

Supplier identification and inbound logistics management for an African lingerie brand.

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DECLARATION

I, Cheryl Horesia Nyawade, declare that this consultancy report project is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in the Graduate School of Business Administration, University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in this or any other university.

Cheryl Horesia Nyawade

Signed at

On the day of 20.....

DEDICATION

This is dedicated to all the young entrepreneurs within the African continent working hard to really put Africa on the map. This is dedicated to every individual who believes in an efficient continent that capitalizes on its own resources to see a better future. This is for all the people who believe that technology is here to make things easier and encourage us to venture out and come up with even better innovations.

#AfricaStandUp

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SUPPLEMENTARY INFORMATION

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EXECUTIVE SUMMARY

This is a consultancy project that is focussed on the supplier identification of an African lingerie brand using the traditional method of sending out a request for proposal to selected manufacturers as compared to the modern method of using e-procurement portals.

The report starts off by giving data that encourages the need for the creation of more African brand names in the continent and globally. This notion discourages the re-selling of international brands while promoting the creation of local brands across all industries in the continent.

The report further gives insight into the manufacturing industry and the evolution advancements that have been witnessed.

I decided to focus on the fashion industry, specifically within the intimate apparel sector. I chose to perform our research based on the start-up company Ressiers, which is based in Kenya, East Africa as my case study. Ressiers is a company that is looking to identify suppliers and manufactures who will assist in the design, manufacturing and delivery of its upmarket lingerie brand. Their goal is to come up with cutting-edge designs that are comfortable, and custom made to the African woman's shape and skin tone.

I therefore take a detailed look at the fashion industry, analysing traits and exploring concepts such as lean retailing in order to reduce costs while simultaneously managing to meet the demand by staying relevant in the industry.

The report employs both traditional and modern supplier identification methodologies, and analyses the benefits, quality of responses as well as the pros and cons of using either one of the supplier identification methods.

I then conclude by outlining a methodology that will assist future start-ups within the intimate apparel industry in efficiently identifying and sourcing suppliers globally who will produce their merchandise. The findings will also help start-ups to build strong business relationships that will help them envision the creation of a legacy African brand name product.

Keywords: manufacturing, branding, supplier, lingerie, intimate apparel, sourcing, tech-pack, design, request for quotation, e-procurement

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1 INTRODUCTION

Africa is a lively and rich continent with lots to offer in terms of resources, creativity, ideas and many more. It is also a continent that is full of talented individuals who don't get their much-deserved recognition internationally. The phrase "Africa is the next big thing" is constantly being thrown around investor and business conferences globally, and it is time for Africans to recognize their value and potential.

According to the Africa Business' Special Report "Africa's Best Brands" that was published in March 2017, we learn how global brands have made their mark on the continent and further stifled the competition from local brands. Astonishing figures show how non-African brands take the top 3 positions in 16 of the 19 markets surveyed (African Business, 2017). The main industries which have been infiltrated include technology, food, automobiles, telecommunications, media, retail and apparel.

This information leads to one conclusion and realisation; there is opportunity in the African market with regard to African owned and branded products or services. Efforts should be placed into creating African owned brands. The report emphasized that "the time has never been more urgent for Made in Africa products and for Africans to rise to the challenge" (African Business, 2017, p 36).

Admittedly, the continent's history and vast resources explain why it is a majority of non-African brands that dominate in the continent. However, African Business (2017), argues that this leaves no excuse for the policy makers and entrepreneurs not to capitalize on the continent that has a population growth forecast of 2 billion people by 2050.

According to Kantar TNS, a market and research agency in South Africa, it is further believed that the members of the African community have the most accurate and reliable know-how of their consumers and can therefore serve them better (African Business, 2017).

Although the problem has been identified, pertinent questions remain: where do we start? Which industries should we tap into? As an African, how do I go about creating and owning my own brand name?

The focus of this paper is on the textile and fashion industry; specifically, the intimate apparel industry considering that lingerie are universal garments worn by a majority of women globally. A study conducted by (Beckman, 2012) on women in the U.K. show that women currently own over 30 pairs of underwear, which is three times more than the figures in 1999. There is no such data available for women within the African continent.

Above all this consultancy report is a contribution to the field of logistics, supply chain management, brand management and marketing.

1.1 Kenyan Textile Industry:

While there is scant knowledge on the topic, the decline of employment within the textile and apparel industry in East Africa is due to the offshore sourcing trend (Bruce, 2004). Subsequently, Barden and Barber (2005) recognise that the second-hand market provides access to cheaper and affordable clothing. Furthermore, they add that this practice is especially beneficial for developing countries as it provides an affordable alternative to the importation of brand new or locally produced garments (Barden and Barber, 2005).

In the 1980s, the Kenyan textile industry was once a thriving sector, employing over 500,000 people (Kubania, 2015). Today, those figures have drastically decreased by over 96%, and the number of employees in the industry currently stands at roughly 20,000 (Kubania, 2015). According to Daily Nation (2015), the high costs of production and unstable international prices of cotton led to the production levels below the national demand.

The Economist (2016), reports that the East African Community (EAC), is seeking to outlaw the importation of second-hand clothing into the region. According to Kubania (2015), the ban will give Kenyan manufactures a chance to reclaim the market by compelling Kenyans to buy locally produced clothes. By the same

token, President Kenyatta, argues that this ban will create new and better jobs which will make up for the losses currently being experienced within the textile industry (economist, 2016).

Moreover, in an effort take advantage of the African Growth and Opportunities Act (AGOA), the Kenyan government is handing out certified cotton seeds to increase production of the crop (Daily Nation, 2015). This will go a long way into revitalising the industry. Fernandez-Stark, Fredrick and Gereffi (2011) are of the opinion that the presence of a local or regional textile industry and manufacturers in a country can act as essential catalyst for national development due to the low fixed cost associated as well as the emphasis on labour-intensive activities. The textile industry not only offers East Africa but the continent at large economic opportunities with forward linkages; this has been well exemplified in China.

1.2 Fashion Industry:

Mannan and Ferdousi (2007), state that in order to compete in the international marketplace, retailers and manufacturers are required to concurrently and continuously improve both the quality and productivity of their products. On the other hand, Christopher, Lawson and Peck (2004) are of the opinion that it's becoming empirically evident to suppliers, manufacturers and industry experts that demand in the fashion industry cannot be forecasted. Fashion items need to simultaneously be promising and show signs of relative ambiguity in order to improve their chances of being successful in the market (Benders & Bijsterveld, 2000). This is because the fashion industry is complex and "chaotic", Christopher et al. (2004) highlights some of its four essential characteristics as:

- **Short life cycle:** Products are based on the mood and current trend of the society; therefore, their saleable timeframe is short and seasonal.
- **High Volatility:** The demand for products in the fashion industry is unstable and usually based on factors such as the weather or pop culture.
- **Low predictability:** Predicting demand is difficult on either a week-by-week or item-by-item.

- **High impulse purchasing:** Products are purchased based on tactile contact or the sensational stimulation experienced upon contact with the item.

The above characteristics highlight the uncertainty and volatility within the fashions industry which affects how retailers operate. Traditionally, retailers would respond to customer demand based on forecasts, which would result in over or under-stocked inventory (Christopher et al. 2004). By the same token, Fisher, Hammond, Obermeyer and Raman (1994), believe that traditional methodology resulted in an increasing number of inaccurate forecasts, costly errors and unwanted goods which had to be marked down or sold at a loss.

