

War Room Concept in the Context of Distribution Logistics

¹Hairul Rizad Md Sapry, ²Abd Rahman Ahmad, ¹Mazlan Md. Zahid and ²Ng Kim Soon

¹Faculty of Industry Logistics, Malaysia Institute of Industrial Technology,
Universiti Kuala Lumpur, 81750 Masai, Johor, Malaysia

²Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia,
86400 Batu Pahat, Johor, Malaysia

Abstract: The rationale of this study is to describe the application of war room concept in the logistic operation through the integration of different platform and functions to create transparency and effective decision. The main purpose of this study is to discuss on how distribution logistic function through the war room operation integrating the resource allocation and knowledge sharing using a single platform of communication. This study describes the operation of the war room and illustrates how benefit were gained from the war room process. The study also highlight several questions and issues that were considered but do not attempt to present a comprehensive discussion on this concept.

Key words: Supply chain, logistic, distribution logistic, war room concept, function

INTRODUCTION

In the current trend of deregulation, the rise of the mass communication, technological innovation and the introduction the concepts of supply chain has changed significantly the landscape of logistics business in many countries. The volatile pace in the modern business requires logistic functions in the organization to reevaluate and improve their processes to stay ahead and competitive from the competitor.

Logistics is often viewed as the integrating element of the supply chain (Rutner *et al.*, 2012). To improve the supply chain, logistics function play a crucial role not limited to improve the flow of internal and external information, but also the ability to interpret and analyze the information (Chin and Heng, 2008).

The ability to interpret and analyze the information is still enduring the main weakness of the logistics function and widely discussed in the research field. Some researchers such as Gunasekaran and Ngai (2003) linked this issue to incapability of Logistics function to manipulate the complexity of available technology for the process improvement in logistic. As argued by Christopher quoted by Gunasekaran and Ngai (2003), the real challenges within logistics function is not a competition from the competitor but rather a challenge from themselves which is in line with a finding by Chen *et al.* (2009) that highlighted the inability of logistic community to utilize the available technology.

In recent years, the commercial world demonstrated the significant gains were possible from the integration of different networks or platform to monitor the transactions, sales and inventories and identify shifts in customer trends. This finding has led to the introduction of similar concept by the logistic community where all the different system or technology were integrated under a single platform or control room that known as a 'War Room'. The war room operation concept is not only a concept means for ergonomic design of a management meeting room but also was developed as a structured platform to monitor the performance. It is intended to make the management teams more efficient by improving communication between different functions by focusing them on the strategic issues. The 'War Room' concept was originated from the military process and can be potentially commercialize in logistic function due to potential benefit realized.

This study describes on how the war room concept can be implemented in the distribution logistics in Malaysia and provide insight on the potential improvement on planning and monitoring of the logistics process.

CHALLENGE IN DISTRIBUTION LOGISTICS

Distribution Logistics is recognised as a key function in the entire logistics system which provide a significant link between manufacturers and customers in

a supply chain process (Yang, 2013). It is also recognize as a strategic driver in determining the profitability of the business due to direct impact on both side of the logistics cost and the customer experience. It is usually the highest single expense in the logistic cost structure. The importance of distribution as a strategic role in logistics has attracted management’s attention due to rapid fluctuation of transportation freight as resulted of volotation of crued oil.

In the current trend of business enviroment, the element of cost, quality, efficiency and customer service level are equally important to ensure the sustainability of the business. The requirement for optimal design of distribution system is become crucial to stay ahead in the competition.

The common problems face by the distribution logistics includes delayed and inaccurate information, incomplete services, slow and inefficient operations. These mainly due to lack of flexibility in responding to changes as a resulted lack of intergartion with other business functions to realize the value-added activities that improve customer services (Gunasekaran and Ngai, 2003).

Value chain solution in their study highlighted the Distribution challenges in providing efficien service to customer as resulted of the following:

- Conflicting objectives of departments
- Time loss in information gathering
- Manual data consolidation from multiple business units for reporting
- Error in keying in details
- Demand-side variability
- Supply-side variability
- Lack of information availability and visibility
- Sub-optimal planning
- Adaptability and risk aversion

To be more effective and efficien, distribution function require a change in the process where various business units and different paltforms are integrated in a real time data and in a seamless manner that can help in taking timely and informed decisions.

War room concept: War room according to Sinex *et al.* (2000) is a concept that was adopted from the US Navy military for the commnad center that integrating all the networks, sensors in the single platforms for “speed of command” and “self-synchronization”. It then extended within the military logistics function as part of the starategy to respond on the realtime requirement from the combat requirement in the field (Russell, 2007).

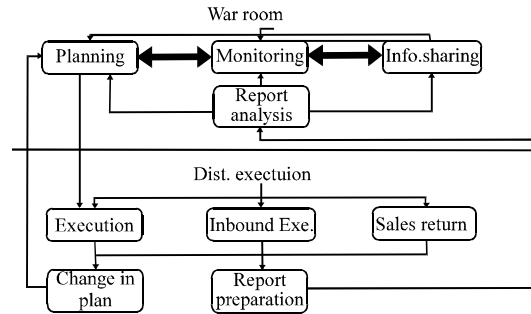


Fig. 1: A model of segregation duty in war room concept

A war room is exactly the name suggested or a room dedicated to control of your business or if you would like, where you review the execution of your business strategy on a daily basis. It is operate on single platform with real time data captured through from various software or technology, i.e., SAP, RFID, GPRS, SMS, Email, Scanner, Barcoding, etc. It is also considered as the brain or nerve centre of the organisation. The war room is not only vital in monitoring and driving improvement in the Key Performance Indicators (KPIs) but it is also plays an integral part in effectively communicating what is happening in the business to all the workforce chain.

