Adapting to a Changing Environment:

Observations Made During an Internship

at a Large Tobacco Product Importer

by

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Certification of Originality

I, ----------, hereby declare that the contents of this paper are original and accurate, and have never been submitted at any other university or educational institution for the award of degree or diploma.

All the information derived from published or unpublished sources has been cited and acknowledged appropriately in the references section. Any figures or statistics included, unless otherwise stated, were obtained from personal observation, presentation witnessed while at the company or company employee. Anonymity of company employees has been preserved on their behalf.

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Preface

To the Reader:

For a long time people have debated the ethical issues involved in the sale of tobacco products and the adverse health effects that these products can have. Tobacco is not good for one's health; that is considered a fact supported by scientific evidence. Public opinion about tobacco companies in general is that they are evil because the sell poison and make large profits. Nevertheless, there has been a demand for these products and thus there will always be a supply, legal or otherwise. The ethical issues surrounding products that can be harmful to a person's health are not on which I would like to focus. I instead would like to focus on the efficiency and responsiveness of a company and its supply chain department that I was allowed to observe. It is important to remain objective to fully appreciate and assess the quality of this department, regardless of what the company produces. I did not sense any evil during my time there. What I saw was normal decent people working hard and working well. Still, in regard to "who said what," names have been omitted or altered in the protection of privacy. Thank you.

-RC

Summary

Between the Spring and Fall semesters of 2016, I was fortunate enough to be able to participate in an internship in the Supply Chain department of British American Tobacco Japan, LTD., or BATJ, in Minato-ku, Tokyo. Approximately ten days were spent learning from and observing members of each of the five functions of Supply Chain department: Procurement, Quality, Planning, Logistics and New Product Introduction. It was a very unique and interesting experience. The tobacco industry in Japan is highly competitive with a few corporations holding nearly all of the market shares. Thus, when one competitor successfully innovates, or demand shifts or fluctuates, firms must quickly adapt and respond or they face potential loss of market share. What makes this industry unique in Japan is that Japan Tobacco, JT, the largest market share holder, is the only company allowed to manufacture products within the country. This means JT's competition must import all of its products from abroad and efficiently distribute them throughout the country in order to compete with JT. Therefore, BATJ must possess a highly efficient and reactive supply chain to adjust to new consumer trends and preferences, competitor innovations and fluctuations in demand. Furthermore, the world continues to trend towards health-consciousness (Johannesburg, 2017), which has

contributed to the decrease in demand for tobacco products. According to the Organization for Economic Co-operation & Development, shown in Figure 1, the tobacco market in Japan has been steadily declining by approximately 1% each year for the past decade (OECD, 2014), which means that companies have been and will continue to compete over an ever-diminishing pool of potential consumers, making competition even more fierce and responsiveness more important. **In this oligopolistic market with a declining demand for tobacco products, how does BATJ manage to stay competitive being solely an import company?**

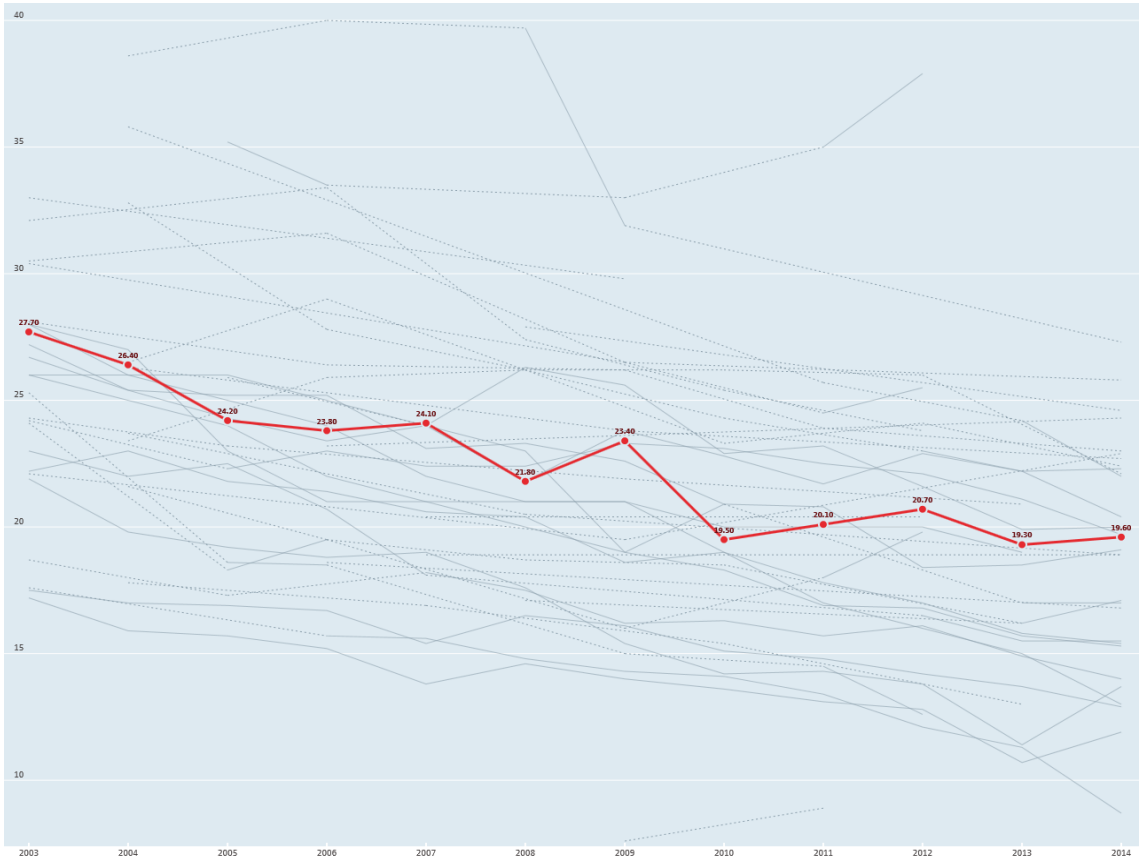

Figure 1: Declining Population of Smokers in Japan (OECD, 2014)