The unpredictability in the fashion sector has benefited the customers. Endless options in the fashion market have created a demanding customer base who are looking for more variety at lower costs. Considering this, firms need employ more concern toward their satisfaction and come up with innovative products at a competitive price (SAP AG, 2005) (Ferdousi, 2009).

1.3 Company case study: Ressiers

The proposal below is based on start-up intimate apparel company by the name Ressiers; an African branded intimate apparel store, offering quality products at an affordable price. It will be launched in Nairobi, Kenya and have both an online and physical presence.

Kenya currently has a booming second-hand clothing market, which also extends into the intimate apparel department. This raises both hygiene and health concerns. Intimate apparel functions at its maximum best when it's new and with tight elastic or bands, both of which are not guaranteed with second-hand clothing.

Additionally, living in a diverse continent allows us to embrace a population of women who embody different body shapes, sizes and skin tones. There are a few companies globally who accommodate this market with tailor-made garments for the African woman.

Given the above information, using Ressiers would allow for investigation on what it would take to form an African branded intimate apparel company with the intention to envision and enable a society of women who do not depend on second-hand/used undergarments. The aim is to create a company with a product that will nurture a society of women who are healthy and clean; a society of women who are self-confident, decent and comfortable. A company that will offer comfortable and quality intimate apparel that is tailor-made to the African woman's body shape and skin tone, with the understanding that every woman's body shape is unique, and therefore aim to provide and avail custom fitted merchandise. The online portal will establish a just-in-time supply chain methodology, linking the order, manufacturing and final delivery of the product to either the store or customer's home.

Considering the company's aspirations, it is imperative to identify suppliers who can visualise the design, manufacture and deliver for an up-market lingerie brand.

The analysis will be based on two different approaches in order to identify the best, efficient and quick-response supplier selection methodology for start-up companies who don't have many resources at their disposal:

1. **Traditional:** search for suppliers from your local directory, contact suppliers directly through phone or email, ask for a request for quotation (RFQ), select the best one based on price and offering, place order, organize for your own logistics, get product delivered then evaluate their performance
2. **Modern:** search from a massive database of suppliers simultaneously request for a quotation globally using an e-procurement portal, suppliers qualified to provide your product request reach out to you with their service and product offerings, select one, pay online, get product delivered, leave review online.

2 Traditional Methodology

2.1 Introduction

Traditionally, price and availability were the main determinants of every purchase decision. The lengthy process would begin with the company's heads and executives determining that there was product to develop. Most of the time this would be based on their internal meetings and analyses as opposed to the market's needs and demand.

The steps that were involved in the traditional purchasing as per (Presutti Jr., 2003):

1. The buying requirement is defined based on the needs of end consumer/customer.
2. Product specifications are developed
3. A buying team is formed to perform the pre-qualification of suppliers; this includes activities such as generating the request for a proposal and evaluating them- the best supplier is chosen based on the selection criteria outlined.

2.2 Literature Review

This literature will cover various thoughts on leadership and expert research on the manufacturing industry, relevant theories as well as the processes involved when a company is looking for suppliers who will facilitate the production of a brand name clothing line.

2.2.1 Manufacturing and Lean Production:

The modern proliferation of supply chain management in manufacturing has led to a broader range of time-sensitive products such as clothing and consumer electronics.

Manufacturers are known to encounter typical industrial problems such as long production lead times, forecasting errors or long distance from customers (Chan & Chan, 2010). Krafcik (1988), coined the term 'lean production' in relation to car manufacturing. Currently, it's a phenomenon which has been adopted by both the developed and developing countries, aimed at achieving performance (Ferdousi, 2009).

The three leading technologies involved in making rapid manufacturing easier according to Wong and Hernandez (2012) are:

1. Computer-aided design (CAD)
2. Computer-aided manufacturing (CAM)
3. Computer numerical control (CNC)

According to Ferdousi (2009), adopting the lean production methodology can lead to improved product quality, reduced inventory, increased productivity and do away with manufacturing waste. Additionally, a study by (EPA, 2003), found that in order to boost their profits and competitiveness, companies adopt the lean system for the following three reasons:

1. The reduction of resources and costs;
2. Increased customer responsiveness;
3. Improved product quality.

2.2.2 Trade Barriers

When forming a multinational company with import/export supply chain activities, then trade barriers need to be considered. According to Nordås et al. (2006), while discussing time as a trade barrier, three main time aspects are considered:

1. **Lead time:** this entails the time between an order placement and goods received. Long lead times are usually acceptable with predictable and stable demand schedules.
2. **Just-in-time:** organised production that keeps the inbound and outbound inventories at a minimum. Delivery time needs to be stable to avoid the need to retain large buffer stock.

3. **Time Variability:** determines whether or not a supplier will be eligible to bid for a contract.

2.2.3 *Lean Retailing*

“Lean retailing” is a term that was coined to refer to the use of just-in-time manufacturing within the retail sector. Suppliers who engage in this practice are usually located close to the market and more often than not experience high production costs. However, compensation for these high production costs comes from low distribution costs, flexibility and high productivity. Companies who choose to adopt the just-in-time process at any stage of production, are encouraged to synchronise the entire supply chain to experience smooth operations.

This real-time exchange of information is also crucial because of shrinking product life cycles and the competitive advantage that comes from reduced time-to-market (Presutti Jr., 2003).

In order to cope with the uncertainties in the fashion industry, conventional wisdom asks that you improve the quality of the forecast, however, due to the volatile demand of the industry, Christopher et al., (2004) recommends companies should focus on lead-time reduction instead. Furthermore, Nordås et al. (2006) recommended that in order for developing countries to stay competitive in these divisions, they need to shorten the lead times.

2.2.4 *Lead time*

Lead time is the forecast period determined by the time it takes to carry out the first part of the product lifecycle from design, manufacturing to shipping the item (Christopher et al., 2004). Christopher et al. (2004) argue that with short enough lead times, suppliers can receive small, frequent, reorders during the season as the retailer has the power to reassess demand for the products.

The ability to see “real” demand is the biggest challenge to most businesses in the fashion industry. Christopher et al. (2004), understand that conditions and

characteristics of the fashion industry provides a challenge to logistics management, and therefore managerial efforts should be focussed on ensuring products are designed, manufactured and delivered based on real-time demand.

in order to successfully compete in the fashion markets, Christopher et al. (2004) suggests that organisations have to control three paramount lead-times:

1. **Time-to-market** – this entails the time period it will take for business to recognise an opportunity, convert it into a service or product, and open it to the market.
2. **Time-to-serve** – this captures the timeframe it will take for a customer to place an order, within their particular specifications, to the delivery of said product.
3. **Time-to-react** – a company's versatility and quick response to the volatile demand.

2.2.5 Quick Response

Imaoka (n.d) defines Quick Response (QR) as a management concept used to shorten the lead time ranging from the receipt and delivery of an order and increase of cash flow through customer satisfaction. Shortening supply chain lead times and decreasing inventory are some of the key concepts covered in QR (Chan & Chan, 2010). Customers and manufacturers employ QR to avoid excessive inventory or poor forecasts which lead to either discounted sales or stock outs respectively (Chan & Chan, 2010).

