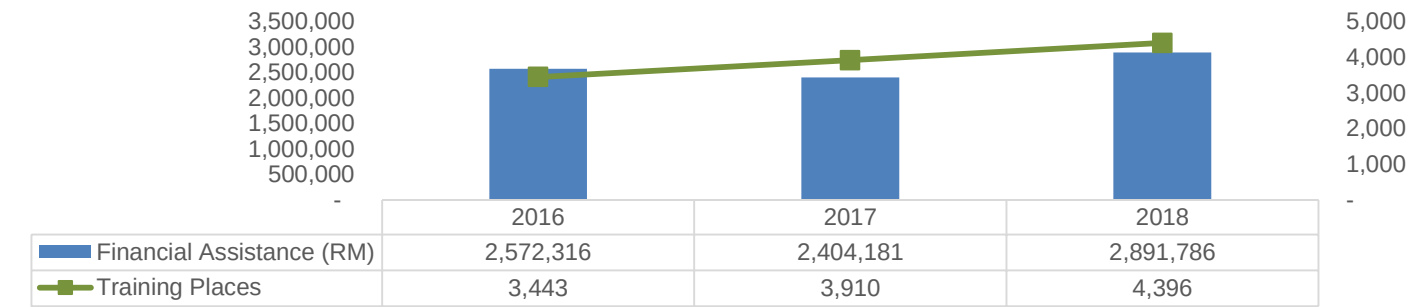
The main exports of Malaysian furniture include wooden bedroom furniture, seats and its parts, bedroom wooden furniture, kitchen wooden furniture and metal furniture. Major export destinations were recorded with Malaysia’s traditional markets such as the United States (US), Japan, Singapore, Australia and the United Kingdom (UK). Other emerging markets for the industry that recorded substantial growth were Canada (increased by 25.7 per cent), the Philippines (13.9 per cent) and the United Arab Emirates (6.8 per cent).

Source: Malaysian Furniture Export Performance Shows Growth, MATRADE (2019)

MANUFACTURER OF FURNITURE AND FIXTURES EXCEPT PRIMARILY OF METAL

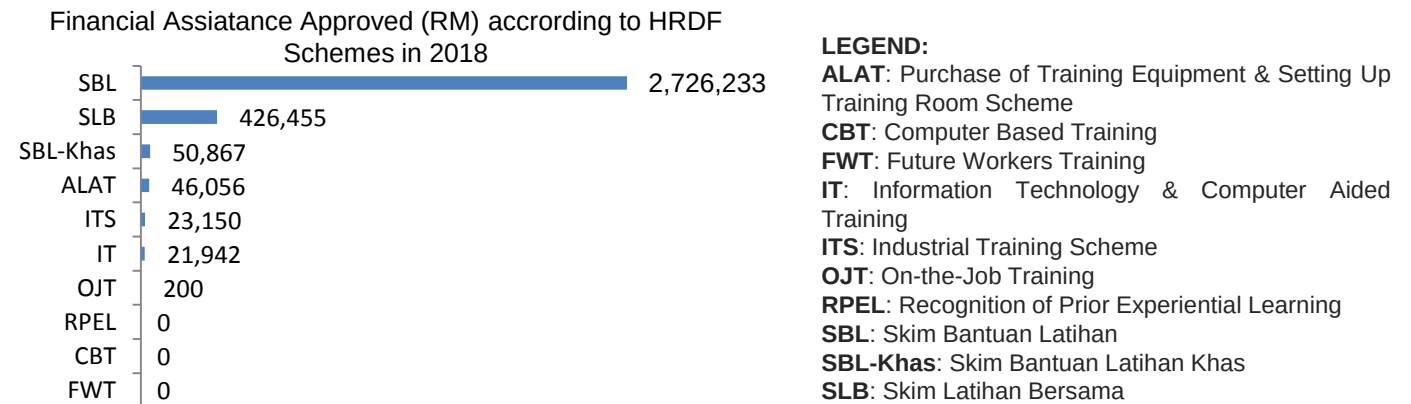
TRAINING OVERVIEW

FACT 2: The trend of training places increased by 27.68% from 3,443 (2016) to 4,396 (2018), and the financial assistance increased by 12.4% from 2,572,316 (2016) to 2,891,786 (2018).



