Streamlining Of Supply Chain To Improve Operational Efficiency

In ARS Emerging Market

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Acknowledgements

After six intensive months, today I write this thank you note as finishing touch on my dissertation. It has been an intense learning period for me on a personnel and professional level. Many of the facts and theories included in the project were cross checked and discussed in detail with my supervisors and colleague’s. I would like to personally thank the following people mentioned below for their invaluable time and support.

- Nestor Matondo – Director Regional Compliance EM, for helping and giving me the opportunity to write about the organisation. Additionally, for his support on checking with various stakeholders on my behalf for getting approval to write about my dissertation.
- Robin Philipose – Sr. Manager SCM projects, for the opportunity provided to interview him and for the time he took off from his busy schedule to review my project concept. His feedback immensely helped in my project.
- Sameer Dhuri – Specialist Purchasing GCC/LENA, my closest colleague at work for the opportunity provided for interviewing him and supporting me in sharing thought on various topics expressed in the project.
- Supervisors – My professors Dr. Mukhul and Harry Cameron for dedicating their time and effort in guiding and evaluating my work and channelling me through the right direction.
- My Family – I would like to thank my wife and child for their support and motivating me to chase after my MBA. Along with it my parents for their counsel and sympathetic ear and always being there for me.
- All the staff & faculty of the Cardiff Metropolitan University and Westford School of Management, for having given me the opportunity & much needed support in bringing me till here.

Thank you all for your support

Sumir Sulaiman

13/05/2018
Declaration and Statements

DECLARATION
This work is being submitted in partial fulfilment of the requirements for the degree of MBA and has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

Signed .... ..............................

Date ........ 13/05/2018..............................

STATEMENT 1
This dissertation is the result of my own work and investigations, except where otherwise stated. Where correction services have been used, the extent and nature of the correction is clearly marked in a footnote(s). Other sources are acknowledged by footnotes giving explicit references. A bibliography is appended.

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Date ........... 13/05/2018..............................

STATEMENT 2
I hereby give consent for my dissertation, if accepted, to be available for photocopying and for inter-library loan, for deposit in Cardiff Metropolitan University’s e-Repository, and that the title and summary may be available to outside organisations.

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Student Number: ST20134559
Ethics Committee Approval Number: 2016D5726
Supervisor Declaration Form

Student Name  Sumir Sulaiman...........................................

Supervisor’s Name  Harry Cameron...........................................

I acknowledge that the above named student has regularly attended the planned meetings and actively engaged in the dissertation supervision process. They have provided regular timely draft chapters of the dissertation and followed given guidance.

Signed  ...........................................

Date  .............................................
Abstract:

Efficiency in SCM is growing concern in every organisation. Any issues in SCM will directly affect the revenue of the organisation. SCM team will have to review process at every interval to see what is going well and what can be improved that help bring in efficiency. In the following research a deep analysis and evaluation is made on SCM process of ARS Group.

ARS group is a multinational sports manufacturing company. In the following research, the efficiency improvement is closely analysed for five markets of ARS Group which located in MENA, Turkey and South Asian region.

The objectives of the research are done to understand how reducing cancellation and delays for the organisation can improve the revenue of the organisation. The literature review is also done to understand from previous researchers their findings and their arguments put forward on the SCM topic. Based on data shared by organisation and interviews done a detail analysis is done to identify the current flaws in the SCM. The data from the research are analysed from both a quantitative and qualitative perspective to answer the research objectives and AIM. The finding from the research is finally used to triangulate with the literature review made.
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Introduction

(Chapter 1)

The following research is based on a MNC based sports company and has requested to remain anonymous. Due to this reason the company will be addressed as ARS Group.

ARS Group is a German based sporting company involved in the manufacturing of sportswear products and accessories, clothes and shoes. It’s the parent company for brand RBK as well as TM. They are ranked number two in world for manufacturing sports products. The company was founded in 1924 by Adolf Dasler. As of 2016, the company was making a total revenue of 21.35$ Billion (annually) (Adidas, 2018). The company is headquartered in Germany, employing around 53K employees in 160 countries. The organization over the last few years has been collaborating with athletes, celebrities and additionally they have started focusing on the women and kids segment to stand apart from their competitors to offer different type of products to its consumers. ARS Group has managed to silence the critics as being the pioneers and leading the business in manufacturing of sporting and lifestyle products.

The competition in the manufacturing industry has been evolving over the years. Strategic Business choices made by the competitors such as Nike in their operation management and inventory control, by Under Armor in their innovations of products and stepping into new sports and signing of new athletes. One of the other main rivalry brands is PUMA, considering the long family history. Their primary area of business is related to manufacturing of footwear but they have also been steadily growing into the production of Apparel and Accessories. For ARS Group to stand apart from its competitors and take lead in market and customer segment they have to analyse all parts of their business look into bringing efficiency in all functions (Bhasin, 2018).

In the project undertaken, my case study will be primarily focused on how to streamline certain core function in Supply Chain which will bring operational efficiency within the organisation. Several times in achieving the company targets, the management focuses on areas related to Sales, Marketing and other areas where revenue can be made easily. But there is huge potential in the area of Supply Chain where by improving the efficiency will result in achieving the goal and objective set by the organisation.

In my case study, the analyses of the five markets of ARS group whose Supply Chain function is very similar to each other. The market area in focus for the study will be called Emerging Market which is a cluster of five markets listed below:
Dubai
Turkey
India
South Africa
Israel

In the analysis the commonality between the five and will break down functions that can be streamlined between these markets. The research will also try look and examine how streamlining these functions will help the organisations revenue, support to the manufacturing factories and from a Global perspective how they will be able to gain advantage over their competitors.

1.1 Rationale:

The following research will analyse on the elements to study and improve the efficiency with in the Supply Chain function within an organisation. In several organisations when it comes to supply chain function people focus mainly on getting the products from one point to another and ensuring the production is completed within the time frame. It also involves the production of goods on daily basis. This will contain products being produced at factory, foods served to customers in restaurant or rides in theme park.

Fig 01 (Anon, n.d.)

Supply Chain Management function in short involves various activities that includes to maximise the customer value and gain leverage for a sustainability of the business. Supply Chain
Management covers various areas from placing of orders, sourcing raw materials to the factory and product development to reaching the end customer.

In every organisations now days efficiency is being improved at every level to have a healthy and sustainable business. The current organisation for the study is no different. The MNC organisation under review has five clusters under them.

- Dubai - Focusing and Serving the customers in the MENA region
- Turkey - Focusing and Serving the customers in Romania, Bulgaria and Turkey
- India
- South Africa
- Israel

Currently the five markets have several individual functions under them such as Finance, Sales, HR and even supply chain. For our study the main area of focus is in the area of supply chain of these organisation. The current SCM functions with these five clusters perform the same functions. As the organisation is considered to be part of the MNC world several deadlines these markets follow are the same. For example the Purchasing & Planning deadline across the five markets are the same. Each of the markets are communicated with deadlines from the HQ which is mandatory to be followed. Considering, this very simple topic there is huge potential that can be tapped into.

Further analysing in to this having one work stream will also support the organisation for a global perspective, better efficiency at the factory, take part in global initiated programs. This will also help reduce cost and increase the revenue of the company. Factories can improve efficiency in producing high volumes of products for these markets. Currently these markets do face challenges in meeting production requirements at the factory which result in huge delays and cancellation. A delay in any part of Supply Chain will result in the products not reaching the customers on time. Another key concept that during the analysis to dwell into is reduction in duplicate work and increasing efficiency among the subsidiaries.