2.2.6 Supplier Identification and evaluations:

When selecting suppliers for just-in-time delivery, those who exhibit high variability lead times will not be shortlisted. According to Chan and Chan (2010), supplier selection is seen as a decision-making problem. Traditionally, suppliers were selected based on the quantity and cost requirement, ignoring other important issues critical to the operation of a textile supply chain (Chan & Chan, 2010). We have identified two key supplier selection models below which are

relevant to our proposed business venture: 1) Forward Commitment Procurement and 2) Analytical Hierarchy Process.

1. Forward Commitment Procurement

Forward Commitment Procurement (FCP) is a concept where suppliers receive advance communication from buyers on the required outcome in terms of quantity and timeframe of a future product or service (Kane, 2014). FCP has also been described as a process that “involves providing advance information of future needs, searching out and engaging with potential suppliers and, critically, incentivising them through a Forward Commitment – the promise of current and future business to promote investment in innovative new product development” (DTI, 2006).

In Whyles, Van Meerveld and Nauta’s (2015) view, FCP is an agile and incremental framework process which allows the customer and suppliers to approach procurement in a staged process by managing risks at each stage; thereby informing them whether they should proceed or withdraw based on the outcome of the preceding stage.

In accordance with the FCP framework which influences the market by supporting the delivery of customer requirements; the Department for Business, Innovation and Skills (2011) outlined a 3-step process displayed in the figure below for its application:



Figure 1: FCP 3 Step process

2. AHP Analytical Hierarchy Process

The Analytical Hierarchy Process (AHP) is a flexible and adaptable decision-making methodology that was developed by Thomas Saaty in the early 1980's (Triantaphyllou & Mann, 1995). It is capable of handling multiple criteria such as selecting suppliers, risk and opportunity modelling, forecasting, locating facilities and choice of technology (Chan & Chan, 2010). The ultimate goal of using AHP is to select the best overall supplier.

Financial considerations

Although not the only element, the procurement cost is the most important element when searching for an international supplier because of the following:

- **Cost minimisation:** in order to capitalize and maximize profit, the several costs associated with the procurement such as transport, import duties and the order price need to be kept at a minimum.
- **Terms of payment:** most international suppliers expect and advance payment to start production. Negotiate suitable terms such as sight drafts to avoid tying up most of your capital.
- **Freight fees:** there are high transport and insurance costs involved in international buying and sourcing agreements.

Supplier Evaluations

In addition to selecting the best supplier, an evaluation system needs to be implemented in order to ensure quality and timely delivery of products manufactured.

Instead of adversarial relationships, firms are now focussing on transforming partnerships with their suppliers (Jones, Hines & Rich, 1997). Levy (1997), believes that strategic relationships with suppliers have underlying perks such as guaranteed quality, delivery and cost. This type of cohesion, allows the supplier to work closely with the buyer with a goal of understanding and incorporating their requirements into their own operations. Paulraj and Chen (2007) have noted that

several firms today are embracing strategic buyer-supplier relationships for the following reasons:

1. Value chains experiencing improved efficiency and effectiveness;
2. Seamlessly integrated physical distribution function with suppliers for greater benefits.

De Toni and Nassimbeni (1999) acknowledge additional benefits to include increased trust and relational reliability experienced through:

1. A concise list of suppliers to contact for short notice orders;
2. Volume orders and the learning curve effect which lead to increased economies of scale;
3. Dedicated production capacity;
4. Improved customer services and market penetration capabilities.

Research findings by Carr and Pearson (1999); Kotabe et al. (2003); Prahinski and Benton (2004); and Giunipero et al. (2006) prove that continuous communication between buyers and suppliers on issues such as product design and material procurement will result in the following;

1. Improved product quality;
2. A reduction in the customer response time;
3. Reduced costs related to opportunistic behaviour protection;
4. Cost savings from better product designs and efficient operations.

2.3 Methodology

2.3.1 Introduction

Global sourcing is the proactive coordination and integration of items, processes, designs technologies and suppliers across the globe (Trent & Monczka, 2003). Additionally, the firms who succeed are those which understand how to coordinate and leverage these activities on a worldwide basis (Trent & Monczka, 2003).

Data gathering in research is an important aspect as it helps ground your findings based on researched facts. Below, we will outline the objective of our research, the methodology we will employ to identify the supplier, define the data requirement we need and how we will collect and analyse it.

2.3.2 Research Objective:

The agenda of this project is to identify an appropriate supplier who will facilitate the design, manufacture and delivery of an African based, budget-friendly, lingerie line. In order to do so, we need to gather the appropriate data which will help us choose based on the Design, Quality, Service and Price offer. We are looking for a company which specialises in design, manufacturing and delivery to develop our proposed budget-friendly product line. The selected company will be involved in the design of the idea, buying and sourcing of materials and delivery of the product; ready for retail.

2.3.3 Research Methodology:

We intend on performing an exploratory research, collecting qualitative data that will lay the groundwork and form the basis for a more conclusive research (Dudovskiy,n.d.). While using the exploratory research method, the researcher should be willing to pivot based on the insights and revelations experienced from the data gathered.

According to Dudovskiy (n.d.), qualitative data is non-numeric information that can be obtained in either notes, interviews, audio recordings, pictures or text formats. Furthermore, the inductive approach will be used to collect qualitative data through the issuance of detailed ‘Requests for Proposals’ from different suppliers across the globe.

The key data we expect to obtain has been outlined below:

1. Submitted proposals from manufacturing/production houses we have identified from the internet.
2. Understand their quality, service and price offering.

2.3.4 Analysis method:

- **Service:** A detailed review of the services offered, from design to production, delivery and feedback consideration and implementation.
- **Time:** We take the different time frames, such as design time, sample completion and delivery and order completion, into consideration.
- **Quality:** At this stage, we will evaluate the quality of communication, design and the actual product. We will check for a product that sturdy, stylish, durable and affordable.
- **Turnkey solutions:** Offerings which can be tailor-made or tweaked for a company depending on size, budget and design.
- **Rules and regulations:** for import and export of above goods from the mentioned countries.

2.3.5 Method of distribution:

- Emails
- Direct applications on the production/manufacturing house websites.

2.4 Results

2.4.1 Introduction:

Bowers (2017), notes that the process of transforming an idea into a product is a complex activity that requires dedicated time that is achieved through research and personal patience. He further emphasizes that the biggest hurdle is identifying and securing a factory which understands your requirements, so they can manufacture your product (Bowers, 2017).

The results below show the response rate and quality received while utilising the traditional methodology. Below, the results will be outlined and analysed, challenges and insights which were obtained from the request for proposal that was sent out to the various companies globally.

This is the methodology entailed the direct sourcing of suppliers through predominantly traditional processes requesting for quotations through email.

2.4.2 Research design:

The main aim of this research was to identify suppliers with ODM capabilities who can partake in the design and production of a lingerie under the brand name “Ressiers”. A total of 20 requests were sent out globally to particular companies in the industry and received the various responses:

2.4.3 Rejected responses:

An immediate response was received from *Nouvelle Lingerie Mauricienne* (NLM)), an intimate apparel manufacturing company; founded in 1988 and based in Mauritius.