Introduction

The tobacco industry in Japan and indeed globally is a robust one. In 2015, over 5.5 trillion cigarettes, or sticks, were sold to over a billion smokers worldwide, amounting to a retail value of approximately $700 billion US dollars, USD (Campaign for Tobacco-Free Kids, 2016). According to BATJ internal figures, the total demand in Japan is approximately 179 billion sticks annually, making tobacco in Japan a nearly $30 billion USD industry. In Japan, the industry consists of four main actors: Japan Tobacco, Phillip Morris International, Inc., British American Tobacco Japan Ltd. and Imperial Tobacco Company capturing nearly all of the market. JT is partially owned by the Ministry of Finance and is the primary market share holder. As stated previously, JT is the only company permitted to grow "leaf," i.e. tobacco plants, and manufacture tobacco products within Japanese borders. This means that BATJ and other firms, excluding JT are primarily import companies. According to BATJ internal data shown in Figure 2, BATJ's share of the Japanese tobacco market is 13% percent, which means that BATJ must import and have distributed approximately 23 billion sticks a year in order to keep up with demand (British American Tobacco NPI Team Member, 2016). In order to do this effectively, members of the supply chain must carefully monitor fluctuations in

demand and have in place unforeseen event response protocols to maintain sufficient stock levels and avoid having to write off expired products or being "Out of Stock," or OOS. According to one Logistics Team member, "Avoiding OOS is the primary goal of the supply chain department" (BATJ Logistics Team Member, 2016).

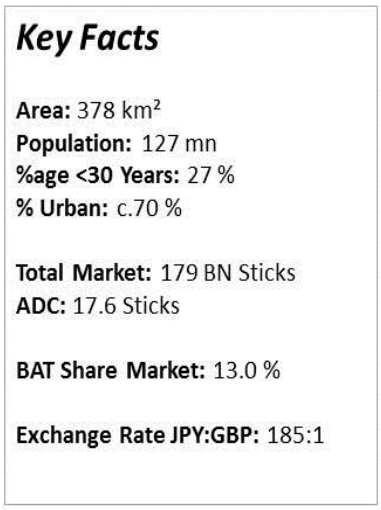

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Figure 2: BATJ Market Share (British American Tobacco NPI Team Member, 2016)

Supply Chain Theory

"A supply chain consists of all parties involved, directly or indirectly, in fulfilling a customer request," (Chopra & Meindl, 2007) from raw material to end customer. In BATJ's case, the supply chain can be traced all the way back to the farm where the leaf is grown and even further to the party that supplies seeds to the farmer. From that point there are numerous other parties that contribute to the production and eventual consumption of a finished good. Suppliers of various component and packaging materials as well as the lower-tier suppliers that provide raw materials to the suppliers are included in BATJ's supply chain as well as any party involved in the transportation of elements of the good to be produced. Any party involved in the marketing, financing, distributing of a good or service is considered part of the supply chain.

There is a constant flow of information, funds and goods between parties and the ultimate goal of a supply chain is "to maximize the overall value generated" (Chopra & Meindl, 2007). According to Chopra, that *value* is the difference between what the final products are worth to the customer, i.e. how much they are willing to pay and the total sum of all costs incurred to get the end product to the customer. In order to achieve

maximum value, supply chain members continually seek out ways to shorten or aggregate the chain and capture synergies across markets to reduce costs and get better value out of every dollar spent. It is a supply chain department's duty to determine which of the company's business relationships are most beneficial and which ones are inefficient, severing ties with the latter if an adequate replacement can be found.

The other main priority of a supply chain department is to plan accordingly so that the supply of a good will always be able to meet the demand for it. If the demand cannot be met, an opportunity is lost. Ensuring the appropriate supply of a good requires careful planning and decision making with regard to issuing orders, establishing new relationships with suppliers and severing old ones. Decisions are divided into three phases which are based on the durations of the repercussions of those decisions. They fall into three categories: strategic, planning and operational (Chopra & Meindl, 2007). Strategic decisions are those with effects lasting several years, planning are those between a few months to a year and operational decisions last from minutes to days. Knowing when to establish a new relationship, end an old one and place orders is essential in keeping inventory at appropriate levels.

BATJ'S Distribution Channel

As previously stated, BATJ and other Japan Tobacco competition are restricted from manufacturing any goods on Japanese soil and are thus entirely dependent on shipments from overseas, which must then be efficiently distributed across Japan. In order to consistently meet the annual 23 billion stick demand, BATJ is required to import approximately 47 shipping containers of product a week. In reality they require more as a buffer, to account for defects as well as for "safety stock" in the case of unforeseen events. The containers must come into port through a bonded warehouse in Tokyo so that the excise tax on the goods can be paid and the goods may be cleared by Japanese customs. After customs clearance, the goods can be legally distributed and sold throughout the country. Each shipping container that comes to port contains 10 million sticks, which equates to half a million packs of cigarettes. This is an astronomical amount of product to be tracked and transported as approximately 50 of these massive containers arrive to port on a weekly basis. It is at the point of customs clearance that asset ownership of the goods transfers from BATJ to a company called Tobacco Service Network, or TSN, a specialized tobacco distribution service that assumes the task of selling and delivering the goods to over 25 thousand retail outlets across Japan.

Ironically, TSN is a subsidiary of Japan Tobacco, JT, but strives to operate its business on the basis of fairness and neutrality. BATJ and TSN share a mutually beneficial relationship where BATJ ensures TSN that products will always be in supply and TSN promises to always purchase them and distribute them via its fleet of 500 delivery vehicles and 30 distribution centers across the country. The location of TSN's distribution centers are shown in Figure 3.