Further to my review and analysis on the following topic, the dissertation topic for the research will be interesting and cover scenarios from all aspect of Supply Chain process. The analysis and the background study is what led to the selection of the project “Streamlining Of Supply Chain To Improve Operational Efficiency In ARS Emerging Market”

1.2 Research AIM & Research Question

The primary AIM of the research is to understand the significance of Supply Chain in an organisation and what are the effects of streamlining the function with in supply chain that can improve efficiency and output of process. The timeline for any such change must be documented and milestones will be required to set up in place to ensure successful streamlining process is
completed. The objectives for the change or streamlining the function must be clearly identified prior to making any change within the organisation. Currently some of the key concerns currently the organisation has been the following:

- Production issues at factory
- Cancellation of products.
- Loss of Sales
- Product availability at the customer and Market

Considering the above factors, the key question to this research will be as follow

✓ How will the efficiency in SCM functions improve with the merging of five clusters into one?

1.3 Objective and Scope

The scope of the research will be focused on understanding advantages of merging the Supply Chain functions of five markets and working together as one team. It will help gain momentum and help reduce cancellation and meet production at much easier level than working individual market. The assignment will focus specifically on the footwear and apparel production industry. The core functional areas will focus will be Forecasting, Purchasing, Planning at factory and customer advantages. Considering the AIM and concerns raised above the key objective of my research will dwell into the following

- To examine how reduction in cancellation and delays will increase the Revenue of the organisation.
- To Explore the factors that can Impact the efficiency in SCM.
- To Evaluate Strategies to reduce Production Leadtime and Implement Global Programs

1.4 Synopsis of the Dissertation

The chapter summary is explained below:

1.4.1 Chapter 1- Introduction

The following chapter places the dissertation into context by providing a background to the research and the rationalizes the reason for undertaking the project. The research question and objective are clearly identified for the research purpose.

1.4.2 Chapter 2 – Literature Review

The following chapter discusses about the available literature and studies that has been recently available on the relevant subject. The key arguments are identified and discussed in relation to research aims and objectives. The literature review also touch base on the organisation used for the study and address it current operating model.
1.4.3 Chapter 3 – Methodology

The chapter discusses on how the research will be conducted and justifies why the researcher has used a method for data collection and data analysis. The ethical approach is also been considered for the study.

1.4.4 Chapter 4 – Research Analysis

The following chapter dwells on the methodology chosen based on the historical data and semi-structured interviews are presented on basis of the research objective. The finding of each research objective are highlighted and discussed separately.

1.4.5 Chapter 5 – Conclusion

The final chapter connects the finding from the research analysis and triangulates it with the literature review. The study examines the findings and summaries it against each objective. The limitation and option for future studies are also discussed in the chapter.

1.5 Chapter Summary

The following chapter is the introduction and providing a background to the study on the related topic. It provides the reader with very high-level overview of what research is about by addressing its AIM, question and objectives.
2.1 Introduction:

The chapter below will be analysing on the Literature Review on the topic of Supply Chain Management in the Production Industry of Apparel and Footwear. We will review the current SCM set up of the organization we are studying on and the drawbacks that is currently affecting them in supply chain areas. The review will also discuss bout the various articles and studies done by other researcher in area of SCM and how they co-relate with the AIM and objective of the research.

2.2 What is SCM?

According to an article published in Supply Chain Resource Cooperative (Anon, 2017), in simple terms they define SCM is to increase the customer value and gain a strong and sustainable market advantage, Supply Chain Management (SCM) plays a very important crucial part to any organization. It’s a continuous effort by the SCM team or organization to develop and run supply chain activities in the most efficient and effective manner. Supply Chain cover all activity from product development to sourcing to production and logistics. All the information related needs to be coordinated and communicated in systematic way. Ideally there are two core ideas to the concept of SCM:

1. When a product reaches the end user with a combined effort and support of multiple organization is called collectively as Supply Chain.
2. The second concept has existed for a while now where every organization or team that sticks to their part of completing the activity. Few teams managed the entire chain of activity to deliver the product to the end customer. The result was often disjointed and ineffective way of supply chain.

An organization that links all the activity of together through physical and information flows in a systematic way is called Supply Chain Management (SME, 2017).
Fig 02: SCM High Level process

- **Physical Flow:** This concept is related to transportation of goods, raw materials, storage etc. which are visible parts of the supply chain function
- **Information Flow:** This mainly related to coordinating with various supply chain partners their long and short goals and managing the day to day flow of goods and materials.

A journal from, Lichocik and Sadowski (2013) discuss on the factors that can influence the efficiency in logistics and Supply Chain. Efficiency has been identified as key fundamental area for several companies and SCM is directly connected to the efficiency of the organization. Some of the key factors that influence the efficiency are the system, structure, mission, human resources, organization culture and incentive systems. The authors believe that these factors contribute to the synergy that plays key role in improving the efficiency in SCM. They also analyze the factors that directly influence the area of Supply Chain that measures the efficiency are Cost, Customer Service, Ecology and Business Ownership.
The authors, Lichocik and Sadowski (2013) also identify the Strategic Decision made in the area of SCM is key element that influences efficiency. An effective SCM should consider the following elements while setting up strategy:

- Should be cost effective ensuring efficiency of the chain.
- Reducing process, Minimizing the number of links and adapting to changes quickly by implementation of RFID, reducing Air freight expense etc.
- Ensuring high quality of customer service.

Finally the authors also identify that certain functions need to outsourced in order to improve the efficiency of SCM (Lichocik & Sadowski, 2013). The authors conclude their journal with below statement:

“Efficiency of supply chains is not only a task for which a logistics department is responsible as it is a strategic decision taken by the management as regards the method of future company's operation. Correctly planned and fulfilled logistics tasks may result in improving performance of a company as well as the whole supply chain. Fundamental improvements in supply chain efficiency may be ensured by analysing theoretical models on the strategic level and implementing a selected concept.” (Lichocik & Sadowski, 2013, p. 124)

A journal from Honggeng Zhou (2014), identifies the importance of effective Supply Chain practice with up to date Information technology. The journal explores mainly on two key concepts of Supply Chain which is sourcing practice and delivery practice.

The journal talks about Benton definition of sourcing practice. This ideally is connecting the manufacturer with the suppliers. It is crucial for any manufacturing company due to the reason that firms spend significant portion of their revenue on Purchasing materials and services (Benton 2006, cited in Zhou 2014). Another key concept Zhou looks at is long term relationship between the supplier and buyers. The importance of a primary supplier in a SCM function plays a bigger role.
It helps organizations to gain benefits and other value-added services. From a sourcing perspective it is identified as key factor to reduce delays at the factories. The other factors the journal dwells in to is the concept of Just in Time and Performance Evaluation of the supplier. JIT is key concept now days manufacturing companies are implementing to reduce huge delays and reduce excess inventory in their location. Additionally, providing a proper evaluation of the supplier and feedback are some best practice used in Sourcing Practices (Zhou, et al., 2014).

Based on a journal written by Brusset and Teller (2017), he discusses on the topic of the capabilities, risk and resilience in the Supply Chain industry. The key highlights of the journal are the framework it applies to the capabilities covering to operational, integration and flexibility approach. The risk covered by the external and internal supplier and the risk involved and its effect in the SCM.

Supply Chain Risk management is a massive challenge faced that affects the performance of any organization (Altay & Ramirez, 2010). The vulnerabilities have been increasing in the SCM industry with inventory levels, increase in complexity of the process and wider geographic areas. As per the Brusset journal, he focuses on two key concepts one is resilience of SCM and Low Order Capabilities. He defines resilience in SCM as the ability to overcome any issues that can disrupt the smooth flow of SCM. The factors that can easily affect a smooth flow SCM are war, catastrophic issues, etc. The low order capabilities refer to the organizational, financial, human and technological resources that helps the organization reach its goals. Stakeholders in several area have to collaborate, plan, forecast and replenish to meet the needs of the end to end customer (Brusset & Teller, 2017).