As at February 2018, they had already reached their capacity for “small volume clients” for the year. Guinda (2014) noted how manufacturers normally prefer to work with established corporations instead of small businesses because of the order volumes.

Although manufacturers are often open to price negotiations; buyers who compromise and lowball may receive sub-par products in turn (Guinda, 2014).

2.4.4 Responses due to lack of clarity:

The second response received was from Inticede BSD PVT Ltd; a buying, sourcing and design company based in Mumbai, India. Founded in 2016, Inticede specializes in intimate wear, and according to their website, they define themselves as “a one-stop-shop providing complete sourcing solutions globally, managing each step in the global supply chain process for major intimate wear retailers and brands and manufacturers” (Inticede, 2016).

The initial email request was ample enough for the first point of contact to transfer us over to the head of Merchandising and Sourcing.

However, despite his desire to assist, he kept insisting that the request was not clear enough and more information would be needed to understand the requirements.

3 Modern Methodology

3.1 Introduction

Over the last few decades, the constant innovations around technology have been forcing users to adapt. Most activities, including supplier identification and procurement have been digitized, taking us away from the old way of doing things. Many corporations were reluctant to adopting this new, faster and more efficient methodology as there was stigma and safety concerns associated with purchase of goods online. Due to the nature of the industry, most of the suppliers found online are based in the east, specifically China and India. These countries sometimes hold a reputation of producing low quality items due to their rapid and mass production capabilities.

In order to realize the full benefits of such online portals, one needs to be patient and meticulously detailed so as to attract the right supplier, designer or manufacturer for your item according to the specifications you have outlined. There is a scarce number of African specific sourcing websites or manufacturers as many are yet to go digital.

3.2 Literature Review

3.2.1 African Branding

The American Marketing Association defined a brand as any attribute of a product or service that uniquely distinguishes it from its competitors (Pienaar, 2011). After some time, brands start being recognized and associated with their level of quality and credibility in the market as well as from the consumer's perspective (Business dictionary, n.d.).

Creating your own brand name is important and benefits you in the following ways (Sellbright, n.d.):

1. **Price:** sourcing directly from the manufacturer/factory ensures that you are in control of the associated costs, and in turn the price of your products.
2. **Competition:** power to undercut competitors by adjusting costs or adding features to your product; further capitalizing on your advantage.
3. **Brand control:** gain brand loyalty by making the decisions on how you want your product to look like, where, how and to whom it will be distributed to.

Kaufman (2013) outlined the risks associated with re-selling other brand names instead of creating your own:

1. **Warranty:** inability to guarantee the warranty of the products. Warranty is important during the sales of products as it serves as a promise to the consumer. This in case of any breakages or replacements required from factory defects or rejects.
2. **Trademark:** while peddling other brand names, one may be faced with trademark issues and require permission to advertise their logos.
3. **Competition:** other merchants have access to the same products and can resell them at competitive prices. Alternatively, when you have your own brand name, you are in charge of setting the wholesale prices for the interested reseller.
4. **No middle-man:** being in control of the whole supply chain allows you to realize higher profits.

3.2.2 E-procurement/Online-sourcing websites

E-procurement is the digital solution that enables a company or individual to purchase products online (Presutti Jr., 2003). E-procurement has grown to include pre-development stages such as e-design, all the way to supplier ratings (Presutti Jr., 2003).

There are special e-commerce websites which were founded to facilitate international trade between business-to-business, business-to-consumer and business-to-government procurement purchases. Haigu (2007), defines these

special e-commerce websites as two-tier purpose forums: 1) Merchant: individuals or companies who secure different kinds of products from sellers and resells them to interested buyers; 2) Two-sided platform: allowing “affiliated” members of buyers and sellers to directly do business with each other.

Some well-known websites include the following:

- **Alibaba:** e-commerce and international trade portal that was found in 1999. They specialize in providing an online platform that helps both businesses and individuals identify and secure suppliers, exporters, manufacturers, importers and many more (alibaba.com, n.d). According to Lazazzera (2015), Alibaba has the most comprehensive directory linking manufactures/suppliers with buyers globally.
- **E-bay:** online marketplaces that works on the buy and sell model for fashion items, electronics, cars, collectibles etc.
- **India Mart:** “India's largest online marketplace that assists manufacturers, suppliers & exporters to trade with each other at a common, reliable & transparent platform” (Indiamart.com, n.d.)

According to Presutti Jr. (2003), the benefits of adopting an e-procurement system comprise of a real time forum where information is shared to constantly alter and modify the specifications and eventually adding value to the end product. He insists that this type of open communication and flow of information helps minimize complexities that may result from misinterpreted design requests and in turn save money by avoiding unnecessary costs related to damage control (Presutti Jr., 2003).

3.2.3 Alibaba Request for Quotation Portal

Websites such as Alibaba were created with the mission of making it easier to do business from anywhere in the world (Alibaba, n.d.). Alibaba currently provides access to both suppliers and buyers in almost 200 countries globally. According to their website, they “do this by giving suppliers the tools necessary to reach a global audience for their products, and by helping buyers find products and suppliers quickly and efficiently” (Alibaba, n.d.)

Alibaba has an integrated RFQ portal on their website that is specifically designed to allow buyers to fill out the multi-criteria form online, which is thereafter sent out to a plethora of suppliers and/or manufacturers prompting the most suitable ones to reach out to the buyer with their quotations.

On the portal, you are also allowed to upload any other supplementary documents one may have such as sketches, sample drawings, pre-designed tech-packs etc. The more details included, the higher the chances are at securing a supplier or manufacturer that meets your requirement specifications and needs.

The system also has a monitoring system which informs on the percentage completion of the request. This gauge helps in tracking how detailed the request is and prompts one to fill in the necessary gaps, so that the final request is strong and up to the specifications needed by the customer.

3.2.4 E-design/tech-pack

E-design facilitates real-time collaboration among all internal members of the firm's cross-functional buying team, as well as with suppliers, preventing the after-the-fact issues in production and purchases that create the inefficiencies and competitive challenges that arise in the traditional sequential process (Presutti Jr., 2003).

Prototype: test a sample, this process may involve several iterations until the final step. However, because one is looking for an all-round pack, they need to go through several steps of securing samples from different suppliers at different rates.

3.3 Methodology:

The integrated request for quotation online portals on both the Alibaba and IndiaMart websites will be used as the methodology tool.

As a start-up company, you are looking for the request that will bring the highest and most accurate supplier, while using the least resources. In order to achieve this, the key attributes which need to be filled in are as follows:

Title of RFQ: bra designer and manufacturer

The wording of your title is important as it is the first option that determines what category your request will fall under. With the title alone, the online search engine is able to connect you to every single manufacturer and designer on their database with that job title.

Quantity Required: 5000 pieces

Although we are looking to produce a sample size that is smaller than 5000 pieces, we indicated this amount to attract a wider range of “qualified” suppliers. Suppliers are tempted to ignore some requests. Vendors do analyse the work required and involved, if it does not equal the quantity ordered, it therefore does not make economic sense to them.

Expire Time:2018-04-14 23:59:59

The expiry time on here is useful as it guides the speed of responses to your request.