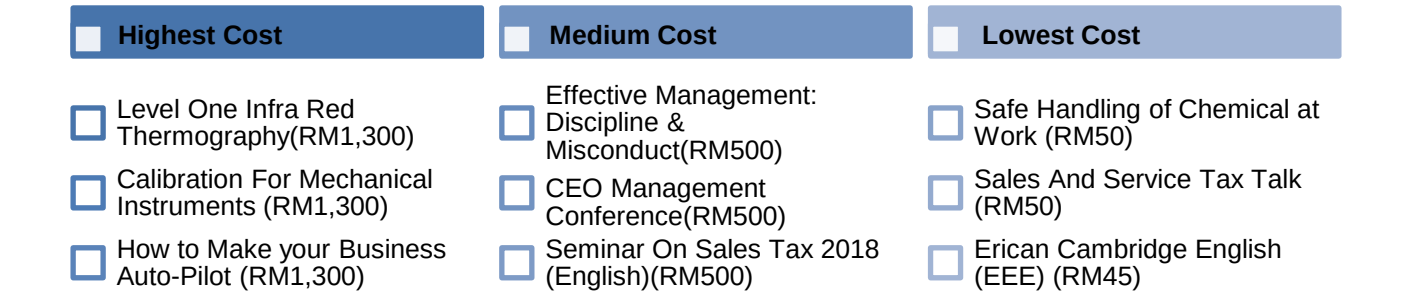
HRDF LEVY SCHEMES

FACT 3: Skim Bantuan Latihan (SBL) is the most utilised scheme by Furniture Base employers in 2018.



COURSE FEES/ DAY

FACT 4: The Furniture Based Industry spent most of their HRD levy on training related to management and business.



*training fee/pax/day

Quick Takeaways & Highlights

Malaysian furniture exports recorded a significant growth in the first five-month of this year, with an increase of 9.16 per cent to reach a value of RM4.14 billion, compared to the same period last year. This indicates the industry's growing importance in Malaysia's overall trade performance. As manufacturers increase their productions, there is a need for them to up-skill their workforce to adapt to the emerging technologies.

MANUFACTURER OF FURNITURE AND FIXTURES EXCEPT PRIMARILY OF METAL

SKILL AREAS

FACT 5: Safety & health is the highest skill areas trained by furniture and fixtures except primarily of metal in 2018, followed by Audit or Tax skill areas.

 TRAINING PLACES	 Safety and Health (1,323)	 Audit or Tax (598)	 Quality & Productivity (496)	 Team Building or Motivation (341)	 Accounting / Finance (180)
 FINANCIAL ASSISTANCE (RM)	 Safety and Health (669,862)	 Audit or Tax (323,473)	 Team Building or Motivation (278,244)	 Quality & Productivity (253,081)	 Management of Strategic Management (165,274)

EMPLOYERS FEEDBACK ON TRAINING NEEDS

FACT 6: Most of the technical training needs are related to the manufacturing of furniture products.

MASCO	TECHNICAL	NON-TECHNICAL
Skilled Workers	1. Safety 2. Quality Control 3. Product Engineering 4. Designing Skills 5. Research and Development	1. Management Skills 2. Leadership Skills 3. Industrial Relations Skills 4. Communication Skills 5. Safety and Health
Semi-Skilled Workers	1. Machine Operating 2. Computer Skills 3. Chemical Handling 4. Logistic 5. Production Planner	1. Management Skills 2. Supervisory Skills 3. Team building 4. Marketing Skills 5. Accounting Skills
Low Skilled Workers	1. Spraying 2. Wood Handling 3. Driving Skills 4. Sewing Skills 5. Packing Skills	1. Team building 2. Operation Skills 3. Safety and Health Skills 4. Security 5. Documentation Skills