Measuring the Value of Supply Chain is book written by Camerinelli (2009). In his book he discusses mainly about how SCM and Finance are directly linked to each other. With the below Fig it easy to explain how SCM and Finance are very closely related to each other.
In his book the author clearly illustrates the factors that can directly affect the P&L of the organization if the supply chain is not influenced. The Supply Chain Manager should have the knowledge and visibility of various supply chain transaction, process and build strategic plans that will help the finance of the organization. This will help gauge the value generated by the organization by different stakeholder and investors. There is usually different approach on how SCM and Finance team measure the success of the operations. It has become key to bridge such gap between the two departments. The book covers a survey done among various European Companies to find most common factors that

- Value issued/returned; completeness of order; remanufacture efficiency
- Stock; transportation costs; perfect order fulfilment
- Perfect order fulfilment; costs; delivery accuracy stock levels;
- Delivery accuracy; Sales; planning accuracy
- Inventory turnaround and delivery quality.
- On-time delivery reliability; flexibility; costs and inventory level.
Mapping operation function to Finance has become key to support to organization and help SCM become key ROI department (Camerinelli, 2009).

A journal from the Bosnia Fashion Industry related to ZARA, Azel France written by Özlen & Handukic (2013) discuss the challenges faced in fashion manufacturing industries. The objective of the study was to understand how to find success for AZEL France Retailer company of ZARA clothing by creating a change in Purchasing and Supply Chain Strategies. The authors does a questionarrie different areas of Supply Chain to understand the growing change and demand with in supply chain that effect the fashion industry. The researchers accomplish that due to flexible process in the supply chain functions Azel France retailer of ZARA was able to accomplish quite a few benfits. The researchers derive that based on the concept of fast fashion buy and reacting to market trequirment, they are able to beat several of the competeiors. The key to the journal is that the indentifying the Purchasing and Supply Chain strategies have key importnce to play in their fashion industry.

“The success of ZARA trends is that it can control and streamline highly consumed fashion items in their supply chains so that they are capable to greatly decrease their lead time and thus to respond faster enough on the very fast changes in its customers’ needs and wants by minimizing the fashion risks. The only drawback identified in their study is that the limitation set up was only in one specific company and market area” (Özlen & Handukic, 2013, p. 105).

2.3 SCM in Participating Organization:

The organization currently used for the research has five clusters under them. These five clusters serve as the market hub for their individual market areas with individual functions on its own. The five clusters are managed by one MD and the company GM reports directly to the MD. The five are split as below and together are called the Emerging Markets (EM):

- EM Central (Dubai)
- EM North (Turkey)
- EM East (India)
- EM South (South Africa)
- EM West (Israel)

- **EM Central (Dubai):** Dubai market which is most commonly referred as EM Central has close to 250 employees working in this organization. This organization places orders close to 20mil pcs with factory and distribute goods to their customers across the whole of Middle East and North Africa region. This market is the largest Market among the five.

- **EM North (Turkey):** Turkey Market which is referred as EM North ensure on having goods for three key markets which are Turkey, Romania and Bulgaria. They are second largest and have close to 200 employees working.
- **EM East (India):** India is referred as EM East also supports three key markets which are India, Nepal and Sri Lanka. This market has big volume of local production of Apparel production.

- **EM South (South Africa):** South Africa is referred as EM South work with singular approach of serving the customer only for South African based customer. Similarly, as India this market also local production.

- **EM West (Israel):** Israel which is mostly referred as West also serves the market itself. It is the smallest market among the five which orders close to 5 mil pcs a year.

The SCM team blue print for the five markets are very similar to each other. The SCM team is split mainly into 3 areas based on their responsibilities.

- **Planning and Purchasing:** The first part of SCM function starts from the Planning and Purchasing team. All the five markets work based on a PRE-Order basis. Their activity is kicked off when the Marketing team provides a range and a set of date when they want to launch their products. The Planning and Purchasing team reviews the range and provide a forecast to Global team and Factories located in various part. This function is crucial as it helps reserve capacities with factory and plan brining in their raw materials for production. Once the planning face is completed, the sales team coordinates with the customers and converts the forecast in to orders. They order from customers are committed to an availability of a specific retail intro or a launch date. Once the orders are confirmed then Purchasing places them with factories. These orders are then checked on bi-monthly basis if it hit production minimums or if they are facing any drastic delay at the factory end. These issues are communicated to the sales by email or through meeting.

![Market Order](image)

*Fig 05: Market order placement (historical data from ARS Group, 2016)*
- **Order Book Fulfilment**: Once the production is completed at the factory, the OBF team ensures the products are delivered to the distribution center from the origin. The team also needs to coordinate with various freight forwarders to ensure products are delivered on time to DC. Once the products are available at the DC the team also reviews the customer order book and prepare Pick and Pack instruction for the DC. Based on these instruction the goods are packed for the customers and kept ready for distribution.

- **DC OP’s team**: This team oversees the final execution of the SCM activity. Once the OBF team completes giving Pick and Pack instruction to the warehouse team, The DC Ops ensure the task is completed and is ready to be distributed to the customers. Once this cycle is completed the SCM activity comes to end.

A high level overview is represented below of the SCM activity.

![EM SCM Process](image)

**Fig 06: EM SCM overview**
2.4 Drawbacks of Current Setup:

Based on the current set up in the five organizations, the current SCM has some drawbacks that can be reviewed below:

- **Cancellation of Orders**: Currently close to 2 million pcs are being cancelled as each of the five subsidiaries are placing individual orders for their market. If the market planning team across the five markets can coordinate with each other can ensure that they can reduce these cancellations. Due to this huge cancelation currently, this results in direct loss of revenue.

- **Production Delays at Factory**: Another issue faced due to this is the production delays at the factory. As the market is not able to align their order placement the requirement for the markets are shared with factory at different interval. Due to this the factory is not able to plan the capacity at the factory result in huge delay to the market availability.

- **Forecast Planning**: Currently the five markets forecast vs orders are resulting in several factory capacity planning issues. If the five markets are able to provide one forecast this improve their deviation between orders and forecast. This help factories predict and plan better their production

- **Communication**: Currently, today as several SCM function are managed individually which puts serval touch points to attain the common objective of the organization. Working together will not only streamline process but also bring in efficiency in the overall process.

2.5 Objectives

Efficiency improvement has become a key factor for all organisations to gain market share and strong sustainability within its competitors. Efficiency improvement is a discussion that is being considered at every stage. Similarly to the journal discussed by Lichocik and Sadowski (2013) areas have to be indentified where improvement can be bought in SCM function of ARS Group. Considering the above functions of SCM in the five market and their flaws in the current process below factors will need to be analysed while performing the research:

- **Increase In Revenue**: Every organisation focus in increasing their revenue by improving their efficiency. Several people consider SCM to be a cost incurring team. But this has been changing over the period by improving the efficiency in the existing process. In ARS Group the five markets have identified where they are losing potential revenue for the business. In the research part the analysing the historical data of their Purchase Order Book and try understanding how much business is the organisation losing due to cancellation and delays.
Fast/Quick Supply Chain Model: Based on the journal published by Özlen & Handukic (2013), one key concept identified is the quick reaction the customer requirement by improving the Purchase and Supply Chain model. In ARS group, currently the five markets are already struggling on cancellation and production minimums. This will require the organisation in improving the forecast process and reserving and giving quality data to the factories. This will help reserve and allocate the capacity from the factory to the five markets that will ensure and improve their supply chain model. This will also consider the principal suggested by Lichoick and Sadowski on efficiency are Cost, Customer Service, Ecology and Business Ownership.