Because this is an algorithm and machine-based search, indicating the expiry time helps you as buyer by managing the number of days it will take to get responses. Depending on your timeline, a shorter time period may limit you to a smaller number of responses but meet your deadline. On the other hand, a longer period may give you time to edit your request until you have matched with a suitable supplier.

Destination Port: Johannesburg; Shipping: FOB

When dealing in global sourcing activities, the tail-end logistics will require the item to be shipped. The destination port is an important criterion to fill out as it guides the supplier on which courier to be used and prices to be charged.

Bra design, size and colour: Front-closure, Convertible, Strapless, Seamless, Padded, Underwired

Indicating the various designs for your lingerie line is helpful in assisting the potential supplier and designer to assess whether they have the capabilities to

assist you with your order request up front. Each bra design requires a unique stitching style, material and equipment for proper finishing.

Providing a potential and design gives the designers insight on the various materials.

Product Detailed Specification:

There is an additional section that is for a detailed “product specification”. Here, the email was written with the goal of providing every single piece of information that may have been missed. Giving details such as name and shipping address also added the human element behind it for identification purposes to the potential suppliers. We are aware that most companies do not own all areas of the supply chain, starting from design to production. Because the aim is to look for design, it begun by mentioning “design” in the request.

3.4 Results

3.4.1 Eisonee International Limited.

A detailed request, as captured on Annexure 5.2, caught the attention of Eisonee International Limited.

The email response was as follows:

“We’re a manufacturer of underwear and we also have the OEM&ODM service. We know that you are looking for lingerie designer and manufacturer. We believe you will be satisfied with our products if you are searching for a reliable supplier since we’ve focused on producing high-quality lingerie for over 20 years with superior R&D team and experienced producing line”.

They also attached a catalogue outlining their service offerings.

After three different attempts, my requests were finally getting the kind of responses I had been looking for.

“We can also customize your private label according to your requirements.”

Ressiers is indeed a private label company and is looking for a company who will design its lingerie line.

Eisonee was founded in 1993 and the company specializes in women’s lingerie. According to their catalogue, they are one of the top 3 companies in Taiwan.

They provided us with the following details on the factory capacity:

	Vietnam Factory	Qingyuan Factory
Lingerie production lines	9	10
Number of employees	400	500
Sewing lines per factory	24	24

Because this was a direct response from the factory request, it meant that they have capacity to take on new clients. This answers our first question from the survey. The difference here is that we did not contact Eisonee directly. Eisonee had a chance to look and examine our brief requirements from the online portal and were thereafter able to reach out to us with their capabilities.

4 Recommendations

4.1 Key learnings: traditional methodology

When sourcing for manufacturers for a start-up lingerie line, it is important to look out for the following:

The big manufacturers have a specific time-frame for accepting new clients. The focus group/pool of manufacturers you reach out to should have the capacity to accommodate smaller volumes. You will find most established manufacturers, such as NLM, are already over-booked, and filled out their small business quota long before the beginning of the year.

Before even finding out a potential supplier's MOQ, the first question that needs to be answered is whether or not they have capacity to design and produce your anticipated volume. This saves you time and provides you with your idea product confidentiality.

Time implication: sourcing for manufacturers takes time and dedication. According to Lazzazera of Shopify "it just requires a little more patience and perseverance to find the perfect partner for your new business".

Guinda (2014), advises that buyers with initial small order volumes need to find a way to promise and convince the manufacture bigger volumes in the future. You can do this by stating your total desired order amount, and then suggesting that you would like to begin by ordering a portion of that.

An example of this would be:

A start-up company probably requires a total of 5000 pieces to launch their business in the first year. As we have seen, you would initially require a sample size of less than that, say 500 pieces. The sample size helps you determine whether quality in terms of colour, workmanship and size are as per your specifications. However, although your initial order will ideally be 500 pieces, it is recommended that you indicate the 5000 instead. This is a more attractive option

to the supplier, helping them understand that if satisfied, they will have another guaranteed order of 4500 pieces in the near future.

Money implication: Most companies base their monetary quotes on volume. Therefore, the lower the numbers of items ordered, the more it will cost. So, ensure you have a tentative forecast to work with.

4.2 Key learnings: modern methodology

Clear and detailed information are key success drivers for seamless communication within the fashion industry. Suppliers and manufacturers often quickly scan your email request for language that they are familiar with as well as action items on how to proceed. According to Brown (2015), both parties involved in any form of communication need to ensure that the information relayed is understood as intended.

Email length: While contacting potential suppliers and manufacturers, it is important to keep it short, precise and straight to the point. One needs to touch on the key points and utilise fashion/supplier jargon such as the number of items required, they style, colour and design. You also need to include deadlines (for a sample development, shipping).

Phone Contacts: With the turn of development and innovation in today's forms of communication, a phone call serves as one of the most important in terms of international negotiations. This can be either in video or audio format, but it verifies the human aspect of the communication line. Ask for the phone number and make good use of the free and affordable applications such as WhatsApp, Google hangouts and Skype.

Quantity Orders: In your initial email, you need to both request the supplier's minimum order quantity as well as state your desired order amount. This is the first part of supplier screening, as they immediately inform you on whether there is buyer-supplier match on the requirement as well as save you time in determining on whether to proceed or not.

For design purposes, you need to provide images or a pre-drafted “tech-pack” for visualisation purposes. This will help the designer have a tangible idea of what you are trying to create. Alternatively, prior logging onto the sourcing websites, one can consult with local designers who specifically specialize in the creation on a fashion tech-pack. Once you have obtained this, all you have to do is upload it onto the secured website, essentially cutting out, or minimizing the time it will take to design the merchandise.

4.3 Traditional vs. Modern Methodology Evaluation:

Through our report and analysis of the different methodologies, we have encountered two primary ways of identifying suppliers. The specific role of these suppliers will be to manufacture lingerie items for a start-up company.

The traditional methodology, entailed the physical, personal search of pre-existing suppliers, sending out requests for quotations and thereafter selecting the best one based on their value proposition. We found that this methodology, was time consuming and posed a high risk by limiting the type and quality of responses and reach you have to the market.

This methodology is also much more suitable for large corporations who have the flexibility of having a procurement and purchasing department. Within these roles, they have the sole task of identifying potential manufacturers as well following up on and maintaining the necessary communication required to secure one.

In contrast, the e-procurement/online request forums and portals have been designed to provide a one-stop shop and application which will reach a plethora of suppliers globally. The response time while using this system ranges from two to three days depending on the level of detail input.

The e-procurement/ online methodology is more suitable for start-ups and small business who do not have the capacity to dedicate a whole department to manage their procurement process. It is also beneficial as it surpasses the traditional physical barriers by opening up the opportunity to both old and new manufacturers. Companies found through this forum are flexible and easy to communicate with.

5 Conclusion:

The most important task to complete prior embarking on a search for the manufacturer or supplier for your lingerie brand is thorough research.

The key areas of research include:

Fashion terms: throughout the supplier identification process, you will find yourself in constant communication with experts in the industry ranging from designers, to sample makers, to consultants etc. (Dupree, 2016). Inability to understand key fashion terms can impede on your communication and waste valuable time.

Manufacturing terms: while sourcing for potential manufacturers to bring your product line to life, it is important to understand the various type of manufacturing services available. These terms will also help you determine whether your chosen factory has the capabilities to produce your product according to your specifications.

