

IJRTBT | REVIEW OF CURRENT SUPPLY CHAIN MANAGEMENT PRACTICES IN MYANMAR HEAVY EQUIPMENT MACHINERY INDUSTRY

Pyi Kyaw Soe*, Abhijit Ghosh, Amiya Bhaumik, Midhun Chakravarthy

Faculty of Business and Accountancy, Lincoln University College, Malaysia

*Corresponding Author's E-Mail: kopksoe@gmail.com

ABSTRACT

Heavy equipment machinery industry means the industry of doing business with heavy duty vehicles, earth moving equipment and big power generators which are widely being using in infrastructure construction, agriculture, mining, oil and gas fields, power plant projects and manufacturing factories. Heavy equipment machines are essentially required and vital role in construction and production to be done in a shorter time, low cost, and massive amount of production. In Myanmar, Heavy equipment machines and spare parts were not able to produce, and such kind of products are importing from abroad. Therefore, supply chain management (SCM) process is main characteristics, and performance of SCM process is playing as a critical role in Myanmar Heavy Equipment Machinery Industry (Myanmar HEMI). Purpose of this review paper is to present the current SCM practices of Myanmar heavy equipment machinery industry and applying of SCOR (Supply Chain Operation Reference) latest model SCOR 12.0, and to explore the strengths, weaknesses, opportunities, and threats to be developed the process of SCM in Myanmar HEMI. This paper has conducted review and evidence-based research design, and qualitative method for surveying authorized dealer organizations of worldwide market share top 10 brands in Myanmar HEMI. The results of this review paper stated that current SCM practices of Myanmar HEMI are reached to below SCOR 12.0 standard operation processes, and organizations within industry have to learn more knowledge about SCM and benefits of applying SCM practices. This paper suggested that how to apply and implement the standard processes of SCOR 12.0 in Myanmar HEMI. Additionally, this paper introduced and recommended to apply SCM 4.0 version in near future, which is fully applied the Internet of Things (IoT), modern technologies, and digital based supply chain management latest model and it contributes for more benefits in competing and developing within Myanmar HEMI organizations.

Keywords: Myanmar; Heavy Equipment Machinery Industry; Supply Chain Management; SCOR 12.0; SCM 4.0

INTRODUCTION

Nowadays, Heavy equipment machines and power generators are familiar with people, using in constructing of roads, offices, home and other business projects and Industries. In 1886, Benjamin Leroy Holt invented a combine harvester for agricultural purposes. It was followed by a steam engine tractor in 1890. In 1892, John Froelich developed the first stable gasoline-powered tractor with forward and reverse gears. Besides, many inventors are widely invented and developed continuously to construct the heavy equipment and power engines. Nowadays, Heavy equipment industry is strongly growth in trajectory. Modern heavy equipment industry is applying electro-mobility and autonomous machinery, artificial intelligent technology, and the Internet of Things (IoT) (Shirk, 2019). Heavy equipment machineries are replaced and applied with updated and advance technologies instead of manual control systems and processes. And widely using as an essential, to be done the tasks and jobs, to reduce the working time by acceptable cost. In global, Heavy Equipment

manufacturing, product sales and its spare parts markets are very competitive in availability, pricing, cost per working hour, and customer convenience such as innovation with modern technology, durability, and ability, after sale services quality and its cost, payment terms, and warranty for more economy to use. On the other hand, opportunities of Heavy Equipment sales are continuously and widely expanding in worldwide market and Myanmar.