- Evaluating factors reducing production lead time.
- Analysing how quick response program will improve the SCM model.

Efficiency in SCM Process: The current market setup for the five organisation provides the same service to their customer. But unfortunately, this process doesn’t give full visibility to the factory. Additionally, this also results in several cancellation and delays for every individual market. During the research close analysis will be made into areas and factors that can influence SCM process.

Based on the discussion of the above topics the Research analysis in chapter 4 and the arguments made by the various researcher should help explain the following objectives

- Analysing how reduction in cancellation and delays will increase the Revenue of the organisation.
- Analysing the factors influencing to improve efficiency in SCM.
- Evaluating factors reducing Production Leadtime and Implementing Global Programs

2.6 Chapter Summary

The following chapter is the literature review build to establish the foundation of the research. It reviews what other researcher have analysed on the topic of SCM and established their facts on the study. The chapter also discusses the SCM set up of the ARS Group across the five companies and what are the key challenges faced by them. Based on this the research objectives were addressed to see the key areas where the research will be focusing on. Additionally, the literature review also focuses on key issues such as the cancellation, delays and lack of efficiency in the current SCM model.
Methodology

(Chapter 3)

3.1 Introduction:

The following chapter discusses regarding the strategy that will be used in the philosophy and the approach on the topic of discussion. Based on the following chapter the research will discuss on the approach take on the analysis made regarding the objective from the literature review in chapter 2. The methodology will take into consideration the research philosophy, the approach, the strategies, Choices, Time Horizons and Techniques and Procedures. From the methodical stand of view will be made clear and the ethical factors will be considered.

“An effective research strategy is dependent on selecting the appropriate methodology (Saunders et al, 2009, P 107).”

3.2 Research Philosophy:

With the onion research method, the research will analyse the research method and philosophy used. The onion research method will help us understand, the overarching terms that relates to the development and the nature of that knowledge. This will help identify and set up the strategy to the research (Saunders, et al., 2016).
The Philosophies of the research will try to cover some of the following key areas:

- **Positivism**: This concept adheres to the knowledge gained through observing, measuring and collection of data. The data collected and observed should be based on creditable data (Dudovskiy, 2018).
- **Realism**: The factor that contributes to Realism is the sense of truth. The objects set have been in existence since starting point.
- **Objectivism**: This is easily defined as all the human knowledge reached through reason. It reflects the situation where factors that exists external to social factors.
- **Subjectivism**: According Saunders argument, a view setup by social phenomena through perception and consequent actions of social factors. It is continual process through social interaction which require constant state of revision.
- **Pragmatism**: The first two parts are part Epistemology which constitutes to the knowledge within the field of study. Whereas Objectivism and Subjectivism are part of Ontology. It is considered to the nature of reality in comparison Epistemology. It is difficult to say which of the two study is better. Due to this the analysis to be used for this research will be Pragmatism to help answer the research and objectives.
Based on the research AIM, question and objective, the following research will apply the above philosophies to reach its desired goal. While analysing the factors behind research we will be having quite a few secondary data from ARS group which will require to be measured to understand the depth of cancellation and delays. Additionally, the human factor of knowledge will be shared by candidates who will be taking part from the semi-structured interviews.

3.3 Research Analysis:

To identify the theories relevant to the literature’s research subject and analysing the data to test these theories is known as deductive approach. It’s a positive approach where the researcher use quantitative data to agree or disagree to theories and hypothesis (Saunders, et al., 2016).

A inductive approach is method used to develop theories which may or may not directly relate to the literature based on data generated. There could possibly be no pre-defined theories to drive the research. According to Saunders for a inductive study, it is better to use a small sample of subjects than large compared to the deductive approach (Saunders, et al., 2016). Researchers are more likely to work with qualitative data and use a variety of methods to collect these data in order to establish different views of phenomena (Easterby-Smith et al., 2002).

Below is some key difference between Deductive and Inductive approaches:

<table>
<thead>
<tr>
<th>Deduction emphases</th>
<th>Induction emphases</th>
</tr>
</thead>
<tbody>
<tr>
<td>scientific principles</td>
<td>gaining an understanding of the meanings humans attach to events</td>
</tr>
<tr>
<td>moving from theory to data</td>
<td>a close understanding of the research context</td>
</tr>
<tr>
<td>the need to explain causal relationships between variables</td>
<td>the collection of qualitative data</td>
</tr>
<tr>
<td>the collection of quantitative data</td>
<td>a more flexible structure to permit changes of research emphasis as the research progresses</td>
</tr>
<tr>
<td>the application of controls to ensure validity of data</td>
<td>a realisation that the researcher is part of the research process</td>
</tr>
<tr>
<td>the operationalisation of concepts to ensure clarity of definition</td>
<td>less concern with the need to generalise</td>
</tr>
<tr>
<td>a highly structured approach</td>
<td></td>
</tr>
<tr>
<td>researcher independence of what is being researched</td>
<td></td>
</tr>
<tr>
<td>the necessity to select samples of sufficient size in order to generalise conclusions</td>
<td></td>
</tr>
</tbody>
</table>

(Saunders, et al., 2016)
3.4 Research Strategy:

It is crucial to choose an appropriate research strategy that meets the research objective and help answering the research question. The data research will be based on the historical data collected and will be followed by semi-structured interview process. The historical data collected will be from full year 2016 to understand the pattern that will help frame the questions for the interview. The historical data will drive the analysis for a quantitative research to understand the cancellation and delays. The research will take a mixed approach of both deductive and inductive approach to help answer the objective and AIM of the research.

The reason for doing a semi-structured interview, will be giving the researcher the option of re-arranging the sequence of questions and adding any extra question which may vary between the interview and interview. The relevant candidates from the industry will be interviewed to understand the effect of the research and factors involved. To start through, the interviewee will go thorough and will be asked 15 questions to understand the effect it will have on SCM process on overall level with factories, Financial books, efficiency in the process. Based on the feedback of the interview, the qualitative approach will help us understand deeper about SCM process in the EM market for ARS Group.

A combination of the historical data and semi-structured interview will help us have quantitative and qualitative data analysis for a well-rounded study in chapter 4.

3.5 Reliability and Validity

When conducting any research, it is crucial the data and sources used are credible and reliable for the study. The term reliability and validity sounds very similar, they seem to have very different meaning while doing a research (Bryman; Bell, 2015). Reliability is linked to measure a concept based on its consistency. Reliability is centered around three concepts stability, internal reliability and inter-observer consistency (Bryman; Bell, 2015). In this research the secondary data provided by the organization will be used and which will measure the cancellation, delays and try identifying the factors that can influence reduction of cancellation and delays. Based on data provided by the organization it will corelate to stability where result are achieved over a consistent period of time.

Validity refers to the issue of if an indicator (or set of indicators) that is devised to gauge a concept really measures that concept (Bryman; Bell, 2015). There are various kind of validity test that can be done to achieve the desired objective. Some of the common validity test are concurrent, face validity, predictive validity etc (Bryman; Bell, 2015). For this research we will use internal validity where based on the data shared by ARS group it will be used for analysis purpose and the semi-structured interview will be followed with candidates from the organization.
3.6 Data Collection and Analysis:

Access will be granted by ARS group to analyse historical data from previous years on the cancellation and delays faced in the EM Market. The historical data collected will be on excel file which will help us understand how much percentage of the business is getting affected due to this.

The historical data will also set-up the framework for the semi-structured interview. The interview process will be conducted face to face. There will be 15 questions set up for the interview which will re-arranged based on the interview process. The process of the interview will last for about 90 minutes approximately. Arrangements for the interview to be recorded will also be arranged to help analyse the data further at later stage.