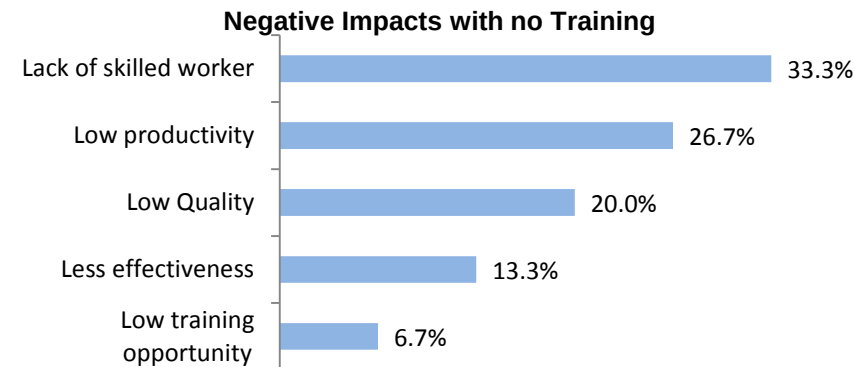
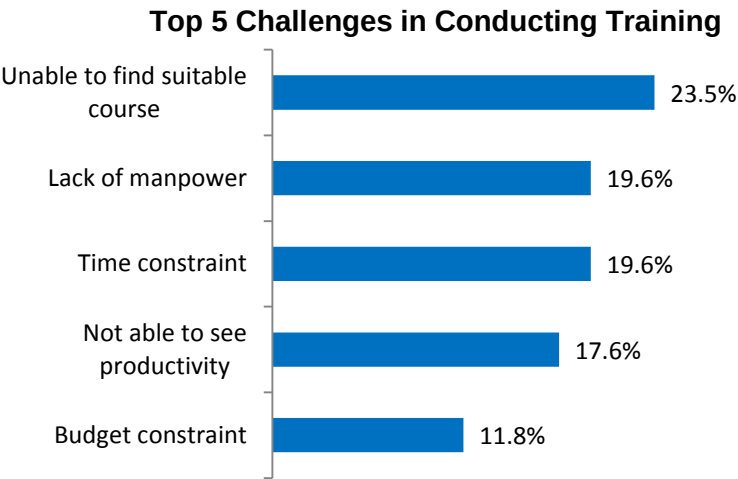
Quick Takeaways & Highlights

“Designing skill” is one of the critical technical skill needed to support the industry in moving up the value chain to become original design manufacturers (ODMs) and original brand manufacturers (OBMs). MTIB also established the Tanggam Design Centre (TDC), a design hub providing design-related services for industry stakeholders. The design centre hired a young and talented workforce with global experience in furniture designing to further enhance the timber industries continual industrialisation.

MANUFACTURER OF FURNITURE AND FIXTURES EXCEPT PRIMARILY OF METAL

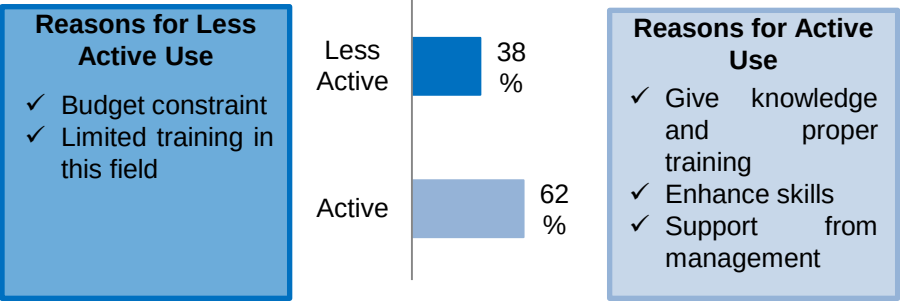
CHALLENGES IN TRAINING

FACT 7: The biggest challenge highlighted was “unsuitable course” due to the expensive course fee.