Financing terms: understanding the various type of financing and payment options available. There is a huge financial risk associated with ordering and producing garments overseas, which can in turn affect your delivery and operational timelines.

Shipping terms: There are a number of freight and shipping terms that are important to understand as they will have an implication on the delivery time and final cost of your product.

Market research: Although your goal is to identify suppliers, it is important to know the exact market you are going to be serving. This has an implication on the material, colour and size. In the case of Ressiers, it was known that the market was for East African women. The majority of these women have a smaller band area but big bust size. Additionally, in order to provide a product that blends with their skin tones, while fulfilling the MVP requirement to test the market, we started with the option of three different shades of brown.

6 Annexures

6.1 Request for Proposal Format:

Introduction:

My name is Cheryl Nyawade, and I'm a full-time student at the Wits Business School in Johannesburg, South Africa. I am investigating the potential (expansion/growth) of my proposed Business Venture for my research component of the MBA.

We are therefore requesting proposals from manufacturing companies with turnkey solutions in order to secure the appropriate supplier who will facilitate the design, manufacture and delivery of an African based, budget-friendly, lingerie line.

We would like to build an African branded intimate apparel store, offering quality products at an affordable price. The store will be launched and based in Nairobi, Kenya and will have both an online and physical presence.

Our goal is to develop a just-in-time supply chain methodology, linking the order, manufacturing and final delivery of the product to either the store or customer's home.

Our Business:

We look to offer comfortable and quality intimate apparel that is tailor-made to the African woman's body shape and skin tone. We understand that every woman's body shape is unique, and therefore aim to provide and avail custom fitted merchandise.

Requirements:

The proposal should be based on the following intimate apparel product items:

Bras	Underwear (Panty)
T-shirt bra	Thong
Strapless Bra	Bikini
Racer-back bra	French cut panties
Sports bra	Hipster/Boyshort

Your proposal should address the following questions and cover the criterion outlined below:

1. Are you currently taking on new customers? (Yes or no) if yes, continue with the survey
2. What is your production capacity?
3. Which technology do you use in the design process?
4. Which brands do you currently work with? (list all)
5. Do you work with 3rd party suppliers? (Yes or no) If yes; please mention which ones and their purpose.
6. What services do you provide? (list all) (e.g. patterns, grading, prototypes, fabric sourcing, design)
7. What is your Minimum Quantity Order? (is it per style, or per item, per colour or per size?)
8. Do you have a "terms and conditions" available?
9. What is your pricing strategy?
10. What is your production time-frame? When can you start?
11. Please append a soft copy of all certifications (Socially responsible buying/sourcing (SRB), etc.)
12. Do you have integrated logistics and supply chain management processes in place?

Selection Criteria:

- RFP response time
- Technologically advanced company with integrated/ synchronised systems.
- Seamless integration capabilities
- Affordability

Timelines:

Deadline: March 1st, 2018

6.2 E-procurement request for proposal format:

Dear Sir/Madam,

This is Cheryl owner of Ressiers Limited from ZA. I'm looking for designers of bras and panties with the following specifications:

- *Brand name: Ressiers*
- *Supply Type : OEM/ODM*
- *Panties Type : OBM (Original Brand Manufacturing)*
- *Bra Design : OBM (Original Brand Manufacturing) Material : OBM (Original Brand Manufacturing)*
- *Bra Colours : maroon , light brown, dark brown, deep brown, black and navy blue*
- *Panty colours : maroon , light brown, dark brown, deep brown, black and navy blue*
- *Panty sizes : S,M,L and XL (20 pieces each style and size) Bra sizes : Bands 30-40; Cup A, B, C, D, DD, DDD, E (20 pieces each style and size) Sports bra sizes: S,M,L, XL, XXL (20 pieces each style and size)*
- *Features: Anti-Bacterial, Breathable, Seamless, invisible,*
- *Use: Sport Bra, Bra Design: Front Closure,*

- *Bra Design: Padded, Bra Design: Underwired, Bra Design: Strapless, Bra Design: Unlined, Bra Design:*
- *Convertible, Material: Spandex / Cotton / Bamboo Fibre, Material: Polyester / Cotton, Material: Spandex / Cotton,*

Assist us by answering the following questions:

- 1. What is your minimum order quantity*
- 2. What is your cost per unit for both bulk and minimum orders?*
- 3. What are your payment terms for new customers?*

We would also like a sample of the bras and underwear to verify the quality and colour match.

Kindly ship to:

inserted shipping address

Thank you,

Cheryl Nyawade

Ressiers Limited South Africa

6.3 Glossary

Cost, Insurance Freight (CIF): The buyer is willing to risk the damage or loss of their ordered merchandise and in exchange the supplier/manufacturer pays for the freight, costs and insurance fees associated (Investopedia, n.d.).

Cost and Freight (CFR): Similar to CIF, however the seller/supplier is not required to pay for the insurance fees involved.

Cut and sew: “A system of manufacturing in which shaped pieces are cut from a layer of fabric and stitched together to form garments” (textileglossary.com, n.d.)

Drop Shipping: special arrangement between the supplier and buyer where the buyer accepts orders that are shipped by the supplier directly to the customer enabling the buyer to never carry inventory (Dupree, 2016).

Free on Board (FOB): According to Minalto (2016), this where the manufacturer or agent involved promises to absorb all costs until they have shipped the merchandise to the closest port. Any other transport logistics fees such as customs and shipping the items to your destination country and local address are taken on by the buyer.

Manufacturer: “Entity that makes a good through a process involving raw materials, components, or assemblies, usually on a large scale with different operations divided among different workers” (Business Dictionary, n.d.). This word is interchangeable with “supplier”.

Minimum Ordering Quantity (MOQ): “the smallest amount or number of a product that a company will supply” (Cambridge dictionary, n.d.)

Original Design Manufacturing (ODM): companies with ODM capabilities design and manufacture products according specifications outlined by a firm who will later rebrand it for sale (Wikipedia, n.d.).

Production pattern: the final pattern which has been made to the buyer’s size and standard requirements (Dupree, 2016).

Request for Quotation (RFQ): According to Business Dictionary (n.d), a RFQ is used to solicit price and delivery quotations for a specific quantity of goods and/or services.

Sight draft: a scenario where the exporter retains the title to the package ordered until the importer (buyer) receives and completes the payment. It is often used in both air sea shipments. (Investopedia, n.d.)

Supplier: The party involved in supplying a good or a service (Business Dictionary, n.d). This word is interchangeable with “manufacturer”.

Tech-pack: also known as a technical package; a type of blueprint/instruction manual that meticulously describes the detailed specs for a factory to produce your product (Dupree, 2016).

Telegraphic Transfer (T/T): “an electronic method of transferring funds utilized primarily for overseas wire transactions” (Investopedia, n.d.)