War room plays a pivotal role in the logistics and is a state-of-the-art solution. It’s a very smart and effective tool to track every activity from the supply side to the very extent of customer delivery. It also help to take necessary actions to streamline the process and also to take preventive steps to avoid any shortfall and it also plays a major role in planning, monitoring, control and visibility purpose.

In war room concept, the war room personel will involved in planning and monitoring while the execution part will be handled by the distribution logistics team, i.e., to assign the truk for delivery. This is different from conventional logistics operation where planning, execution and monitoring is handled by the same person or team. A clear segregation of the planning and execution is to ensure transparency and effective monitoring (Fig. 1).

In the operation, the War room personel will be able to access complete scope of supply chain management infromation such as the supplier’s supply capability of raw materials, shipment progress, inventory status (raw material and semi/finish good), production/packing performance, in-plant truck mangement, transporter supply capability, driver performance, delivery tracking status and feedback from driver or customer.

These information will be extracted from various software or technology that linked to a single platform in

real-time data. These information will be analysed and used as a guide for the delivery planning. War room is also functioning as information center for the company as it is loaded with the information from the supply and demand side. It can act as mediator between operation team (manufacturing/production/logistic) and sales team to update both functions fluctuations in planning.

The other role of war room is to review the performance of the planning and execution based on the KPIs set by the company. This activity will be jointly reviewed by the other functions during the war room meeting review.

War room meeting procedures: The war room procedures is developed to be a very focused oriented in order to increase our understanding on the complex problems. It is facilitate with visualization and assimilation of data that links to various network in a realtime. It is highly interactive and integrative, enabling a collaborative team to break down complex problems and information processes into comprehensible parts to promote structured dialogue and brainstorming. War rooms have been used by the military to study new problems and develop new concepts (Sinex *et al.*, 2000).

A structured war room meeting will be conducted daily to review the business performance in order to identify and resolve the issues that prevent successful execution to the plan by review of KPIs, identify areas of poor performance, agreeing actions, allocate ownership, and completion dates. In this forum, setting priority is crucial to ensure everyone is focused on the same issues. The aim of the forum is to generates positive peer group pressure which quickly builds teams, commitment and a one plan mentality.

Ideally the war room meeting should be no shorter than 30 min and no longer than 60 min. If issues arise and people become bogged down in debate it is best to park the issue, select individuals to continue the discussion outside of the war room meeting and have them report back on the outcomes the following day.

Equally there is a danger that the meeting can become too short. Remember that the war room forum is about monitoring and communicating the performance of the business so it is important to strike the right balance between being too brief and skipping over the issues and being too weighty and bogging people down with unnecessary data. The war room meeting is ideally organized as follows:

- Its a paperless environment, where possible
- Results/issues/actions are recorded on boards
- Each meeting lasts about 30-60 min

- With approximately 5-10 min/function
- The reporting follows a structured sequence
- Reports should be short and sharp

Key Performance Indicator (KPI) measurement: War Room measure and report on anything that is fundamental to the effective and smooth running of the business. KPIs will be used to evaluate the planning and execution performance against the similar operation or industry standards. This will help War room decision maker to have clear insight into business objectives (Krauth *et al.*, 2005). Proposed measures within the war room include:

- Outstanding order status and pattern
- On time delivery and tracking status
- Load cycle time monitoring
- In-plant queuing management
- Truck planning and Utilization
- Truck availability
- Truck location and activity status
- Transporter performance
- Inventory status
- Inbound material monitoring
- Maintenance schedules
- Shipment monitoring
- Safety performance for driver

War room tools problem solving techniques:

- Data analysis deal with facts
- Gather data over suitable timescale
- Route cause analysis
- Pareto analysis of reasons
- Ask 5 Whys
- PDCA (Plan, Do, Check, Act)
- AN others Examples of quality defects

War room committee: As we have seen previously we measure a diverse range of KPIs within the war room, therefore to ensure that the meeting is effective and successful, all key functions must be represented at every meeting:

- Sales/Marketing
- Manufacturing/Production
- Supply chain planning
- Procurement
- Customer services
- Logistics
- Safety

General rules in war room meeting: The meeting is aiming to create an open honest culture:

- Ensure ownership and accountability
- It should be a no blame, no excuse environment
- People should speak with data, not with opinion
- Measurement and root cause analysis to drive improvement
- When problems are identified we need to be very action orientated PDCA discipline
- This daily discipline allows you to continually check if the actions you are taking are having the desired impacting real time
- And finally we need to foster and build team spirit

CONCLUSION

War room concept is a new to Malaysia perceptible and needs to be further explore and testing to create valuable tool for research study especially in the context of logistics practicality. War room concept offer unique guidance on the modern logistics operation. The concept that we present is a first step towards our long term aim to commercialize the benefit of war room operation. The researchers have validated the concept with a domain expert, and have planned multiple case-studies and interviews for validation as future work.

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