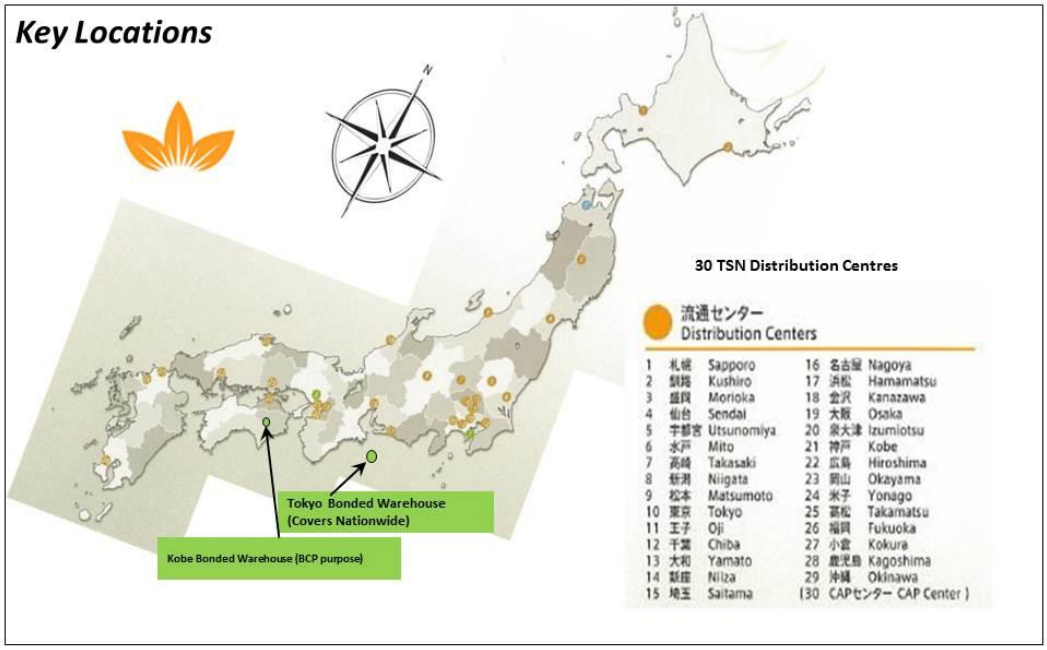

Figure 3: Location of TSN Distribution Centers (British American Tobacco NPI Team Member, 2016)

Lead Time

All supply chains have lead times to consider when making decisions. A lead time is the length of time required to take a raw material to finished good and finally to retailer where it can be sold to the customer. Knowing and managing lead times is important if a firm wishes to avoid lost opportunity as a result of being "out of stock" or being overstocked which can lead to writes-offs. Write-offs, goods that are never sold, are particularly common in industries that deal in goods which have expiration dates. Tobacco, while not exactly perishable, does have a best-by date according to BATJ Quality Team members, which is approximately 6 – 8 months after which the product will not be sold by retailers in Japan. Knowing lead times helps to ensure that First In/First Out, or FIFO methodology is practiced. FIFO practice attempts to always sell that good that was produced first, which helps in limiting the number of write-offs. Oftentimes, the goods that arrive to port first are not the goods that were produced first, meaning that tracking of each container on each vessel and when and where it was produced and shipped is very important to ensuring the oldest products are sold first and the possibility of expired products is minimized.

At the factory the time required to go from raw material to finished good is 3 months. BATJ sources finished goods from five different locations; the United States, which accounts for 59% of the total volume imported, Korea at 30%, Malaysia at 5%, Singapore at 5% and less than 1% coming from Switzerland. BAT owns all of these production centers except the one in the US, which is owned by R&J Reynolds Tobacco Company and is located on the east coast of the US in Winston-Salem, North Carolina. Shipping lead times vary. If the product is coming from anywhere other than the US, it can be in Japan within approximately 1 week. If the product is coming from the US east coast by sea vessel, it typically takes two months as the vessel must travel around the country, through the Panama Canal in Central America and across the Pacific Ocean. Shipping from the west coast of the US can decrease lead time by 3 weeks, but requires transport across the country via truck, which is subject to the potential hazards of road transportation, and is more costly. Lastly, when receiving product from the US, air freight is a possible albeit the most expensive alternative, which reduces the lead time to just 1 week and has been necessary in the past to avoid an “out of stock” scenario. BATJ’s source factories and lead time are illustrated in Figure 4 on the following page.

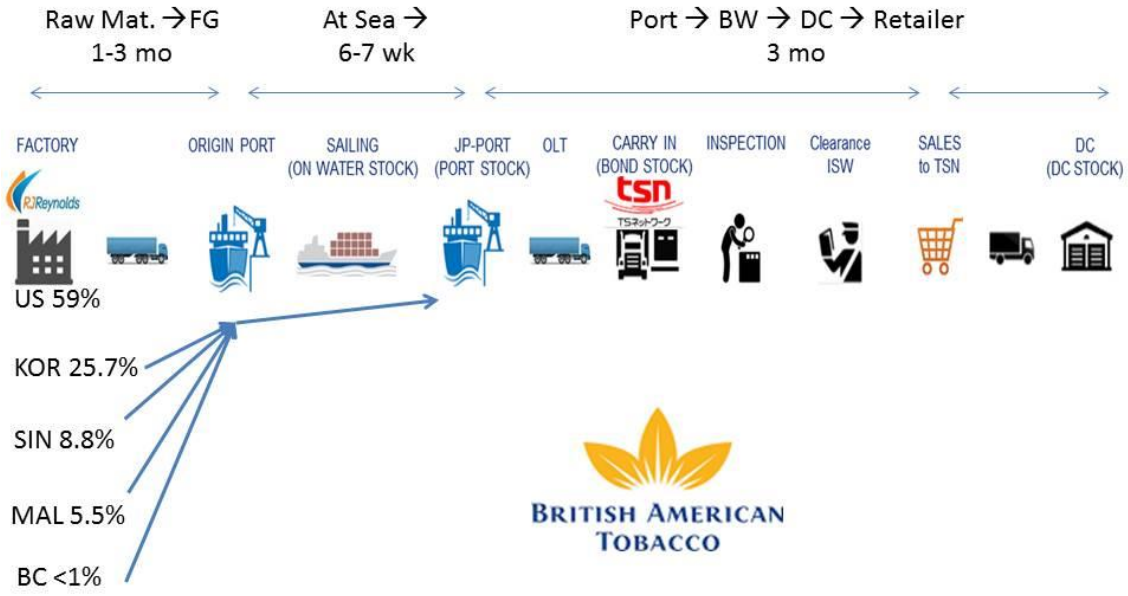

Figure 4: BATJ Source Factories & Lead Time (British American Tobacco Japan Logistics Team Member, 2016)

After the product has reached Japan, it must go through customs, which takes approximately one week to get the container off of the vessel and into the bonded warehouse for customs clearance. After that the product will be transported to TSN's distribution centers and finally delivered to retailers. The time it takes from port to retailer is approximately 3 months.