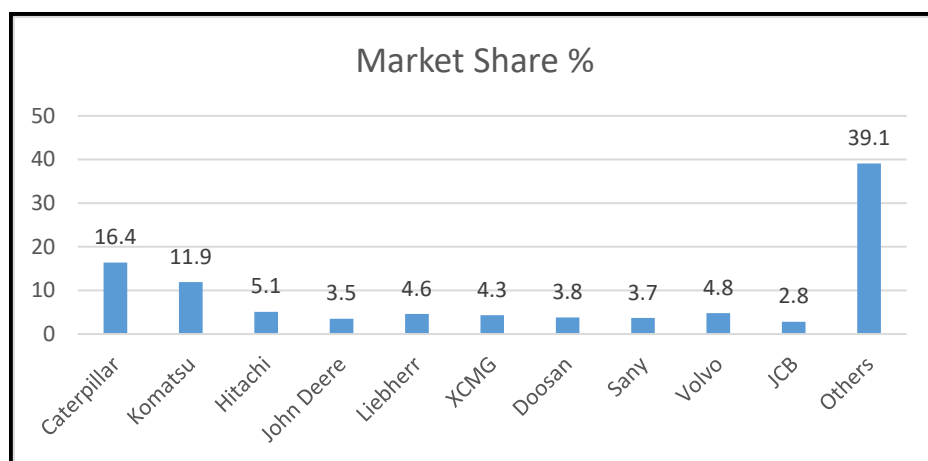
In Myanmar, Heavy equipment machines, generators and spare parts are not able to be produced because of lacking raw materials, resources, production machines and technologies. And such kind of products are importing from abroad. Mainly imported from China, Singapore, Thailand, Japan, and India (Myanmar Ministry of Commerce, 2021). Hence, supply chain management (SCM) process is very important and playing as a main characteristic of doing business, and to compete within Myanmar HEMI. As per Khairi Kleab (2017), better supply chain is a better business. The effective practices of SCM can be reduced the lead time and unnecessary operation cost, support to achieve customer satisfactions and can be pursued to customers in its competitive market. For competing within industry, firms must invest in their supply chain, to be competed supply chain versus supply chain against firm versus firm. Competition is also in among supply chains (SCs) (Hult, Craighead & Ketchen, 2010). Nowadays, Myanmar HEMI is very competitive, and it has also high opportunities of readiness to construct the infrastructure and projects. Applying better SCM practices in Myanmar HEMI is led to achieve the more customers and market shares.

LITERATURE REVIEW

HEMI market share

Global heavy equipment sales were downtrend from 2012 sales figures \$186 billion to \$163 billion in 2017. On the other hand, construction equipment manufacturing market is predicted to reach globally \$230.9 billion and Asia Pacific \$122.9 billion by 2020. Global market shares of manufacturing the bigger heavy equipment companies are Caterpillar, Komatsu, Hitachi, Liebherr, and Volvo, and they continue to dominate the top five positions in 2020 (Sharry, 2018). All the heavy equipment manufacturing companies are optimized its market share due to there has many opportunities in future global market. As per Zoe Sharry (2018), worldwide top 10 heavy equipment company Market share in 2017-2018 are (refer to figure 1):

Figure 1: Worldwide Top 10 Heavy Equipment Company Market Share 2017-2018



HEMI current situation in Myanmar

Nowadays, thousands of heavy equipment machines and big power generators are using in power plants and construction projects in Myanmar. According to The World Factbook (2021), Myanmar is a resource-rich country. And big opportunities of market share in Myanmar HEMI against infrastructure and industrial planning. Heavy equipment is mostly using in construction of infrastructure such as highway roads, dams, daily jobs and projects of Yangon City Development Committee and Mandalay City Development Committee, and Ports. And big power generators are using in gasoline power plants. Production and transportation projects of oil and gas fields, oversea and local ships in marine lines, jade mines, gold mines and copper mines, manufacturing factories and transportation companies are also using heavy equipment all over the Myanmar.

Many opportunities to use heavy equipment machines and power generators for recent and future projects and industries which are under planning for developing infrastructure and industrial fields in Myanmar (Myanmar Builders Guide, 2020).

Supply Chain Management (SCM)