7 REFERENCES

- ANJORAN, R. What does CMT (Cut, Make & Trim) mean? Retrieved from <https://qualityinspection.org/cmt-cut-make-trim/>
- Benders, J., & Van Bijsterveld, M. (2000). Leaning on lean: the reception of a management fashion in Germany. *New Technology, Work and Employment*, 15(1), 50-64. doi:10.1111/1468-005X.00064
- Blog, I. (2016). UNDERSTANDING YOUR CLIENT: 7 DIFFICULT QUESTIONS TO ASK UP FRONT. Retrieved from <https://www.invisionapp.com/blog/design-client-questions/>
- Bowers, J. (Producer). (2017). How to Find a Factory to Manufacture Your Product. Retrieved from <https://www.businessnewsdaily.com/8820-how-to-find-factory.html>
- Britain, G. (2006). *Environmental Innovation: Bridging the gap between environmental necessity and economic opportunity*: Department of Trade and Industry.
- Brown, B. (2015). What is Effective Communication? Retrieved from <https://www.livestrong.com/article/69309-effective-communication/>
- Business, A. (2017). SPECIAL REPORT: Africa's Best Brands Interview with Samsung's marketing head. Retrieved from <http://www.brandafrica.net/Documents/BrandAfrica100-2017.pdf>
- Carr, A. S., & Pearson, J. N. (1999). Strategically managed buyer–supplier relationships and performance outcomes. *Journal of operations management*, 17(5), 497-519.
- Cathy, H., & Belinda, D. (2001). An exploratory study of the consumer decision process for intimate apparel. *Journal of Fashion Marketing and Management: An International Journal*, 5(2), 108-119. doi:doi:10.1108/EUM0000000007282
- Chan, F. T., & Chan, H. K. (2010). An AHP model for selection of suppliers in the fast changing fashion market. *The International Journal of Advanced Manufacturing Technology*, 51(9-12), 1195-1207.
- Cleaver, R., & Kutner, J. (2008). Raising Equity in a Volatile Market. *Int'l Fin. L. Rev.*, 28, 23.
- Colleen, M. (2011). Enterprise orientations: a framework for making sense of fashion sector start-up. *International Journal of Entrepreneurial Behavior & Research*, 17(3), 245-271. doi:doi:10.1108/13552551111130709
- Corcoran, A., & Gillanders, R. (2015). Foreign direct investment and the ease of doing business. *Review of World Economics*, 151(1), 103-126.
- De Toni, A. (1999). Buyer-supplier operational practices, sourcing policies and plant performances: results of an empirical research. *International Journal of Production Research*, 37(3), 597-619.
- Dictionary, B. brand definition.
- Dictionary, B. manufacturer definition.
- Dictionary, B. request for quotations (RFQ).
- Dictionary, B. supplier definition.
- Dictionary, C. minimum order quantity Retrieved from <https://dictionary.cambridge.org/dictionary/english/minimum-order-quantity>

- Dupree, L. S. (2016). Need-to-Know Fashion Industry Lingo. Retrieved from <http://seattlefashionincubator.org/fashion-industry-lingo/>
- East Africa's used-clothes trade comes under fire. (2016). Retrieved from <https://www.economist.com/news/middle-east-and-africa/21695819-governments-take-aim-well-meaning-foreigners-east-africas-used-clothes-trade>
- Edler, J., Ruhland, S., Hafner, S., Rigby, J., Georghiou, L., Hommen, L., . . . Papadakou, M. (2005). Innovation and public procurement. Review of issues at stake. *ISI Fraunhofer Institute Systems and Innovation Research, Karlsruhe*.
- Eversman, M. (1999). Key to managing supply chain is extended chain. *American Metal Market*, 107(8).
- Exploratory Research. Retrieved from <https://research-methodology.net/research-methodology/research-design/exploratory-research/>
- Ferdousi, F. (2009). An investigation of manufacturing performance improvement through lean production: A study on Bangladeshi garment firms. *International Journal of Business and Management*, 4(9), 106.
- Fisher, M. L., Hammond, J. H., Obermeyer, W. R., & Raman, A. (1994). Making supply meet demand in an uncertain world. *Harvard business review*, 72, 83-83.
- Fletcher, K. (2010). Slow Fashion: An Invitation for Systems Change. *Fashion Practice*, 2(2), 259-265. doi:10.2752/175693810X12774625387594
- Frohlich, M. T., & Westbrook, R. (2001). Arcs of integration: an international study of supply chain strategies. *Journal of operations management*, 19(2), 185-200.
- Garment Manufacturing Process. (2016).
- Gereffi, G. (2013). Economic and Social Upgrading and Workforce Development in the Apparel Global Value Chain. *International Labour Brief*.
- Giunipero, L., Handfield, R. B., & Eltantawy, R. (2006). Supply management's evolution: key skill sets for the supply manager of the future. *International Journal of Operations & Production Management*, 26(7), 822-844.
- A Guide to Writing a Request for Proposal Retrieved from <https://www.werc.org/assets/1/assetmanager/rfpwritingguide.pdf>
- Hansen, K. T. (2004). Helping or hindering? Controversies around the international second-hand clothing trade. *Anthropology Today*, 20(4), 3-9. doi:10.1111/j.0268-540X.2004.00280.x
- Ho, W., Xu, X., & Dey, P. K. (2010). Multi-criteria decision making approaches for supplier evaluation and selection: A literature review. *European Journal of Operational Research*, 202(1), 16-24. doi:<https://doi.org/10.1016/j.ejor.2009.05.009>
- Inticede. (2016a). Retrieved from <http://www.inticede.com/services.html>
- Inticede. (2016b). About Us. Retrieved from <http://www.inticede.com/about.html>
- Investopedia. Cost and Freight - CFR. Retrieved from <https://www.investopedia.com/terms/c/cfr.asp>
- Investopedia. Incoterms. Retrieved from <https://www.investopedia.com/terms/i/incoterms.asp>

- Investopedia. Telegraphic Transfer - TT. Retrieved from <https://www.investopedia.com/terms/t/telegraphic-transfer.asp>
- J., A. C., Å., S. R., A., P. E., & Alan, H. (2006). "Web-weaving": An approach to sustainable e-retail and online advantage in lingerie fashion marketing. *International Journal of Retail & Distribution Management*, 34(6), 497-511. doi:doi:10.1108/09590550610667074
- Jones, D. T., Hines, P., & Rich, N. (1997). Lean logistics. *International Journal of physical distribution & logistics management*, 27(3/4), 153-173.
- Kane, G. Sustainability Using the 80/20 Rule.
- Kaufman, N. (2013). Is It Legal to Buy and Resell Items? Retrieved from <https://www.entrepreneur.com/answer/226401>
- Kenya in fresh bid to revive cotton growing (2015). Retrieved from <https://www.nation.co.ke/business/Kenya-in-fresh-bid-to-revive-cotton-growing/996-2812692-ew1lpiz/index.html>
- Kerketta, N. (2017). *Analysis of international vendors for developing an effective vendor management system*. Retrieved from
- Klas. (2018). The Garment Price. Retrieved from <http://www.thesportswearinc.com/the-garment-price/>
- Knack, O. (2015). 3 WAYS TO IMPROVE COMMUNICATION WITH SUPPLIERS.
- Kotabe, M., Martin, X., & Domoto, H. (2003). Gaining from vertical partnerships: knowledge transfer, relationship duration, and supplier performance improvement in the US and Japanese automotive industries. *Strategic management journal*, 24(4), 293-316.
- Kristiansson, K. (2017). 12 Questions To Ask The Clothing Manufacturer. Retrieved from https://medium.com/@klas_sportswear_inc/12-questions-to-ask-the-clothing-manufacturer-13f2394b6c0
- Kubania, J. (2015). How second-hand clothing donations are creating a dilemma for Kenya. Retrieved from <https://www.theguardian.com/world/2015/jul/06/second-hand-clothing-donations-kenya>
- Lazazzera, R. How To Find a Manufacturer or Supplier for Your Product Idea. Retrieved from <https://www.shopify.com/blog/13975985-how-to-find-a-manufacturer-or-supplier-for-your-product-idea>
- Lazazzera, R. (2015). Alibaba 101: How to Safely Source Products from the World's Biggest Supplier Directory. Retrieved from <https://www.shopify.co.za/blog/16665772-alibaba-101-how-to-safely-source-products-from-the-worlds-biggest-supplier-directory>
- Levy, D. L. (1997). Lean production in an international supply chain. *Sloan management review*, 38(2), 94.
- London, B. (2012). Victoria's secret revealed: Women now own an average of THIRTY FOUR pair of knickers. Retrieved from <http://www.dailymail.co.uk/femail/article-2178263/Victorias-secret-revealed-Women-average-THIRTY-FOUR-pair-knickers.html>
- Margaret, B., Lucy, D., & Neil, T. (2004). Lean or agile: A solution for supply chain management in the textiles and clothing industry? *International Journal of Operations & Production Management*, 24(2), 151-170. doi:doi:10.1108/01443570410514867