Based on data collected and analysis performed, should help address two of the key objectives which are related to the efficiency in the SCM process in the five markets across EM and additionally it will also help understand how the cancellation and delays can be reduced which help increase the Net Sales of the company. The data analysed will be represented in graphical charts for easy understanding and breakdown of contents.

3.7 Ethics:

The participating organization and individual in the study have volunteered for the following research. An E-mail was send to the organization and individuals participating for the research defining the purpose and the nature of the research and their involvement. The candidates have also been given the option and rights to withdraw at any time. All participants have given their consents to patriciate by way of email acknowledgment. All participants are assured about the confidentiality and their inputs are used only for educational purpose. Additionally, the organisation has requested that not use their Company name or logo anywhere in the study due to the competitive market situation. Due to this very reason, the organisation name ARS Group is a hypothetical name presented in the research study.

Additionally, the Cardiff Metropolitan University Ethics Committee has approved my study by granting me an ethics approval number 2016D5726.

3.8 Chapter Summary:

The following chapter discusses about the methodology that will applied for the research and explains the reason behind the chosen approach. The study also discusses about the strategy that will be applied for the study and the factors that was considered for the data collection and research analysis. The research analysis further dwells about the process of semi-structured interview that will be conducted on the candidates selected for the process. Finally, the chapter talks of the ethical consideration in context the research made and the proposed questions for the interview.
Research Analysis

(Chapter 4)

4.1 Introduction:

In the following chapter, a detailed study on the current setup of the SCM model in ARS group. Additionally, qualitative data collected from the semi-structured interviews will also help us understand if the five markets working together will help bring in efficiency in the complete SCM process. The finding and study from the following chapter will help answer our objectives in Chapter 5. The study in this chapter is very crucial to understand how to link the finding from research to the literature review and to draw conclusion based on the research objective.

The research chapter will be split in to two parts:

**Historical Data Analysis:** ARS Group had shared some historical data of the organisation for the full year 2016. Based on this a detailed analysis and study was done to identify the following issues:

- The total cancellations faced by the five markets.
- Production Constraints that factory faces.
- Identifying the complexity of current set up.

**Interview and Data Analysis:** The second part of the study is based on data collected from semi-structured interview after analysing the current setup and how efficiency can be improved. The key questions for the data analysis are mentioned below:

Q1- Understanding and Streamlining SCM across five markets.

Q2- Advantages and Disadvantages of Streamlining SCM

Q3- Factors Reducing Cancellation.

Q4- Production Delay Improvement and Factory Planning

Q5- One Work Location and Warehouse Challenges

Q6- Potential Impact on other Areas of Business.
**4.2 Historical Data:**

The study below is done completely based on data and information shared by the organisation. The following data consists of information on orders placed in the year 2016 and further insights and reasons were provided behind the cancellation and delays to understand the data. The organisation has requested to remain anonymous due to which they are being addressed as ARS Group.

Based on the secondary data shared for full year 2016, the five individual markets are currently placing orders separately. Collectively the five markets make up to 60 million pcs a year.

Based on graphs the Dubai market serves as the hub to the entire MENA region. As a result, they are also considered to be largest in terms production volume and revenue to the five marks.

The second largest market in terms production is India and this is due to local production the market has with in the country. The customer segment for this market within India and exports products to customers in Sri Lanka and Nepal additionally.

The third market in terms of volume is Turkey and is the second in terms of revenue among the five markets. Turkey serves as the hub for Bulgaria and Romania.

The smallest among the five markets are South Africa and Israel. The two countries only focus on serving the local markets.

The graphical and no units the market process has been split below:

<table>
<thead>
<tr>
<th>Market</th>
<th>Total Vol Ordered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dubai</td>
<td>24,526,833</td>
</tr>
<tr>
<td>India</td>
<td>12,562,179</td>
</tr>
<tr>
<td>Turkey</td>
<td>8,960,835</td>
</tr>
<tr>
<td>South Africa</td>
<td>8,309,255</td>
</tr>
<tr>
<td>Israel</td>
<td>5,858,842</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>60,217,944</strong></td>
</tr>
</tbody>
</table>

Table 01: Orders per Market (historical data from ARS Group, 2016)
Considering the above the five markets contribute to a total business of 60 mil pcs. The above analysis provides a high-level overview that five organization reports to single MD and has key abilities and to move to single SCM functionality.

Currently the total market is losing close to 20% of the business due to cancellation and production delays. In the study ahead key reason for cancellation and delays need to be identified.
4.2.1 Factors Affecting Cancellation:

Currently the five markets have various factors affecting their cancellation. Some of the key reasons behind these factors have been identified in the below chart:

![Cancellation Reason Chart](image)

Fig 10: Reasons for cancellation (historical data collected on cancellation from ARS Group, 2016)

Based on the above the main reason behind the cancellation of products is driving from the factory. As mentioned in the literature review by Lichocik and Sadowski (2013), there is huge room for efficiency if this factor alone is tackled. To improve efficiency, the cancellation split by market is also provided.
From the chart three key areas of cancellation has been identified which can improve the efficiency in the whole SCM process which are as below:

- **Factory Production Issue**: These cancellations happen as the markets places orders without any synchronization or alignment between them. As a result, this leads to production minimums not being meet at factory level due to which the products being cancelled. There is huge potential of efficiency that can be narrowed down if this issue is resolved.
- **Discontinued Products**: These set of cancellation happens when a specific product is not produced by the factory for any markets across the world. Each of the five market selects their own set of products. Ideally the market must ensure if the article is available for production prior to their selection of range.
- **Customer Cancellation**: Customer cancellation can be increased based on partial delivery of the products. If the five markets can reduce the Production cancellation and discontinued products can have an adverse effect in reducing the cancellation from the customers.
4.2.2 Factors Affecting Production Delays:

Currently from the cancellation analysis one point is clear that the five markets are not synchronized among each other. While cancellation being one of the factors affected in the process this does have a repel effect on the factories and product availability into the markets. One of the key finding to the research is represented below on delays faced by the five markets:

![Production Delay Chart]

**Fig 12: Delay Reason** (historical data collected on delays from ARS Group, 2016)

Two major reason that can be identified behind the delays are

a) **Factory Planning Delay**: For the factory to perform better the markets must provide a strong and realistic forecast based on their Demand. Based on the current setup each individual market is providing a separate Forecast which result in overusing capacity issue resulting in delay.

b) **Production Minimum Issue**: The segments of products are classified into three Footwear, Apparel and Hardware. The factory requires to receive a total quantity as mentioned in the below table to start production. For the above chart it is understood 10% of delay is result that the markets are not able meet production minimums on their own which result directly products being late to the market. Additionally, the research will conclude that each market on an average are placing small orders and need to identify areas where they can place big orders at specific time.
### Average order Qty per Market

<table>
<thead>
<tr>
<th>Product Division</th>
<th>Factory required Minimums</th>
<th>Dubai</th>
<th>India</th>
<th>Turkey</th>
<th>South Africa</th>
<th>Israel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apparel</td>
<td>1,200</td>
<td>363</td>
<td>643</td>
<td>468</td>
<td>461</td>
<td>364</td>
</tr>
<tr>
<td>Footwear</td>
<td>2,400</td>
<td>540</td>
<td>925</td>
<td>1,142</td>
<td>702</td>
<td>528</td>
</tr>
<tr>
<td>Hardware</td>
<td>1,200</td>
<td>382</td>
<td>730</td>
<td>714</td>
<td>739</td>
<td>789</td>
</tr>
</tbody>
</table>

|                 |                           | 432   | 728   | 780    | 603          | 430    |

Table 02: Average orders per market (historical data from ARS Group, 2016)

#### 4.2.3 Complexity of Current Setup:

Analysing from the above studies, the current setup of the five markets are quite complex due to the geographical area the markets are situated. Some of the key hurdles understood the markets are facing from the current setup are as below:

- As there are five individual markets, SCM teams the planning, forecasting, and order placement is not consistent. Based on this, the markets are facing huge cancellation and delays at the factory end. As mentioned by Lichocik and Sadowski (2013) SCM is directly connected to the efficiency of the organization. It is key for the markets to work as a team to reduce these challenges that they face.