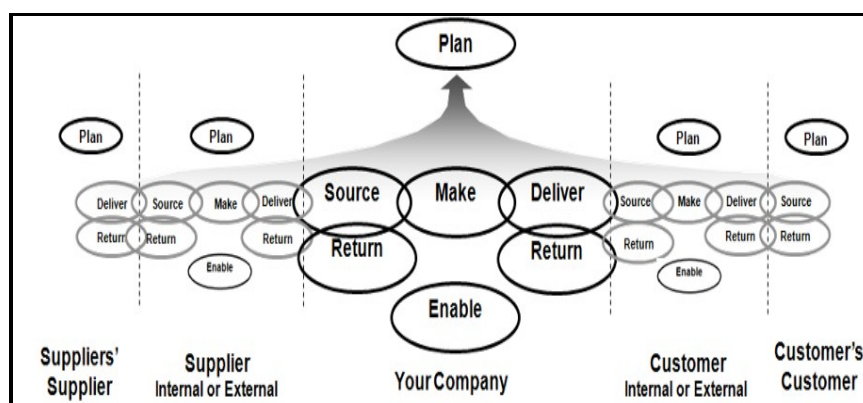
The purpose of SCM is to fulfil the customer needs and wants by satisfactions with making profit for organization at the same time. The SCM process is starting from supplier to end with customer (Chopra, Meindl & Kalra, 2013).

Supply Chain Operations Reference (SCOR)

Supply Chain Council (SCC) introduced SCOR to measure supply chain performance across the firm in 2005. The supply chain operations reference (SCOR) model is a powerful management tool of company supply chain strategic and process within supplier, customer and intercompany decision making (Kusrini et al. 2019).

SCOR model was continuously improved and updated by several adjustments to optimize the value chain for various companies. APICS (the American Productions and Inventory Control Society) released latest version SCOR 12.0 in 2017. In SCOR model 12.0, the enable process was created and added to the previous standard five areas of supply chain process (refer to figure 2). Thus, the SCOR model 12.0 focuses on six areas of the supply chain process: plan, source, make, deliver, return, and enable (Kusrini et al. 2019). Those areas and processes interact and repeat again and again along the supply chain. The supply chain council argued that this process spans from “the supplier’s supplier to the customer’s customer (Kusrini et al. 2019).”

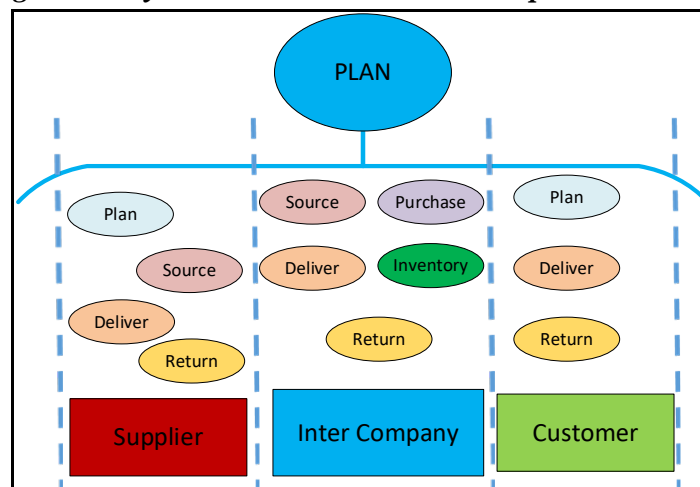
Figure 2: Standard SCOR model 12.0



Review process of Myanmar HEMI Current SCM Practices, Model and Method

SCM process of Myanmar HEMI is little bit different and changed on standard SCOR model 12.0 as Plan (Planning to sales, purchasing, after sales service, investment, rental, agreement with customers, suppliers, marketing), Source (Source of supply countries and brands), Make (Purchasing, Inventory Management for product availability instead of manufacturing or making products), Distribution (Main depot, Branches, Outlet Stores), Delivery (retail sales and transportation), Return (from customer to company, and company to supplier end), Enable (business rules, facility performance, data resources, contracts, compliance, and risk management). SCOR model 12.0 is a basis for global supply chain widely using in around the world to improve the organizations and companies (Kusrini et al. 2019) (refer to figure 3).