Therefore, the lead time from factory to retail outlet ranges from approximately

8 months if coming from the US and 6 months if coming from outside the US. This requires careful planning and monitoring of end market sales in order to ensure the healthy stock levels are maintained and expirations are limited. The difficulty of this is further enhanced as it must be done for 66 SKUs, or shelf/stock keeping units. An SKU is any product or variant of a product that a company makes and sells. For example, two packages containing exactly the same contents except one is a cardboard box and the other is paper packaging would be considered two separate SKUs.

BATJ's Supply Chain Department

At British American Tobacco Japan, the Supply Chain department is divided into five functions. They are: Procurement, Planning, Logistics, Quality and New Product Introduction, or NPI. Each function has from 3 to 5 members and has specific duties.

Procurement

The executive summary of the BATJ Procurement Policy (Appendix A) states that its primary objectives are to:

1) Obtain the best overall value and quality for all spend
2) Ensure that the controls are in place to manage all spend in the most appropriate manner
3) Cultivate mutually beneficial long term relationships/partnerships with Suppliers
4) Ensure the highest ethical standards which are altered to all business dealings

Procurement is concerned with more than just the sourcing of raw materials at the lowest possible cost in order to deliver the lowest cost end product possible, they seek

out, foster and maintain relationships with potential future partners with which to do business. Procurement team members are essentially the ambassadors from one company to another company with whom the company may wish to do business. They are responsible for seeking out new innovative vendors and suppliers from all over the world in an attempt to create synergies between them and existing operations, meaning for example, if they were able to source some new primary product component at a better price or quality, they could additionally filter it across the supply chain to other supplier/vendors that use the same technology. The members also do their utmost to guide other departments such as marketing when trying to decide how to allocate funds and monitor how the funded projects are performing.

Procurement attempts to attain the best price for the best quality by initiating "bidding contests" between potential suppliers and vendors. This is done by submitting a proposal to a pool of potential suppliers/vendors, waiting for the ones who can deliver what is asked at the proposed price to respond, and then adding specifications to the proposal until there are one or two firms that remain who can still deliver the good or service.

During August and September 2016 at BAT, the Procurement team was

primarily occupied by a few projects, some parts of which were observable firsthand. One task was to meet with the CEO of one the largest lighter manufacturers in China, XINHA, and notify him of a substantial decrease in the amount of business that would be done together the following year. The reason being that as of 2017 the Japanese Government would be banning the "gift with purchase of tobacco product" promotion that entailed the shopper receiving a free lighter or can of coffee with the purchase of certain products (BATJ Procurement Team Member, 2016). Therefore, BATJ would not require as much product from the Chinese company and wanted to inform the company of what was to come so that it would be prepared. The CEO thanked the team for the early notification and they parted ways with their relationship intact, perhaps even strengthened. The CEO even invited the team to China for dinner and drinks.

Another project that kept Procurement and the other functions of supply chain most busy during the internship was the very secretive approaching launch of a new product known as "Glo," a new tobacco heating device. When BATJ introduces a new product into the market, it typically chooses one city, Sendai city in Miyagi prefecture in this case, in which to test launch the product to see if demand meets expectations. Procurement's duties were sourcing a variety of vendors and suppliers, both for the

imminent city launch and 2017's national launch. They included sourcing suppliers of parts of the new device, call centers for customer questions/complaints, advertising agencies, a logistics company to handle returns/repairs, a maker for the promotional fixture that would be placed in retail outlets, leasing space and having a flagship store built in Sendai. Procurement also had to negotiate with convenience stores chains over the "hot-spot" in the stores. It refers to the location in the store that gives a new item the most visibility and is most likely catch the consumer's eye. In convenience stores, the majority of tobacco products are situated on a large wall-mounted rack behind the registers. In this case, dead center in the middle of the rack would be the "hot spot" on that rack.

A very interesting meeting attended was a discussion to assess the performance of their relatively new "BATJ & T-Point" alliance. T-Point is a type of point card which is very common in Japan. T-Point and variety of other cards like it allow the cardholder to accumulate points from a variety of retail outlets for their purchasers which can then be spent on various things such as movie rentals, discounts or coupons at participating outlets. What some people may be unaware of is that T-Point and other point card companies compile all of this data and sell it to numerous firms across various industries

who then use it to analyze customer spending habits including; what they buy, how much on average they spend, where they spend and when they spend. The purchaser even has access to the information filled out by the cardholder at the time of application such as name, age and address. To give an idea of the amount of data that passes through T-Point's system, in Japan there have been over 167 million cards issued (BATJ internal data), some duplicates obviously as this figure is more than the entire population of Japan, and over 53 million active card users. For BATJ, acquiring this data is very useful in that not only does it assist in the forecasting of sales of particular SKUs, but it enables them specifically target the competitions' customers via direct mail. Cardholders are sent a request to agree for receipt of a sample and if the person approves, sample trials of new products, sometimes with a discount coupon that can be used at various convenience stores to make repurchases are sent to the cardholder. According to their most recent data, of all if the people who were sent mail, 16.3% agreed to the trial package and out of those 55% were not only repeat customers, but converts from the competition (BATJ internal data). This means that 8.9% percent of all mail recipients were converts, which serves both to increase BATJ's market share and diminish that of the competition. However, the associated costs must be compared with the outcome. Acquisition of customer data from T-Point is expensive, as well all of the costs associated with sending

direct mail including packaging, postage, paper and the product itself. At the time of departure from the Procurement team, T-Point was still considered to a worthwhile project.