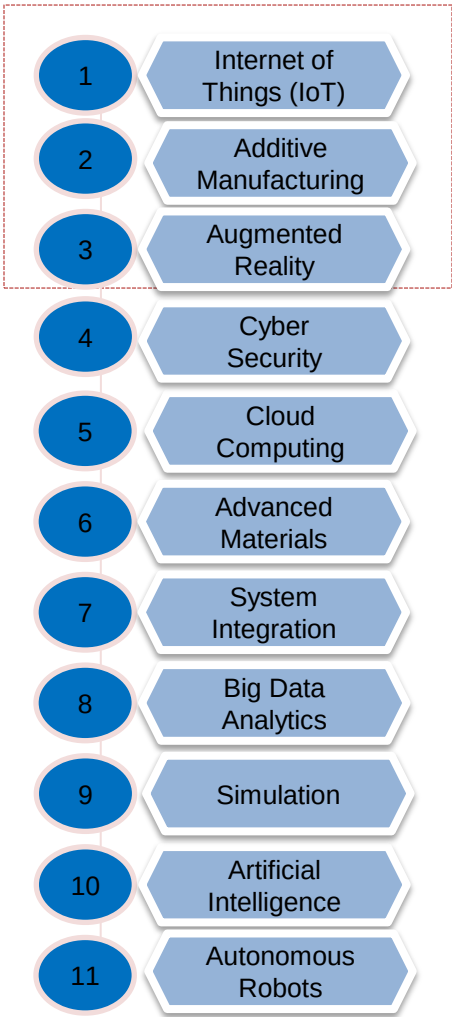
UTILISATION OF HRDF LEVY

FACT 8: 62% of the respondents cited that they were actively using their HRDF levy.



INDUSTRY 4.0 FOR THIS INDUSTRY

FACT 9: The registered employers in Petroleum Refineries subsector required their employees to be skilled in “Internet of Things”, “Addictive Manufacturing” and “Augmented Reality” areas to support emerging innovations.