Figure 3: Myanmar HEMI current SCM practices Model



Since there has no production in domestic for such kind of heavy equipment machines, power generator units, components, and spare parts, are needed to import from the source of supply countries directly or indirectly. All the companies of Myanmar HEMI business situations are totally depended on importation supply chain process. According to Liu et al. (2014), effective supply chain management practices assisted to reduce the cost and lead time. Myanmar HEMI companies usually finding the best practices of supply chain management and activities because of it can be supported and overwhelmed to compete in market by reducing cost and lead time. As per customer behavior in Myanmar HEMI, companies are severely competing in market on brand, price, availability, and after sales service quality. But Brand name are constancy for dealers or importers, and it's well known and goodwill, brand images are totally depended on manufacturers. Myanmar HEMI companies have less competition on brand name and more emphasize to compete in price, availability, and after sales service quality. To reduce the lead time and cost of goods, Myanmar HEMI has to fully implement SCOR 12.0 model which is the latest and best practices of SCM process in importation and supply chain performances (Haider & Mohailan, 2020). Providing the after sales service best quality is also very important to be overwhelmed the competitors within market and it can be supported to develop the own organization.

As per Myanmar Builders Guide (2020), total 229 companies are doing business in Myanmar HEMI. But 10 out of 229 companies are found as official and sole authorized dealer/distributors in Myanmar for worldwide top 10 Heavy Equipment manufacturing market share brands. All others are doing business with unauthorized dealers/distributors, fewer transactions,

repair services only, and even for not well-known brands. In Myanmar HEMI, sole authorized dealership and distributorship is an official, grant for warranty and achieved trustworthy by customers for doing business strongly.

Plan

Myanmar HEMI companies used to review previous year target achievements and set the forecast supply chain target, budget, and expense for short- and long-term plan. Manpower, facilities, technologies, and training were considered in planning. There is attributes and matrix, Key Performance Index (KPI) were set up for supply chain management team and appraised actual achievement on the year end. And decide to set next year KPI targets. KPI are identified by specific objective, and it is a measurement and performance of SCOR (Waaly, Ridwan & Akbar, 2018).

Source

For a sole authorized dealer or distributor in Myanmar HEMI companies, they have no chance to choose the brand, country of origin, quality of goods, warranty, availability, and pricing. Since those are totally depended on source of supply. But Myanmar HEMI companies have the chance to negotiate with supplier for dealing with fare pricing with discount or promotion program to compete and win the market share in local. Need to record warranty cases and complaints from customers for getting better availability, grant for warranty and quality of products to be improved. For source of supply and country of origin, dealers or distributors sometime need to ask suppliers for specific customer requirement of country of origin to supply if products are available in multiple sources. Brand is no way to change for dealers or distributors, but they can try to deal with additional brand to trade as an additional or sub brand as per customers or local market requirements. Many Myanmar HEMI companies are doing business with multi-brand strategy as per market requirement and pricing competition. Multi-brand strategy is very useful for retail seller companies to pursue and deal with different target customers and different market segments (Jing, 2020).

Purchasing

Top 10 branded Heavy Equipment Suppliers have been set up their main depot and front distribution centers (FDC) around the world by regional wise such as China, Singapore, Korea, Japan, Dubai, Thailand, Australia, Europe, and USA to fulfill the assigned dealers or distributors requirement, to be supported for purchase order process and dealing as necessary by nearest regional authorized source of suppliers. Correct location of a front distribution center (FDC) supports to reduce the cost and improve its service level (Huang & Shi, 2021).

Purchasing from supplier's process is mostly using internet-based web-application, and via email with supplier preset purchasing format. Normally, dealers or distributors using their main supplier websites to be inquired the product availability, pricing, and ordering process. Some time for special cases, dealers and distributors have to contact their assigned representatives of supplier to get the assistance for lot wise order, one time order, support program, promotion, discount price and availability status in advance before submitting quotations, tenders or offer to customers. And follow up for not available in source and back ordered products. Suppliers have responsibility to proceed the placing back-to-back order to factories or some other source of distribution centers for not available parts and products at supplier source.

Dealers and distributors have to proceed purchase order by product requirement types such as supplier warranty, customer emergency, dealer stock, and to deliver in future dated agreement with customers. Sometime Myanmar HEMI companies used to place the purchase order by combining stock order and future dated customer orders. Future dated customer orders mean company got agreement with customers to deliver the products on predefined date, it has been set up in advance. Stock order is suggested by ERP inventory control system weekly or monthly based on Minimum/Maximum predefined parameter in system. To order or set up stock for new products or items, it was advised by concerned departments in organization such as Unit Sales, Marketing, Customer Service, and Rental.