- The information flow currently has multiple touch points. From Brusset and Teller (2017) study, it is important for stakeholders to collaborate, plan, forecast, and replenish the needs of end-to-end customers. Based on the complex setup of the markets, the planning and forecasting isn’t accurate enough due to which the factory is facing serious challenges.

- Currently, based on the market setup, there is no synergy between any of the markets. From the time markets plan and forecast, to order placement and ranging of their products are not done in an efficient manner.

In the second section based on the semi-structured interview process, the research will analyse from the respondents the key impact and factors that will improve the efficiency.
4.3 Interview and Data Analysis:

The second part of the Research Analysis will evaluate in to the semi-structured interview held with two key candidates working in the organization. The reason semi-structured interview was done is to understand from the candidates if SCM team can work under one umbrella and potential challenges and gains will the organization have from this. A total 15 questions were used for the interview with both candidates to understand their point of view on the following topic.

The first candidate to be interviewed was Robin Philipose. The following candidate is the Sr. SCM Manager Projects for the five markets. The reason why he was shortlisted for the interview process is due to vast knowledge and experience the candidate had about the five markets during his past projects such as setting up Distribution Centres in Israel, Streamlining the Forecast among the five markets, initiating new projects from Global/HQ to the team.

Whereas the second candidate for the interview is Sameer Dhuri. He is Purchasing Specialist for the largest market Dubai. He was shortlisted to understand from a purchasing and planning side, how working as one SCM will help reduce cancellation and delay for the markets.

From the 15-question used for the interview below are the top six question that will potentially address pros and cons of streamlining the function in SCM.

4.3.1 Q1- Understanding key benefits and Streamlining SCM across five markets.

The objective from the question was to understand, how feasible is the option of combining the function of the five SCM markets into one. Both candidates offered their input which explained that key element in understanding and streamlining SCM will have direct effect on the Cost, it will improve their Range (segment of products offered to customer), better planning between the clusters which directly help support in the reduction of cancellation and delay of products to the customers and finally better people management in SCM to understand the goal set by the organization.

Additionally, during my interview with Sameer, he identifies that one of the key elements for streamlining the process will include in bringing efficiency to the range and selection of products. This part will be clearly the starting point where the markets will need to align the marketing team to have a selection of products. Currently the five markets have their own set of range which is represented in the table below:
Currently the product commonalty between the market is less 50%. This alone is the key start to the problem of cancellation and delays for the five markets.

<table>
<thead>
<tr>
<th>Market</th>
<th>Israel</th>
<th>Turkey</th>
<th>South Africa</th>
<th>Dubai</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art Count</td>
<td>4,047</td>
<td>4,672</td>
<td>3,980</td>
<td>9,007</td>
<td>4,770</td>
</tr>
<tr>
<td>Overlapping Art</td>
<td>3,277</td>
<td>3,538</td>
<td>2,893</td>
<td>5,660</td>
<td>2,049</td>
</tr>
<tr>
<td>%</td>
<td>81%</td>
<td>76%</td>
<td>73%</td>
<td>63%</td>
<td>43%</td>
</tr>
</tbody>
</table>

Table 03: Over Lapping Articles (historical data on products from ARS Group, 2016)

Based on mentioned key elements the facts put forward by the two candidates relates directly to literature review on the journal published on Efficiency of Supply Chain that Supply Chain measures efficiency through Cost, Customer Service, Ecology and Business Ownership (Lichocik & Sadowski, 2013).

4.3.2 Q2- Advantages and Disadvantages of Streamlining SCM

Based on the interviews conducted with the two candidates below points have been identified as the key advantages and disadvantages the organisation will face during the change process.
<table>
<thead>
<tr>
<th>S. No</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>With streamlining core areas of SCM will directly reflect in Cost Efficiency</td>
<td>Inventory Issue due to products coming in early for some markets</td>
</tr>
<tr>
<td>2</td>
<td>Better factory planning and reduced delay of product from the factory</td>
<td>To set up a single SCM team will incur a huge cost. But this will be one time cost the organization will need take on</td>
</tr>
<tr>
<td>3</td>
<td>Reduced Cancellation for the markets</td>
<td>Immediate customer/market reaction cannot be actioned.</td>
</tr>
<tr>
<td>4</td>
<td>Better execution will improve the overall SCM efficiency</td>
<td>Silo Market decision will be affected.</td>
</tr>
<tr>
<td>5</td>
<td>Range and product selection efficiency for market</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Common organisation objective to achieve target</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Single Point of Contact for Factory and Global team</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Faster Implementation of Global Requirement</td>
<td></td>
</tr>
</tbody>
</table>

Table 04: Advantages and Disadvantages of streamlining SCM

4.3.3 Q3- Factors Reducing Cancellation

Both the candidates understand close to 50% of the cancellation for most of the five organisations are driven by bad planning. During the interview process, we identified some more key factors that affect the cancellation which are due to the delay in production several customers cancel their orders, similarly due to individual market condition each market placing orders at their own convenience.

During my interview some of my key finding to research were as follows:

- **One Range:** Currently the markets have no uniformity in the product selection and what is offered to the customer. It is important that five markets work together to offer a common platform of products to their customer which will help them reach production minimum together instead of individually attaining the required minimums.

- **Market Planning:** Currently each market is placing order based on their requirement and needs. It is key for the five markets to identify and plan together what works best for all five markets. One key to this can be PDCA cycle which will help improve the overall planning.
  - **Plan:** Its ideal for the markets to plan, analyse and understand the opportunities around a common buy date.
DO: Ideally it’s best to test on a small scale to understand the potential impact on the business. From my interview it was evident that that participants believe this will have positive impact on the business.

Check: If the planning and the process of order placement is successful, the results in reduce cancellation needs to be analysed.

Act: As mentioned by the participants, based on success the action can be fully implemented across the five markets.

Fig 14: PDCA (N.A., 2018)

- **Tackling Production Minimum:** If the five markets combine and place orders together this will help in reaching required production minimum at the factory.
- **Reduce Customer Cancellation:** With reduced delays from factory this will directly help in reducing customer cancellation.

### 4.3.4 Q4 - Production Delay Improvement and Factory Planning

In the process of efficiency improvement, one biggest advantage the participant mentioned about is on the factory end. The factories currently plan differently based on the market requirements. Due to this several products have been already delayed reaching the markets. Additionally, currently the factories are unable to reserve huge capacity for small individual markets.

With one SCM team and functions under one umbrella will help improve several areas of factory planning and delays. This will help the markets plan and give better forecast instead of individual forecast per market. This will provide the factory the visibility and reserve allocation for their production. Additionally, the markets will also require planning their order placement. This will help reach their production minimum easily at the factory. From a factory perspective from the point of forecast it allows the factory to plan and allocate capacity for the five markets at one time.
Currently the five markets have individual allocation which puts them on low priority on their allocation and resulting in their orders getting delayed.

4.3.5 Q5- One Work Location and Warehouse Challenges

The participants were asked various question regarding the location of such a setup, how many people would be required and the DC challenges. Both the participants had interesting facts to present which were supporting the discussion on the efficiency topic of SCM. For such set up it is clear it can’t happen overnight and would require lot of planning to set up such a team. The similar set up has been set up in markets North American and Latin American Markets. In Europe a similar set up is supporting 29 markets with one single distribution centre.