Quality

Time spent in the quality department fascinated as well. Quality at BATJ is not defined in the typical sense as a degree of superiority or excellence. In the words of one of the quality managers at BATJ, “Quality means consistency, the ability to minimize defects and delivery the exact same product every time. Japan is a no-defect culture and has come to expect this” (British American Tobacco Japan Quality Manager, 2016). The Quality managers at BATJ are very serious about their jobs and the speed with and degree to which they are able to find the source of a potential issue is astounding. With regard to finding the source of a defect, a single pack of tobacco product can be traced back to a 6 minute production window, a carton to an 8 hour window and a shipping case to a 4-6 minute production window. Each product has a unique code that identifies it. Individual packs and cartons have 8 digit codes while shipping cases have a 32 digit code.

The arrangement and meaning of the digits is shown below.

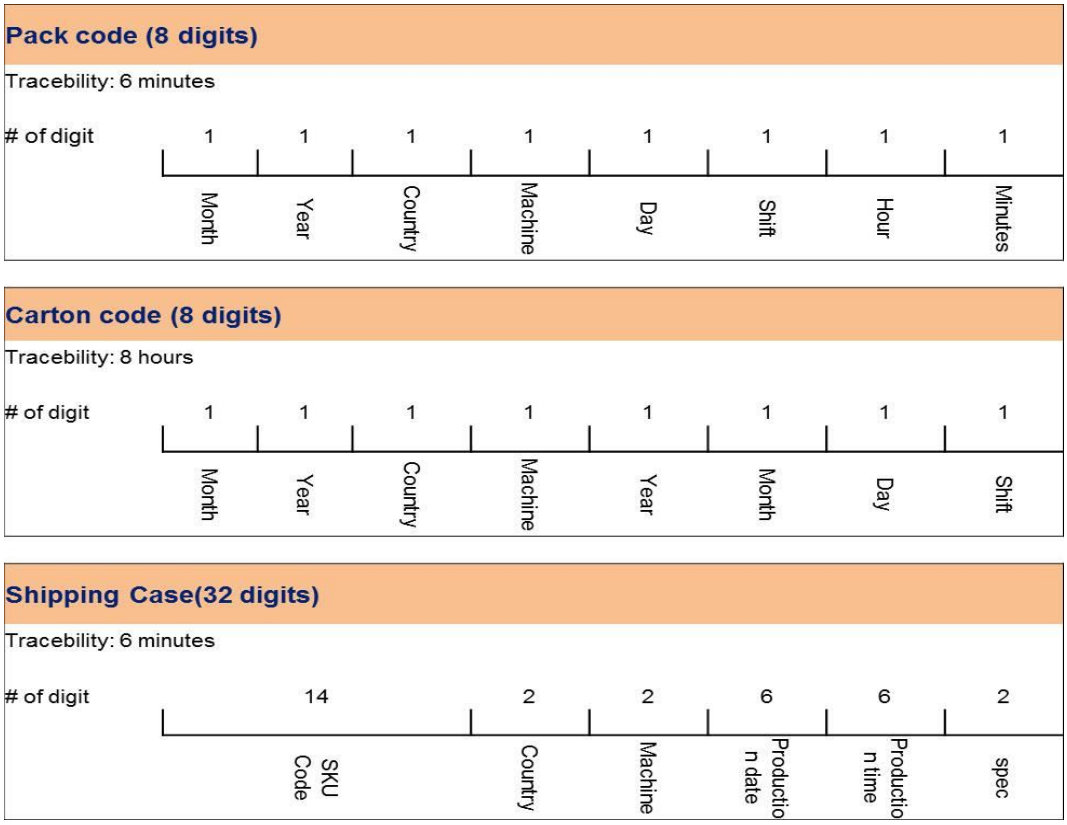

Figure 5: Package Tracability Code Sequence (British American Tobacco Japan Quality Team Member, 2016)

An example of a pack code: E6MGQ2z9

This translates to: May-2016-Malaysia-Machine7-17th-Afternoon-5PM-54-59 minute

Once the machine and production window of the affected product have been identified, the cause of the defect can be determined and whether it be the result of some mechnical or human error, adjusted and production can be resumed as usual. This tracking information is essential in maintaining quality at both the production level as

well as in market circulation. If it has been found that defects have made it through inspection while clearing customs at the bonded warehouse at the port in Tokyo, and if the severity of the defect has been deemed worthy of recall, then BATJ has to dispatch field sales representatives to track down those defective products and buy them back from the retailer to whom it was sold.

Recalling products always has a cost and will vary depending on the degree of the defect and quantity of defective products in circulation. In 2015, 45 field sales representatives were sent to Oita prefecture in Kyushu, Japan in order to track down 5 defective cartons of cigarettes at the cost of 40,000 USD (British American Tobacco Japan Quality Team Member, 2016). These defects were mislabeled with a health warning intended for a different end market, Taiwan in this case, and were therefore inelligable to be sold legally in Japan. Had they been sold to consumers, BATJ could incur penalties imposed by the Japanese government and/or Ministry of Health.

BATJ has a list of around 200 potential various defects for a pack of cigarettes or its contents. The individual parts of a cigarette are shown below and any part can possess a number of defects. Typical Components of a cigarette are shown in Figure 6.