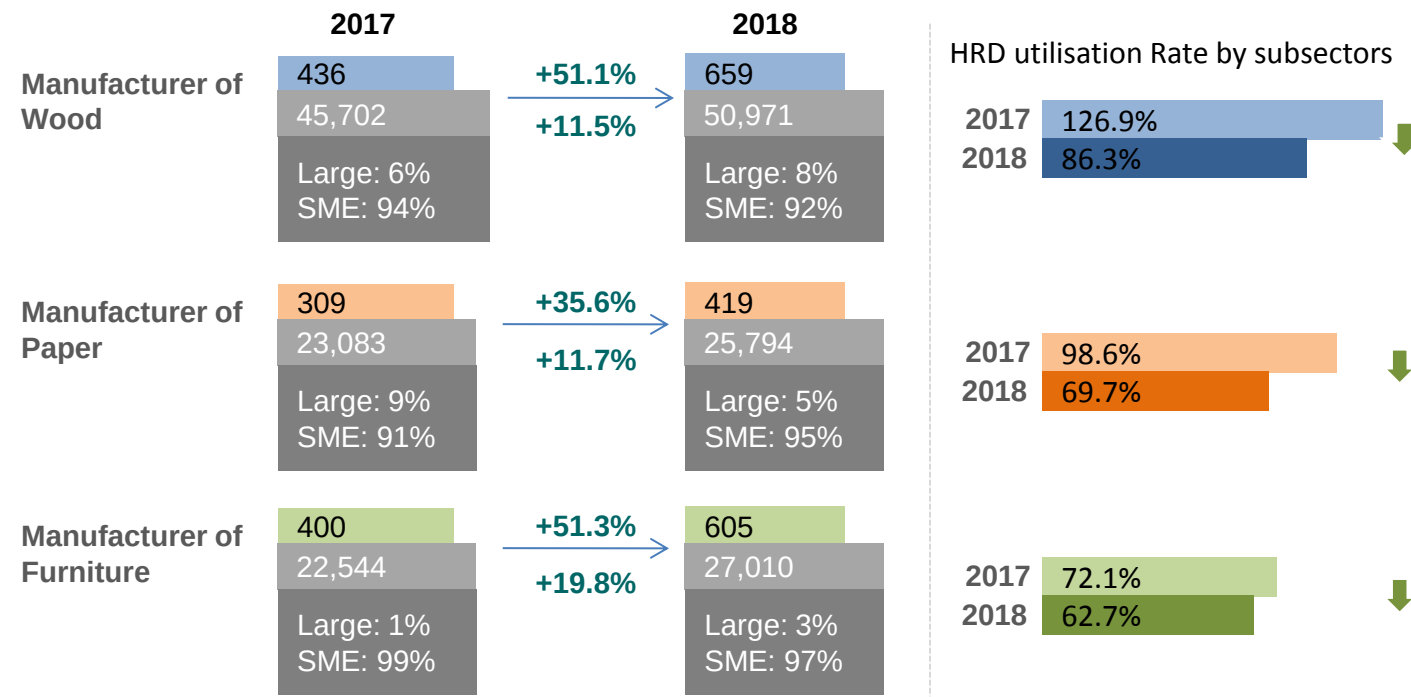


Quick Takeaways & Highlights

The results indicated that 38% of the respondents cited that they were less actively using their HRDF levy due to unable to find suitable courses and at the same time having manpower constraint. As far as Industry 4.0 is concerned, the use of Internet of Things (IoT) technology in home furnishings and retail will see explosive growth, with new categories of products that tackle problems at home and stores.

SUMMARY & COMPARISON OF SUBSECTORS

COMPARISON IN GROWTH NUMBER OF HRDF REGISTERED EMPLOYERS AND HRD FUND UTILISATION



The statistics show that all three (3) subsectors have increasing number of HRDF registered employers by more than 35% for each subsectors in year 2018. In terms of establishment size, these three (3) subsectors have lower representatives from large companies, of which below 10% compared to Small and Medium Enterprises (more than 90%).

In terms of levy utilisation rate, Manufacturers of Wood is the active subsector compared to the other two (2) , Manufacturer of paper and Furniture. Nonetheless, the statistics show that the utilisation rate for all three (3) subsectors have decreased from year 2017 to 2018, even though more registered employers benefitted from the HRD levy. The drop in levy utilisation rate (HRD fund) is due to the decrease in number of training activities among the respective employees. The scenario might be due to the economic downturn in manufacturing sector in year 2018 which causes the slow production.