Emergency order is normally for customer urgent requirements of new products, existing product machine/engine down, and nearly down situation. Warranty order is only entitled by company warranty policies agreement with customers. Warranty order process is same as an emergency order because machines or engines down is totally impact to company image and need to recover as earlier as possible.

Inventory Management

Myanmar HEMI, all surveyed companies are using computerized inventory management system. 40% are using standalone computerized inventory management system. The rest 60% are using intercompany integrated Enterprise Resource Planning (ERP) system, and not found the web-based or integrated with supplier end system. Inventory management system under the integrated ERP system can relate to Customer Relationship Management, Finance and Accounting Management, and Service Information System for capturing customer call and demand, service history, and current credit or debit status with customers other than main inventory control jobs such as receiving, issuing, and replenishing the inventory. Forecasting future demand by integrated inventory management system is very important to cover the lost sales and not filled products. Measuring lost sales, not filled, forecasting for future demand, ordering lead time, cost of goods, inventory turnover, service filled percentage, warehouse management, fast moving, medium moving, slow moving, and non-moving products by inventory management system under integrated ERP system. ERP system provides informational benefits to management such as operational, managerial strategic, IT infrastructure and organization management (Shang & Seddon, 2000).

Logistics

(A) Importation process

Suppliers to company importation process is really very important for matching with company and customer requirements. Company profit is based on customer revenue sales amount and its gross profit. For more revenue sales, company must provide the fare price and best availabilities of products by best practices of logistics and supply chain activities. Myanmar HEMI companies usually emphasize the best practices of their logistics and supply chain activities by reducing cost of goods, and to make the delivery in shortest lead time from supplier to customer end.

Companies decided the mode of shipments to import such as SEA freight, AIR freight and Express Courier Service for importation based on urgency and costs.

SEA freights are using for stock and customer future dated orders, and consolidation of stock and customer orders if those have enough lead time to wait for importation. AIR freight is using for

emergency and urgent orders to be filled by shorter lead time. Express courier services such as DHL, TNT have the shortest lead time for importation process, but it has limited importation amount USD 500 maximum import value in one shipment. And it can be considered likewise personal effect and no need to proceed for commercial importation customs clearance and import license process. For summary of mode of shipment, lead time and cost of freight with its strength and weakness shown in below (refer to table 1):

Table 1: Summary of mode of shipment, lead time and cost of freight with its strength and weakness

Mode of Shipment	Lead Time	Cost	Strength	Weakness
SEA	Long	Low	Suitable for Big Volume and Heavy Weight	Long Lead Time
AIR	Medium	Medium	Suitable for Small Volume and Light Weight	Not suitable for Big Volume and Weight
Courier Express	Short	High	Very Fast But allowed for Below USD 500 per shipment	High Cost and Not allowed above 500USD

Before shipped out from supplier end for AIR freight and SEA freight, importer has to verify all of the shipping documents, such as BL, AWB, sales contract, proforma/commercial invoice, packing list, insurance and country of origin certificate. Importers need to apply import license in advance for some of predefined license required products or declare import form at port for customs clearance. Some importers handed over to third party logistics agency team for customs clearance process and it is more convenient with importers, safer and faster for port customs clearance process. Port customs clearance process average lead time is two weeks from vessel or cargo arrival to receive at importers' warehouse. For the cost for customs clearance at port, estimate charges including agent service fees and transportation up to arrival of importer warehouse (Yangon City area) is as per below (refer to table 2):

Table 2: Cost for clearance at port, estimate charges including agent service fees and transportation

Cargo Type	Estimate Cost of Port Clearance	Port Clearance Lead Time
1 x 20' Container	350 USD	2 weeks
1 x 40' Container	500 USD	2 weeks
Air Cargo	250 USD per shipment	2 weeks
Courier Express	Per weight	1 day