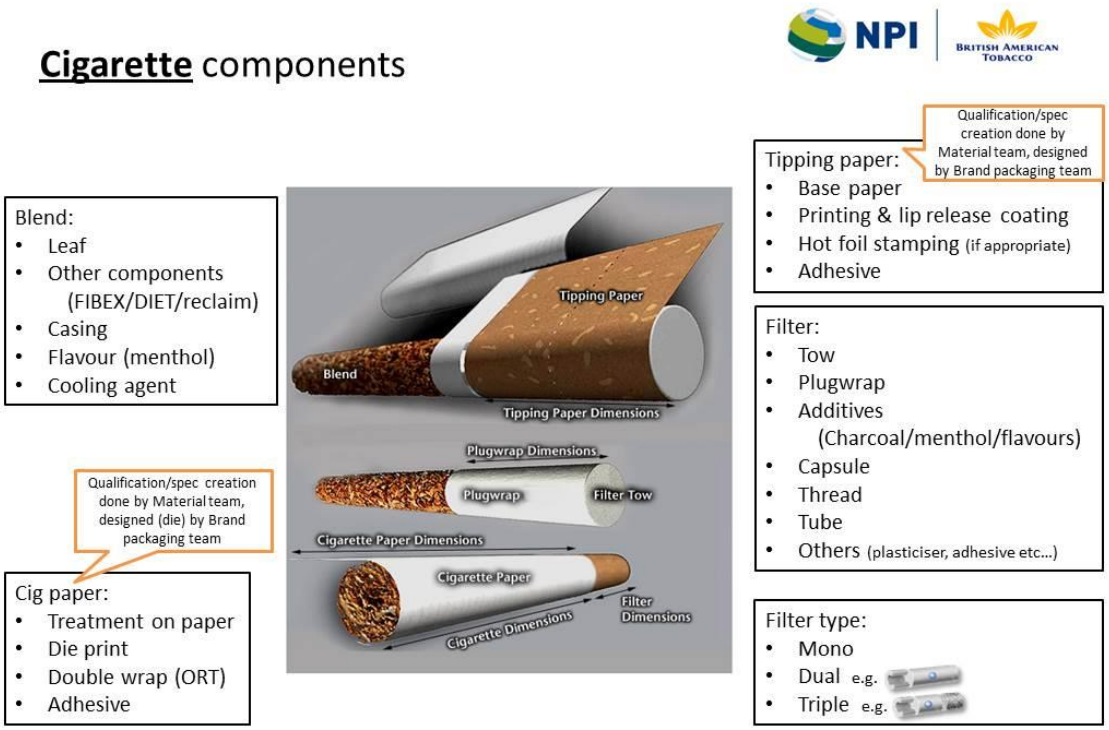

Figure 6: Typical Components of a Cigarette (British American Tobacco NPI Team Member, 2016)

Recently, new innovation has led to a new type of defect that is quite common and involves the capsule contained within certain brands of menthol cigarette. A capsule cigarette is a British American Tobacco innovation in which the cigarette filter contains a 3 millimeter in diameter menthol-filled plastic capsule that upon breakage, releases a certain quantity of menthol, sometimes mixed with other flavorings, in the airstream of the cigarette and are intended to provide the user with a cooler, fresher and more rewarding taste than a traditional menthol cigarette. However, due the very small size

and fragility of these capsules, they are prone to defects, such as pre-crushed capsules and warped or misshapen capsules.

Figure 7: A Standard Cigarette Filter with Mentholated Capsule (Flavor Capsule Filter)

The Quality team obtains vast quantities of information on potentially defective products via screening of complaints made to customer hot lines. The team is in daily communication with both the call center as well as their managing counterparts at the factories overseas. These calls are all recorded and depending on the type of complaint are given a recall priority rating. If enough calls are received regarding the same issue in a given period of time, a recall decision committee is notified. It should be known that with any serious call such as a threatening call to the center or report of illness, the recall

decision comitee is notified immediately.

A difficult part of monitoring customer calls is to identify complaints that are falsifications or exagerations. The Quality team must filter out what they refer to as "monster complaints," which are simply not true as no source of defect or proof of defect can be identified. There are also customers, usually small retailers, that frequently make the same complaints repeatedly, which must be taken into consideration when determining the degree . The frequency and type of complaints most common in 2015 are shown in Figure 8.

2015 Consumer Call

Top	Defect Type	# of Call
1	CM91 Cigarette/Filter Plug/Other	315
2	CK24 Cigarette/Paper/Torn; holed	308
3	CL20 Cigarette/Tipping/Crooked; misplaced	130
4	CL14 Cigarette/Tipping/Surplus material	122
5	BH27 Pack/Box or Label/Stuck; tight	99
6	CE29 Cigarette/Filling/Uncut tobacco / Objectionable Stems	84
7	CL22 Cigarette/Tipping/Foreign Matter; spotted	80
8	CM27 Cigarette/Filter Plug/Stuck; tight	79
9	CK22 Cigarette/Paper/Foreign Matter; spotted	70
10	CO83 Cigarette/Taste/Mentholisation wrong	66
	others	816
	TTL	2169

Figure 8: Most Common Types of Defects & Frequency, 2015 (British American Tobacco Japan Quality Manager, 2016)

In essense, the Quality function is concerned with the identification of defects, finding their source, correcting the source of defect and assessing whether the severity and frequency of the defect is enough to notify a recall decision comitee, who may then find it necessary to enact a recall.

Planning

The Planning function of BATJ is responsible for monitoring in-market sales, determining appropriate stock levels of individual SKUs as well as issuing sales orders for more product from overseas as needed. The primary objective of planning is to ensure that domestic stock levels as well as stock in the pipeline, “en route to Japan,” always remain at an appropiate level as well as a buffer supply and a 21 day “safety stock”. Having this 21 day reserve or “safety” stock means that if shipments were to suddenly cease to arrive, it would still be nearly impossible for any one of the 66 SKUs sold by BATJ to be out of stock and would be available for at least an additional three weeks. The buffer quantity of stock added on top of the safety stock and is in place in case sales for a period exceed expectations. Planning does its monitoring by continously collecting all of sales data from the various sales outlets and inputting that data into a compilation of

electronic files that Planning refers to as “the bible.”