CHALLENGES AND IMPACTS IN TRAINING

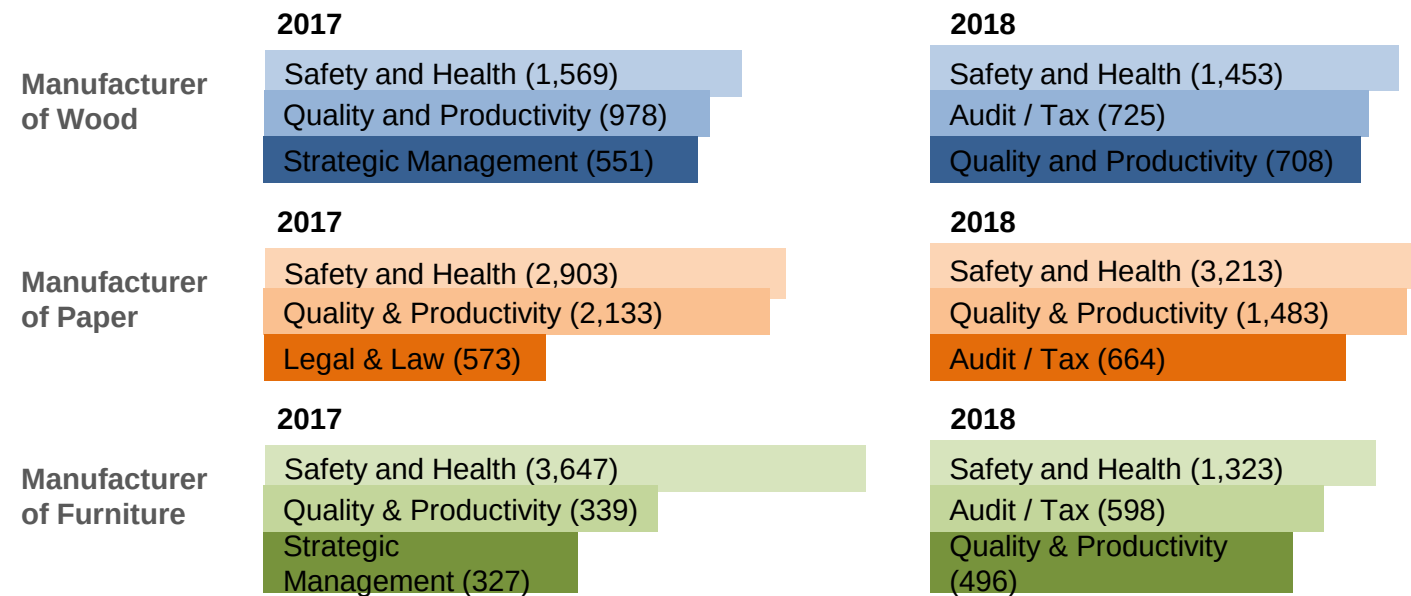


Manpower constraint and higher workload remain as the common challenge for all three respective subsectors in attending training as 90% of them are SMEs.

Apart from that, the respondents also agreed that difficulty to find suitable training also becoming one of the reason on low levy utilisation. Thus, it is suggested for HRDF to collaborate with Malaysia Timber Industry Board (MTIB) to identify the skill training needed by the industry in order to assist the development of value-added within this sub-sectors.

SUMMARY & COMPARISON OF SUBSECTORS

OVERALL TRAINING ACTIVITIES IN THE INDUSTRIES



The statistics show that “Safety and Health: skill remains as a priority within wood-based products industry. The scenario might be due to wood products industry historically considered to be one of the most dangerous sector for manufacturing employees. Workers are exposed to hazards ranging from falling trees to debarkers, saws, nail guns while working under pressure for high productivity.

Other skills required within these industries are “Quality & Productivity” and “ Audit / Tax” as all of them are from Manufacturing sector which lead to huge volume of production and export oriented industry.

TOWARDS INDUSTRIAL REVOLUTION 4.0

Digitization is changing all sectors - in the wood industries too, new challenges are emerging from highly networked industrial production processes.

As for Manufacturer of Wood industry, “Additive Manufacturing”, commonly known as 3D printing is one of the most important pillar in IR4.0 as this area leading the industry to rethink where and how they conduct their manufacturing activities.

Manufacturer of Paper and Paper Products found that “Cyber security” is the most important area as it plays an important role to cover smart machines, storage systems and production facilities – not just in one factory but across many.

Apart from that, respondents from Manufacturer of Furniture agreed that “Internet of Things” will drive their industry in creating intelligent networks – connecting machines, work and system that can autonomously exchange information, trigger actions and control each other independently.



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Human Resources Development Fund (HRDF)

INDUSTRIAL INSIGHTS' REPORT SNAPSHOT

Issue: 5/2019

HRD LEVY UTILISATION IN 2018

62.7%



Manufacturer of Furniture & Fixtures Except Primarily of Metal

86.3%



Manufacturer of Wood & Wood Products and Cork

69.7%



Manufacturer of Paper & Paper Products

CHALLENGES IN TRAINING



Higher Workload



Difficulty to find suitable training programme



Manpower Constraint

TOWARDS INDUSTRY 4.0



Additive Manufacturing



Cyber Security



Internet of Things (IoT)

CRITICAL SKILLSETS



Safety & Health



Audit / Tax



Quality & Productivity

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