And three kinds of Customs duties are needed to pay for every shipment, those are Import Duty, Commercial Tax and Pre-profit Tax. Import duty has to pay 1% to 40% of import value based on imported unit or product HS Code category, such as Machines and Generators 3% to 10% based on capacity, Filters 5%, Oil and Lubricants 1.5%, normal spare parts of engines and machines by 3%, etc., And Commercial Tax 5% and Pre-profit Tax 2% of added import value are fixed for every import unit or product. But Commercial Tax and Pre-profit Tax are advance taxes for importers, and it has chance to offset when imported units or products were sold out to consumers or when company submit the financial audit report to government yearly. In 2017, Myanmar customs department started to apply

the Myanmar Automated Cargo Clearance System (MACCS) for customs clearance of documentation process to be more convenient and faster (Japan International Corporation Agency, 2017). But MACCS limited for 200 items or products only and need to run manual clearance process as like before for above 200-items or products importation. Manual and X-ray scan inspection of import units or products are applying for ground physical check at customs ports. Some import products are needed pre-examination or inspection for ground physical check based on imported HS code. Below is steps of current customs clearance process and lead time (refer to table 3):

Table 3: Steps of Customs Clearance Process and Lead Time

Customs Clearance Process	Lead Time (Day)
Arrived at Port	Day-1
Mani-fax received	Day-2
Clearance Documents presenting	Day-3
Pre-Exam/Inspection (Excluded for some H.S. Code products)	Day-4
Verification at customs office	Day-5
Final-Exam/Inspection	Day-6
Valuation Verification	Day-7
Payment Order Received at Agent	Day-8
Payment Check Received at Agent	Day-9
Import Units or Items arrival to importer warehouse	Day-10

Total lead time for port customs clearance is needed to add weekend and public holidays in above mentioned lead time due to port customs department are not working on those days normally. Importers have to pay double daily wages if they would like to run the customs clearance or port process on weekends or holidays. According to Nārhi (2021), collaboration with suppliers, buyers, service providers and the customs can be improved the import/export process and key to achieve efficient and agile the supply chains.

(B) Deliver to Customers

Myanmar HEMI Companies are providing delivery terms in Ex-Work, DDP, FOB, FCA, CIP and CIF under incoterm 2020 (LLamazares, 2020), as per customer requested. All the surveyed companies' main depots are available in Yangon since importation port entry is available in Yangon only for SEA, AIR and Express shipments. Border trade is not widely used, and it has very less transactions than SEA, AIR and Express shipments for importing Heavy Equipment products.

Branches are opened and doing business with customers from all over the Myanmar, mainly branches are found in Cities of Nay Pyi Taw, Mandalay, and Pharkant. Main Depots were received the imported products and delivered to customers directly or through branches. Inland transportation is smooth and Heavy Equipment companies are using third party logistics or transportation companies without contracts. They negotiated for each sending product and lot wise. Spare parts can be delivered by overnight to send branches from Yangon main depot.

As for customer payment term: Cash in Advance, Cash on delivery, Credit 30 days, Credit 25th of next month, cheque, TT and LC are widely used as per predefined customer types. Customer types are loyal customer, vulnerable customer, risk customer and one time customer. Loyal customers getting the credit payments and discounts on their purchase value. There is charged interest for late

payment of credit customers, but loyal customers got special rights for exemption to pay interest if some time delayed for payment. And they can get some discount if payment can be made in earlier or during credit payment term. Commercial tax is needed to pay by customers or buyers if the revenue is done anywhere in Myanmar.

(C) Return

Return process or policy has been set up by most of Myanmar HEMI companies for discrepancy, damage, quality issues, warranty and goodwill of delivery units and products. Customers can complain and return the delivery units and products by convert of same delivery process if the company is accepted for false or entitle to source of supplier warranty policy. Myanmar HEMI companies' feedback of return policies are issue credit payment, replace with new products, repair the defected parts, deferred payment allowance, discount offered, based on type of customer complaints and requests.

Export process in Myanmar HEMI is just only found the Re-Export for machines, Generator sets and spare parts since there is no manufacture the heavy equipment products. But there are few transactions only, and re-export for return to supplier by some causes such as wrong supply, used warranty parts, customer cancellation for purchasing products. Re-export process is the same as import process, such as license application, declaration, port customs clearance, shipment arrangement and payment term. It is very less transaction and not much impacted to SCM process and doing business of Myanmar HEMI. However, according to Shaharudin et al. (2017), sharing product return information with both supplier and customers can achieve a higher performance in SCM.