For the five markets here they cannot rely on the exact setup as NAM, LAM or European markets. For the other markets a single DC set up makes sense as they can ship products to the markets in shorter time. Because of the geographical area a single DC set up won’t work for the five markets. The business will need to focus key areas of SCM such as Purchasing and OBF team. Ideally the team will require to have be in one single location instead of multiple location for them to plan and execute at highest level of standards.

4.3.6 Q6- Potential Impact on other Areas of Business

During the interview, we had to understand the changes in SCM will have any potential impact on the business. Based on my interview with Robin and Sameer, they identify the success in change of SCM is related the product/range selection for the markets. As mentioned in the earlier analysis the Marketing team who selects the range for the market must identify and bringing in a uniformity in the products across the five. Based on this Purchasing will have to place and plan their order placement accordingly. Additionally, this will support the sales team and customers in selling and buying of products. It will have direct impact on the net sales and revenue of the organization.

4.4 Chapter Summary & Key Findings

Based on the previous chapters methodology, the following chapter presents it research and findings. The following chapter provides in depth study of the current procedure and based on facts of the historical data it dwells on the cancellation and delays that is affecting the organisation. Additionally, there was semi-structured interviews conducted to understand the benefits of the concept of One SCM. Below are some key findings that will be discussed in the next chapter:

- Reducing Cancellation and increase in Net Sales
- Better Planning and reduced factory Delays
- Better execution of order placement in the market
- Having one Range/product selection to have uniformity to reach production minimum.
- Quick implementation of Global program.
Conclusion

(Chapter 5)

5.1 Introduction

The following chapter is a review about the research and analysis from chapter 4 based on the literature review on Efficiency in SCM discussed in chapter 2. The purpose of the research is to examine and understand how can efficiency be built and increased into the SCM in ARS group. The chapter will summarise a conclusion about the research AIM and Objective. It will also identify the limitation of the research study and the future opportunities for further research will be discussed in the following chapter.

5.2 Conclusion to Research Objective

ABC Group is well established sports company that produces various Apparel and Footwear products. The organisation has got several offices around the world. The following study is based on five markets key markets and how SCM efficiency can be improved. The research analysis is based on the historical data and the semi-structured interviews that will provide us the outcomes which will corelate with the literature review in chapter 2 and help us assess them against the Research Objective.

5.2.1 Analysing how reduction in cancellation and delays will increase the Revenue of the organisation.

SCM function is generally considered to be cost incurring department. Efficiency in SCM is not only the responsibility of SCM team but it’s a common Management decision taken by the organisation (Lichocik & Sadowski, 2013). Lichoick and Sadowski argues that two key factors that contribute to SCM efficiency directly are Cost Efficiency and Customer Service Efficiency. However, Enrico Camerinelli (2009) claims about the direct link between SCM and Finance. It is believed that there is different way on how both these team measure successes in the operational work. In his book he clearly identifies that SCM Manager must have the awareness about the various process in supply chain transaction and build strategic plan that will help finance on the organisation.
In Chapter 4, the research and analysis was done based on the historical data and the interviews to understand if cancellation and delay improvement will have any direct impact in increasing the revenue of the organisation. In the above chart a total 70% of the cancellation are driven from Factory production issue, Market Req Minimums or customer cancellation. Similarly, 82% of the orders are affected by delays that contributes from Factory Planning and production Issues.

Based on the historical facts, interviews were arranged to understand further what can be the factors that can improve cancellation and delays. During the interview with candidates, they shared
their input on various topics of which below were some key findings that will reduce the cancellation and delays

- **One Range**: Currently the five markets of ARS Group, have less than 50% of their product range common between the market. As a first step it is crucial that the markets try aligning on their range. This will help reach production minimums at factory and reduce factory delays.

- **Market Planning**: Another factor that will influence in improving delay from the factory is the planning team. Currently each market provides their requirement to the factory. There is no proper communication between the five markets in place for planning and aligning to ensure factory production minimums are met. If proper market planning and market requirement/launch dates are set in place this will help improve the production at the factory.

Currently the market is losing a total business of 10million pcs due to market delays and cancellation. As Camerinelli (2009) rightfully claimed that the SCM Manager should have the knowledge, awareness and visibility about various aspect of the SCM model that will help finance of the organisation. It can be said that even is half of 10 million pcs can be saved a year this will directly help increase the Sales and revenue of the organisation. Additionally, the process will also be cost and customer efficient as mentioned by Lichoick and Sadowski (2013). It will gain customer confidence and help increase faster sell through with them by reducing cancellation and placing high volume order.

5.2.2 **Analysing the factors influencing to improve efficiency in SCM.**

Chapter two identifies the effective Supply Chain practice is based on two elements which are sourcing practice and delivery practice (Zhou, et al., 2014). Zhou challenges, the long-term relationship between supplier and buyers is crucial part SCM. This helps organisation to gain benefits and other value-added services. Benton (2006) claims that manufacturing companies spend significant revenue on Purchasing Material and services to help have products on time. From a sourcing point it is key to understand factors that can reduce delays at the factory.

According to Brusset and Teller (2017) claim that stakeholders from the business need to collaborate, plan, forecast and replenish stocks to meet the requirement of the end to end customer needs.

On basis of chapter 4 research and analysis, various factors could be derived that could drive the overall efficiency of the SCM function. To start of the production minimum for various products at factory varies from 1200 to 2400 pcs. Currently the orders placed by the five markets on an average of 500 to 600pcs. This currently isn’t very efficient for the markets as well as factories to produce goods. It also fails to meet several customer reequipment and results in delay of products reaching the markets. From the interview and discussions held with the candidates, it was clearly
identified if the five markets come and work together then the potential of meeting production together will be very high. Additionally, in order to do this the market will require to work as one team where they will require to setup two core function which related to planning and execution team.

During the interview it was also identified some of the other key advantages will be there in the areas of forecasting where now the market can give a combined volume which will help support the factory in reserving capacity and allocation for the markets. Currently as the markets submits individual forecast the factory can’t maximise their efficiency in reserving capacity for these markets which also create delay in timeline. As per Camerinelli (2013), clearly highlights that the revenue of the company will increase with better on time delivery, delivery accuracy and better sales. In the interview process the candidates also highlighted efficiency in better execution of order placement and single point of contacts for the factory and Global team will be enabled. Additionally, this will also reduce the other complexity with in the business structure such as moving from five market range to one market range, planning of better order placement to avoid delays and cancellation and brining synergy to the five markets. To summaries, based on the literature review in chapter 2 points brought out by Zhou (2014) regarding sourcing and delivery practice at the factory will be improvised if the five markets work as one. Furthermore, this will help create a long-term relationship between the supplier and buyers as well. With efficiency increasing, this will also reduce the multiple touch points between the factory, global team and the markets. Based on Brusset’s study this does mean for an efficient SCM different stakeholders of the business will require to collaborate, plan, forecast and replenish stocks to meet the requirement of the end to end customer needs (Brusset & Teller, 2017).

5.2.3 Evaluating factors reducing Production Leadtime and Implementing Global Programs

Based on the study from Özlen and Handukic (2013), they claim that having a flexible SCM model can improve fast replenishment and react to quick market requirement. The authors strongly believe that Purchasing and Supply Chain strategy will have to go hand in hand to ensure the maximum leverage in reducing the production LT. Whereas Zhou (2014) challenges on the concept having the products JIT to ensure better inventory control and doing performance evaluation to ensure in reducing the production LT. However, Altay and Ramirez (2010), contradicts the stamen believe that the challenges have been increasing in the SCM industry with inventory level, increase in complexity of the process and wider geographical areas.