- Martin, C., Robert, L., & Helen, P. (2004). Creating agile supply chains in the fashion industry. *International Journal of Retail & Distribution Management*, 32(8), 367-376. doi:doi:10.1108/09590550410546188
- Minalto, A. (2016). CNF, CIF, FOB & EXW Explained! Retrieved from <https://andrewminalto.com/cnf-cif-fob-explained/>
- Morrow, R. W., Hornberger, C. S., Kligman, A. M., & Maibach, H. I. (1976). Tris (2,3-dibromopropyl) phosphate: human contact sensitisation. *American Industrial Hygiene Association Journal*, 37(3), 192-197. doi:10.1080/0002889768507442
- Nordås, H., E. Pinali, & Grosso, M. G. *Logistics and Time as a Trade Barrier*: OECD Publishing.
- Nordås, H. K., Pinali, E., & Grosso, M. G. (2006). Logistics and time as a trade barrier.
- Nyabundi, D. (2016). Kisumu residents want Kikomi revival plan hastened. Retrieved from <https://www.standardmedia.co.ke/business/article/2000208538/kisumu-residents-want-kicomi-revival-plan-hastened>
- Paulraj, A., & Chen, I. J. (2007). Strategic Buyer–Supplier Relationships, Information Technology and External Logistics Integration. *Journal of Supply Chain Management*, 43(2), 2-14. doi:10.1111/j.1745-493X.2007.00027.x
- Plean-Moh, K., & Rattanakul, A. A STUDY TO APPROACH TO INCREASE BRAND EQUITY OF LINGERIE PRODUCTS BY USING MARKETING STRATEGIES. *Education*, 9, 4.50.
- Prahinski, C., & Benton, W. (2004). Supplier evaluations: communication strategies to improve supplier performance. *Journal of operations management*, 22(1), 39-62.
- Professionals, C. o. S. C. M. Retrieved from <http://www.cscmp.org>, QR (Quick Response). Retrieved from <http://www.lean-manufacturing-japan.com/scm-terminology/gr-quick-response.html>
- Quinn, J. B. (1992). The intelligent enterprise a new paradigm. *The Executive*, 6(4), 48-63.
- Quora. (2016). What's the difference between a manufacturer, vendor, distributor, agent and wholesaler? Retrieved from <https://www.quora.com/Whats-the-difference-between-a-manufacturer-vendor-distributor-agent-and-wholesaler>
- REH, F. J. (2018). How to Write an RFP. Retrieved from <https://www.thebalance.com/how-to-write-an-rfp-2276025>
- Sarkar, S. Design Process in Fashion Product Development Retrieved from <http://www.fibre2fashion.com/industry-article/5723/the-design-process-in-fashion-product-development?page=1>
- Skills, D. f. B. I. (2011). Forward Commitment Procurement - Practical Pathwars to Buying Innovative Solutions
- Song, G. (2011). *Improving comfort in clothing*: Elsevier.
- Staff, F. Lingerie Designer - Fashion Career Profile. Retrieved from <https://www.fashion-schools.org/articles/lingerie-designer-fashion-career-profile>
- Stewart, M. (2018). How to Get Your Product Made: Finding and Working with a Manufacturer. Retrieved from

- <https://www.marthastewart.com/264329/how-to-get-your-product-made-finding-and>
- Study on OEM, ODM and OBM: Extending the Supply Chain with Added Value. (2008).
- Tanrisever, F., Erzurumlu, S. S., & Joglekar, N. (2012). Production, Process Investment, and the Survival of Debt-Financed Startup Firms. *Production and Operations Management*, 21(4), 637-652. doi:10.1111/j.1937-5956.2012.01319.x
- techopedia. Computer-Aided Design (CAD). Retrieved from <https://www.techopedia.com/definition/2063/computer-aided-design-cad>
- Trent, R. J., & Monczka, R. M. (2003). International purchasing and global sourcing-what are the differences? *Journal of Supply Chain Management*, 39(3), 26-36.
- Triantaphyllou, E., & Mann, S. H. (1995). Using the analytic hierarchy process for decision making in engineering applications: some challenges. *International Journal of Industrial Engineering: Applications and Practice*, 2(1), 35-44.
- Tsay, A. A. (1999). The Quantity Flexibility Contract and Supplier-Customer Incentives. *Management Science*, 45(10), 1339-1358. doi:10.1287/mnsc.45.10.1339
- WHAT IS A TECH PACK? (2017). Retrieved from <http://successfashiondesigner.com/what-is-a-tech-pack/>
- Whitmore, N. Build Your Own Brand (and Stop Reselling!). Retrieved from <https://www.sellbrite.com/blog/build-your-own-brand/>
- Whyles, G., van Meerveld, H., & Nauta, J. (2015). Forward Commitment Procurement: a practical methodology that helps to manage risk in procuring innovative goods and services. *Innovation: The European Journal of Social Science Research*, 28(3), 293-311. doi:10.1080/13511610.2015.1024638
- Wikipedia. Original design manufacturer. Retrieved from https://en.wikipedia.org/wiki/Original_design_manufacturer
- Wong, A. (1999). Partnering through cooperative goals in supply chain relationships. *Total quality management*, 10(4-5), 786-792.
- Wong, K. V., & Hernandez, A. (2012). A review of additive manufacturing. *ISRN Mechanical Engineering*, 2012.
- Xu, X., & Birge, J. R. (2004). Joint production and financing decisions: Modeling and analysis.
- Yip, J., & Yu, W. (2006). *Intimate apparel with special functions*: Woodhead Publishing Limited, Cambridge.
- Yu, H., Zeng, A. Z., & Zhao, L. (2009). Single or dual sourcing: decision-making in the presence of supply chain disruption risks. *Omega*, 37(4), 788-800. doi:<https://doi.org/10.1016/j.omega.2008.05.006>
- Yu, W., Fan, J., Ng, S., & Harlock, S. (2014). *Innovation and technology of women's intimate apparel*: Woodhead Publishing.