Above sections had mentioned about Myanmar HEMI current SCM practices, facts and figures were received by verbal interviewed with supervisors and managers from targeted surveyed companies in Myanmar which are top 10 worldwide market share brands. Below is SWOT analysis on current SCM practices in Myanmar HEMI (refer to table 4). The section also described about author suggestions after compared with SCOR 12.0 standard performance measurements and analyzed by SWOT analysis method.

Table 4: SWOT analysis on current SCM practices in Myanmar HEMI

<p>Strengths</p> <ul style="list-style-type: none"> -Myanmar is Resource Rich country. -Dealers/Distributors are available in country for worldwide Top 10 market share brands. 	<p>Weaknesses</p> <ul style="list-style-type: none"> -Not able to produce the equipment in local. -Totally depend on suppliers. -Lack of applying latest model of SCOR 12.0 performance measurement standard -Lack of modern technologies.
<p>Opportunities</p> <ul style="list-style-type: none"> -Available many numbers of Heavy Equipment in country. -High demand available in existing and future market, projects and government plans. 	<p>Threats</p> <ul style="list-style-type: none"> -Many unauthorized dealers/distributors after sales service companies are existing in market. -Current SCM process is complex, cost is high and lead time is very long.

Hence, Myanmar HEMI must conduct the further research and adhere the best practices of modernized SCM process, it is very important to pursuit customers and develop the organizations with achieving more profits and market shares.

Figure 4: Myanmar HEMI current SCM practices under SCOR model

Myanmar HEMI current SCM practices under SCOR model						
Phase	Plan	Source	Make		Deliver to Customer/ Through Branches	Return
			Purchasing	Inventory Management		
	Review previous target and achievement	Brand, country of origin, quality of goods, warranty, availability and pricing	Set up the main depot and distribution centers	Standalone Inventory management system 30%	Set up the Main and small branches for coverage of territory	Set up the Return policies for discrepancy, damage, quality issues, warranty and goodwill
	Budget and expense for short and long terms plan	Price negotiation and discounted or promotion program	Purchase from HO and main branches. Supported in territory	Intercompany integrated ERP system 70%	Select the shorter lead time and less transport cost	credit payment, replace with new products, repair the defected parts, deferred payment allowance, discount offered
	Forecast supply chain target	Supplier Warranty	Using web based application and email for purchase process with order mode (stock, emergency, warranty, FDO)	Call/Demand Stocking parameter ROL/ROQ Protective	Lead time and cost Sea Freight Air Freight Courier Express	Return to sources for wrong supply, used warranty parts, customer cancellation for purchasing products. Re-export process
	Manpower, facilities, Technologies, Training	Options for country of Origin	Contact assigned representatives of supplier for special cases	Updated stock level monthly and Stock replenishment weekly	Ex-Work, DDP, FOB, FCA, CIP and CIF under incoterm 2020	
	Planning for Attributes and Matrix KPI	Additional Brand and Sub brand requirement	Supplier placed order again to factories for back orders	Fill percentage Inventory T/O Lost sale and not fill Lead time Cost of goods WMS	Inland Transportation by third party logistics	

Suggestion

Regarding of the supply chain management plan, design, determine the metrics, efficient, effective and deliver value to customers must be aligned with company’s strategic management plan (Perkins, White & Wailgum, 2021). Supply chain plan such as Demand and supply, resource requirement, inventory value, transportation, assets, and regulatory compliance also aligns with company financial plan (Haider & Mohailan, 2020).

For Myanmar HEMI supply chain process, need to review the SWOT analysis in all the five areas of SCOR to eliminate, modify, add, and change process, and ease of doing business strategies for achieving more efficient in planning process. And Myanmar HEMI is becoming more competitive due to many opportunities in projects of infrastructures and industries are planned by government and private sectors during these years. Heavy equipment machines and power generators are essentially required and play a critical role to accomplish those projects. Therefore, Myanmar HEMI should consider for supply chain management plan not only in intercompany process but also to be extended with the market opportunities forecast and competitive supply chain situation in soon and future.