During the research and analysis chapter, one of the key finding was that the five markets were facing huge delays. Due to this very reason it becomes quite difficult for the factories to support the markets in manufacturing products under shorter LT. The concept of reducing production LT is done by various manufacturers such as ZARA, H&M, Mango etc where they react to quick to market requirement. From the interview and the historical data, it seems that reducing production LT for the ARS Group can seem to be quite challenge as the markets cannot meet production minimum on their own with the factory. Considering, the SCM team to work as one team can help
support the Short LT program. But considering them to work as one team will take away the flexibility to quick market reaction as they will be heavily dependent on the other markets. For such a setup the market will require to work on SILO approach where they can make decisions on their own.

During the interview with candidates one factor that developed further was the topic on how currently the five markets cannot take part on the Global programs due to the limitation on their SCM process. Currently, other markets such as they NAM, LAM and Europe are taking advantage on various programs set up by Global such as RESPOND, Contract Buys and CHASE Buys. From the candidates, at present the five markets are currently not able to participate in such programs due to small volumes of order placement. Once the market are able to work as one they will be able to take advantage of such programs where they can participate and place big orders. These kind programs are made by the Global team to support markets unexpected growing demand.

Regarding the facts presented Zhou(2014) having products JIT will work if the five markets place the orders together. This will ensure the markets provide better planning time for the factories and ensure better inventory control within the markets. To conclude, the markets will have to take it slow and one step at time to see how they can improvise and try reducing the LT at the factory. They will require to develop a PDCA tool to improve and bring changes to the team.

5.3 Conclusion about the Research Question

The following research was done to answer the question “How merging of SCM function in ARS EM Group will help improve efficiency in Supply Chain?” Based on the historical data provided it was identified that the five markets under the EM group is facing significant cancellation and delay of products reaching the customer. By comparing the total volume of the markets and based on the interview with candidates, it was clear that if these markets merge together as one can reduce the overall cancellation and delays of products to the markets. The research on a whole could highlight success on below topic:

- If the organisation can merge as one it will easily reduce the cancellation and delays by 50%, this could increase the organisation’s Revenue.
- It will increase the availability of products to end consumer.
- It will reduce the amount of touchpoint between the five markets and factories.
- It will be cost efficient to meet customer reequipments
5.4 Limitation of the research

The following research acknowledges on the limitations on samples used to do the study. Due to the time constraint another options analysis could not have been done. The option of sending a questionnaire to the other markets could have been an option that could have been looked into and inputs from them could have been used for analysis purpose as well. Additionally, the study is purely based SCM cycle of product manufacturing and factory constraints. The research could also consider options of developing and providing insight on the DC operations.

5.4 Opportunities for Future Research

The following research is a study based on five organisations with ARS Group. The study can be further enhanced by using larger sample and be compared against the organisation within the same industries. The study can be further developed to understand about how the products are logistically moving from the origins to the destination and how exactly the operations at the five countries happen.

(11,107 words)
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Appendix A

Participant Information Sheet

Cardiff Met. Research Ethics Committee Guidelines

Ethics No: 2016D5726

Streamlining Of Supply Chain To Improve Operational Efficiency

Project Summary:

The topic chosen for my MBA Dissertation is to analyse how certain functions within the Supply Chain Industry can improve the overall operational efficiency with in an organization. In every organisations now days efficiency is being improved at every level to have a healthy and sustainable business. The current organisation I am basing my study is no different. The MNC organisation I will be reviewing has five clusters under them. In order to streamline the Supply Chain function it is crucial to understand the geographical regions where the markets are located. The objectives set behind my dissertation will be broken as below:

- How will the merging of SCM function improve the overall efficiency of the process.
- Fast Fashion Supply Chain Model
- Increase in Revenue
- Lean Management Concept

Why have you been asked to participate?

You have been asked to participate because of your profile and past experiences in projects and the key business decision taken in the Supply Chain. Furthermore, as the case study is base on streamlining of SCM to improve operation efficiency, I would like to understand your perspective on the following segments:

- Production Capacity at the factory
- Financial benefits to the organisation
- Understanding of the warehousing concept for all five markets

The study will be used to only dwell and breakdown on my objectives in order to help complete my assignment. Your participation is entirely voluntary and you may withdraw at any time.

Project Risks

The assignment involves us in participating in interview and performing questionnaire session. which will be recorded for further analysis. Under no means will we be collecting any sensitive data that will put you or the organisation in any risk. At any point if you do feel that any of the question are inappropriate , you have the full right to stop the process. We will completely respect your decision.

Privacy

All the information shared will be kept confidential. The information shared will be only used for the following case study and will not be used for any other studies. Any interview process that are recorded or questionnaire will be kept safe. The information will also be destroyed after one year.
Appendix B

Interview Question

1) How would streamlining SCM across five markets help the business?
2) How will you tackle geographical condition between the five markets while streamlining SCM?
3) What are the advantages and disadvantages of streamlining SCM?
4) What is the perspectives from a Global angle to streamline SCM?
5) What are the key advantages to the factories from streamlining SCM function?
6) How will the Distribution Centre operations work for the five markets?
7) Will this help in reducing cancellation increasing sales in the organization?
8) How many people would be required for such set up?
9) Will this setup align with the global blue prints?
10) What gains do you see from a Global perspective?
11) What will be the timeline required for such change in setup?
12) From an IT perspective is all the market working on the system?
13) Which will be the key driver markets for this change?
14) Will all functions be centralized in one location?
15) Will this potential change impact other areas of the business?
Consent Form

Cardiff Metropolitan University
Ethics Committee

PARTICIPANT CONSENT FORM

Cardiff Metropolitan University Ethics Reference Number: 2016D5726
Participant name or Study ID Number: Robin Philipose
Title of Project: Streamlining of Supply Chain to Improve Operational Efficiency
Name of Researcher: Sumir Sulaiman

Participant to complete this section: Please initial each box.

1. I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. [Y]

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason. [Y]

3. I agree to take part in the above study. [Y]

4. I agree to the interview. [Y]

5. I agree to the use of anonymised quotes in publications [X] [ ]

6. I would like my organisations’ name to be anonymised in all publications [X] [ ]

Robin Philipose 02.05.2018
Name of Participant Date

Signature of Participant

Sumir Sulaiman 30.04.2018
Name of person taking consent Date

Signature of person taking consent

*These alternate phrases are probably most useful only when you want to be able to directly attribute your quotes. When the participant or organisation are to be anonymised the standard phrase is likely to be the most appropriate to use.

When completed, 1 copy for participant & 1 copy for researcher site file
PARTICIPANT CONSENT FORM

Cardiff Metropolitan University Ethics Reference Number: 2016D5726
Participant name or Study ID Number: Sameer Dhuri
Title of Project: Streamlining of Supply Chain to Improve Operational Efficiency
Name of Researcher: Sumir Sulaiman

Participant to complete this section: Please initial each box.

1. I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. [Y]

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason. [Y]

3. I agree to take part in the above study. [Y]

4. I agree to the interview. [Y]

5. I agree to the use of anonymised quotes in publications [X] [ ]

6. I would like my organisations' name to be anonymised in all publications [X] [ ]

Sameer. V. Dhuri 30.04.2018
Name of Participant Date

Signature of Participant

Sumir Sulaiman 30.04.2018
Name of person taking consent Date

Signature of person taking consent

*These alternate phrases are probably most useful only when you want to be able to directly attribute your quotes. When the participant or organisation are to be anonymised the standard phrase is likely to be the most appropriate to use.

When completed, 1 copy for participant & 1 copy for researcher site file