Another duty that is required of planning is to try and assess the potential cannibalization effect of releasing a new product of variation of a product into the market. This is the measure of the decrease in the sales of a particular good or goods made by a company as a result of that company introducing a new product in the same product category as its other products. The new product’s sales effectively “eat into” the sales of the other products in the same category offered by the company. Planning collaberates with the marketing department and other forecasters to determine the expected level of cannibalization which will in turn influence the next batch of sales orders as desired stock levels of SKUs will shift. This occurs to some degree every time an SKU is introduced or augmented.

Planning is also responsible for initiating disaster or unforeseen event response protocols. For example, in 2015 there was a dock worker strike at the United States’ west coast port from which BATJ was to receive shipments, effectively bringing 60% of inbound BATJ products to a halt. It was Planning’s recommendation that the only way to avoid being in an “out of stock” scenario was to air freight products from the US. If sales are appearing to exceed expectations beyond the buffer quantity, it is Planning’s

duty to ensure enough product gets to Japan as quickly as possible.

Logistics

Logistics is the function of the supply chain department at BATJ that is the driver behind ensuring that the First In/First Out method of stock maintainance is practiced in order to minimize the chance of having to write-off expired products. Expanding upon the quantity and frequency of shipments mentioned in previous sections, we can say that BATJ has a yearly minimum requirement of approximately 2,330 shipping containers of products to be distributed throughout Japan. This is a massive amount of products to be tracked and monitored and it takes careful cooridination with shipping companies as well as with BATJ's domestivc distributor, TSN, to ensure that all involved parties are aware of exactly which shipments are on which vessels, where precisely containers are located on each vessel, when shipments were actually produced at the factory and when and from where the products are coming. In order to accomplish this, there are a number of documents that must be tracked and the information must be shared with BATJ's distributor. By sharing this information with TSN, TSN is then able to determine which containers should be unloaded and distributed sooner based on

product age and stock levels of a particular SKU in market circulation. These documents include a Packaging/Container Weight list which is sent to BATJ from the producing factory when the goods have been finished and packed which notifies Logistics which shipping containers the products are in. The second document is a Shipping Conformation sent when the goods have been physically put on board the shipping vessel. While the products are at sea, 3 days prior to shipment arrival, BATJ will receive an Arrival Notice from the shipping company. At the time of arrival, a Shipping invoice or Waybill serves as proof of arrival and at this point ownership of the assets transfers to TSN. After the products clear customs TSN will send BATJ a Talley Sheet which records the quantity of products that arrived minus all defective or damaged goods that were found or pulled for inspection prior to being cleared by customs. These pre-customs clearance write offs will then be charged back to the factory of origin. After this reconciliation of stock is communicated between BATJ and TSN, a final document noting actual quantity of goods issued can be drafted, which completes the sale to TSN and represents the actual quantity of stock available for distribution. This reconciliation is done on a weekly basis and if there is ever a discrepancy between the stock levels of the two parties, it is usually the result of some human input error and is promptly corrected.

New Product Introduction

The New Product Introduction, or NPI, team are the day to day managers of new projects the company is undertaking, which during August and September of 2016 were eight projects simultaneously. They act as the link between the Brand department and the technical experts throughout the supply chain. Basically, when Brand has a new idea or project they wish to pursue, it is NPI's duty to make this idea a reality. They communicate with experts and factories and develop realistic timelines for project completion.

They assess the feasibility of a project and clearly define what the project is intending to achieve. This includes who is the target customer for the new product, what is the business opportunity to be had, expected costs and timelines for implementation. Once these parameters are clearly defined NPI determines which parties are to be responsible for the project and accountable for the project. The responsible party is intended to see the project through to completion. The accountable party bears the potential consequences if the project fails.

After parameters, involved parties and timelines are identified and the necessary

approvals are received, the project is kicked initiated. From this point NPI is responsible for ensuring that projects are completed by the agreed upon date. Any project consists of multiple tasks that need to be completed in order to achieve a final result. Some of these tasks must be done in sequence, others can be done simultaneously. NPI and other project managers assess what is known as the "critical path" (Prof. Yamamura, Spring 2016). The critical path is the shortest possible amount of time it would take to complete a project as a result of tasks that must be completed in sequence. Given their completion is not required by tasks along the critical path, non-critical path tasks can be completed when it is more convenient or resources are more abundant. As long as they are completed between the beginning and end of the critical path, postponement of these these tasks will not hinder progression of the project.

Market Challenges

As mentioned previously, the number of people who smoke in Japan is decreasing each year by approximately 1% (OECD, 2014). The world certainly appears to be trending more towards health consciousness and environmental awareness. There are a number of factors that contribute to this trend, but one of the more impactful is the proliferation of ease of access to information via the use of mobile devices and social media. Dr. Deepa Maharaj, chairperson of the Smasa regulatory and technical committee, said: "This current day focus on self-care stems from the evolution of the digital age and the improved education levels of individuals, whereby people have ready access to information to make more informed decisions about their health" (Johannesburg, 2017). Apart from health consciouness, people are increasingly more concerned with the environment, the planet, social issues, human rights and sustainable business practices (Urh, 2015). Ms. Urh refers to this phenomenon as LOHAS, or Lifestyles of Health and Sustainability, which is the marketplace for goods produced in a manner which are aligned with the above concerns and consists of consumers who share these views and companies with whom those consumers wish to conduct business. According to Ms. Urh, people that fall into this grouping represent 29% of the adult population in

Japan. She also states that with the rise of globalization, people seek companies with traceability and credibility (Urh, 2015). Thus, a company doing its utmost to be socially responsible and sustainable will have a better chance of succeeding than one who does not show as much concern for LOHAS issues.