For Source, Supply chain managers should use the variety of processes to monitor and manage supplier relationships and processes (Perkins, White & Wailgum, 2021). It describes how to manage inventory, the supplier network, supplier agreements, and supplier performance. And how to handle supplier payments and when to receive, verify, and transfer product (Haider & Mohailan, 2020).

In Myanmar HEMI, specific supply chain managers were not assigned properly, and separate department are taking care for separate process likewise machines department, generators department, spare parts department, service department, sales department, marketing department, and reported to concerned General Manager directly. Supply chain can be divided to work perfectly by department wise but should be reported to single head of supply chain manager for combining data, balancing each other, and achieving better supply chain performances, to set planning and sourcing against all SCOR process at the same time.

As for **Make** step, Supply chain managers should take care to observe the quality of product, package for shipping, and schedule for delivery, worker productivity to ensure the enterprise creates products that meet quality standards (Perkins, White & Wailgum, 2021).

Supply chain managers need to take the responsibilities and decision making of make-to-order, make-to-stock, or engineer-to-order, managing the supply and delivery network, equipment and facilities, and transportation (Haider & Mohailan, 2020).

In Myanmar HEMI, as aforementioned, there is no manufacturing or production. Supply chain managers should take the activities of purchasing, logistics and inventory control better performance and to meet with customer requirements such as quality, deliver by shorter lead time or need by date, product availability, reducing cost of goods under this step.

Delivery is one of the logistics functions. It includes coordinating customer orders, scheduling delivery, dispatching loads, invoicing customers, and receiving payments (Perkins, White & Wailgum, 2021).

And involves management of inventories, assets, transportation, product life cycles, and importing and exporting process (Haider & Mohailan, 2020). Worldwide class many organizations contracted with third party logistics and transportation companies for achieving better performance in delivery process. Myanmar HEMI companies should need to contract with third party logistics and forwarder companies for arranging delivery to customer especially for large units, consignments or lot wise delivery and import-export clearance process.

For Returning- Companies must have the policy and process map of handling the return from customers for defective products (Haider & Mohailan, 2020). Supplier has responsiveness for taking back customers unwanted products and excess supplied (Perkins, White & Wailgum, 2021).

Myanmar HEMI companies should have the strong return and credit policies for customer return for defective, wrong, excess supplied and customer order cancellation, but there should be limited and to be verified whether customer requested return is entitled and eligible by preset up return and credit policies. Authorization level is also needed to set in advance for faster and better performance of returning and credit note issuing process.

Supply chain managers also need to set the policy and return process map to claim and sending back those defective, excess, wrong supplied products to supplier source. Supply chain manager performance in claim process for return to source of supply included showing strong evidence, using official format, clear stated, acting within limitation date, communication, and explanation of claim.

Those performances are very important to accept the claim at supplier source end for getting back credit note for it.

Enabling- Supply chain activities are running several support processes by other departments such as finance, HR, IT, facilities, portfolio management, product design, sales, and quality assurance. Need to make sure and monitor for compliance with those departments regulations to be operated supply chain process efficiently (Perkins, White & Wailgum, 2021).

RECOMMENDATION

In recent decades, industry revolution version 4.0 is conducting based on new technologies for achieving best performance in many organizations all over the world. Industry 4.0 will change and impact on supply chains design and operation (Holmström & Partanen, 2014). SCM 4.0 represents a new stage of development in SCM in the era of industry 4.0 (Stölzle, Hofmann & Oettmeier, 2017). Myanmar HEMI need to understand very well of SCOR model standard process and has to conduct the modernize and new technologies based SCM 4.0 version under Industrial 4.0 is one of the best practices and innovation of SCM process in future.

For further research, to find out and explore the strengths, weaknesses, opportunities, threats, and basic requirements to be conducted SCM 4.0. Additionally, the whole Myanmar doing business SCM standard should be classified and compare with the main supplier countries SCM standard since buyer and seller are in same version of SCM standard is making more benefits in doing business.

CONCLUSION

As per reviewed of current SCM practices in Myanmar HEMI, applying some of SCOR 12.0 model standard process but not yet fully implemented for getting the best practices. The SCOR 12.0 model can support a company SCM practices to be perfected and enable to provide many benefits.

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