A second challenge faced by tobacco companies in Japan and globally stems from innovation. The rise in health consciousness has led firms to seek alternative or healthier means of marketing tobacco/nicotine products. This led to the introduction of what are known as "next generation products" in the tobacco industry. They are new forms of nicotine that vary greatly from traditional tobacco products. The term "next gen" is in reference to e-cigarettes and tobacco heating devices. E-cigarettes were introduced in 2003 by a Chinese pharmacist and have since become exploded in popularity with millions of users worldwide and average sales of $7 billion USD (Electronic cigarette, 2017). It is offeres as a healthier alternative to smoking or as a smoking cessation device. E-cigarettes function by heating a liquid comprised of glycerol, nicotine and flavorings that when heated create a vapor which the user can inhale and extract the nicotine from it. E-cigarettes exist in Japan, but more popular are the new tobacco heating devices. This product was developed for the Japanese market

by Phillip & Morris International to attract people seeking alternative means of nicotine delivery without sacrificing the taste of tobacco. It has been very successful since its 2015 launch and continues to grow in popularity (Bloomberg, 2017). A tobacco heating device; a device that actually contains tobacco and heats it to the point of near combustion, offers the user a more authentic smoking experience while eliminating many of the harmful factors associated with combustion (British American Tobacco).

Figure 8: BAT Tobacco Heating Device (left) & BAT E-cigarette (right) (British American Tobacco NPI Team Member, 2016)

BATJ Response to Trends

These changes in market conditions such as decrease in demand for traditional products, changing public concerns regarding priorities and preferences, and new innovation are challenges that affect firms in all industries at times. Firms must be ready to adapt or respond to pressures in the most effective manner possible to stay competitive an their industry.

According to a member of BATJ's Japan Leadership Team in regard to the decreasing smoking population and subsequent decrease in demand, "When there is a decrease in demand, there are really only two things you can do, shorten the supply chain or fire middle managers" (BATJ Japan Leadership Team Member, 2016). BATJ opted to go with the former option. As of 2017, BATJ will begin to sever ties with the US based factory owned by RJ Reynolds Company and shift that production volume to its Korea factory, which as of 2018 will be responsible for producing more than 90% of the goods for sale to the Japanese market. This will dramatically decrease product lead times as there will be no longer be shipments coming from across the Pacific Ocean, a journey which takes weeks to complete and carries the increased risk of goods being damaged at sea. BAT will also be closing its Malaysia based factory and shifting its production

volumes to new facilities in Korea as well. However, there is a potential risk associated with this shift in production volume and it is known as "Plant Build Complexity," or PBC (Pickar, 2016). According to the theory, PBC has a direct negative impact on quality and is directly proportional to defect rate. It states that the more products and variations of a product a factory produces, the greater the likelihood of defect. A higher PBC factory has a 99% chance of producing more defects (Pickar, 2016).

With regard to innovation, it is important for a firm to be both proactive and reactive. BAT exhibited proactiveness with the innovation of the capsule cigarette, which was then imitated by Japan Tobacco. BAT also showed excellent responsiveness to a competitor's successful innovation in regard to e-cigarettes and more recently with its new tobacco heating device. Phillip Morris International, Inc was the first to innovate and launch the tobacco heating device in the Japanese market and was very successful. Less than a year later, BAT was able to capture and immitate the technology with very impressive results. BATJ launched its own tobacco heating device in the city of Sendai, Miyagi prefecture in December, 2016 and demand has been "far exceeding expectations," according to a BATJ brand marketing official (Delventhal, 2017). It is equally important that a firm be adept at immitating others as it is at innovating itself and it is often more

cost effective option. This is known as immitative innovation (Prof. Namba, Fall 2015). Oftentimes, it is better to let a larger firm to make the investments in Research & Development, wait for them to launch the new innovation and quickly reverse engineer the product and create one's own version. This approach both reduces the cost of R&D and removes the risk associated with a potentially fruitless investment.

In regard to what was referred to as LOHAS (Urh, 2015), companies will do their best to appeal to the concerns of the public. Increased exposure and access to information can be beneficial to a firm, provided they conduct their business dealings in a socially responsible and ethical manner. Consumers naturally want to conduct business with people who share similar values and BATJ does its best to be sustainable and socially responsible. British American Tobacco's official website states that, "Sustainability is not a choice or something that is 'nice to have' – it is crucial to securing the future of our company and for creating shared value for our consumers, our shareholders and our stakeholders." Evidence of this statement is that BAT has been included in the Dow Jones Sustainability Index for the past 15 years (British American Tobacco). Similarly, BAT is "committed to good corporate governance and achieving our business objectives in an honest, transparent and accountable way. We regard

corporate governance a key element underpinning the sustainable, long-term growth of our business," and has been awarded the number one ranking in an index published in the Institute of Directors' (IoD) 2016 Good Governance Report (British American Tobacco). BAT and other tobacco product manufacturers are aware that they make products that are harmful to one's health. Companies in these types of industries are subject to more scrutiny and are held to higher standards when considering their overall benefit to society. Thus, they must conduct themselves even more responsibly and transparently. There is a demand for these products, so there will always be a supply. A BATJ Legal Team member stated, "There is a demand. These products can be marketed and sold responsibly or the market can go underground and the government loses out on tax revenue" (British American Tobacco Legal Team Member, 2016).

Conclusion

From observations and learnings during the internship, it can be argued that British American Tobacco Japan, LTD and its Supply Chain department do everything in their power to seize opportunity where it exists while attempting to minimize waste. A BATJ is solely an import company in Japan and if the supply chain struggles, the competitiveness of the company in serious jeopardy. It must therefore be one of the, if not the most meticulous and efficient department in the firm.

The procurement function is exceptional at obtaining the highest quality for the best price, whether it is from a supplier or a vendor. Its T-Point alliance is an ingenious way of generating consumer information and targeting potential converts from the competition. The frugality with which procurement attempts to source is remarkable and the value of a single yen is not overlooked. As one former Toyota employee now working at BATJ said, "Imagine you are sourcing 1 billion screws to assemble a product. I you can reduce the cost of that screw by a fraction of a penny; you can save your company a lot of money. Your boss will be thankful for that" (BATJ Procurement Team Member, 2016). The Quality strives to understand what the consumer's expectations are. According to the Quality manager interviewed, "Quality means consistency, the ability to

minimize defects and delivery the exact same product every time" (British American Tobacco Japan Quality Manager, 2016). Quality ensures this by quickly seeking out defects and removing them from market circulation. Planning does an excellent job at monitoring in-market sales, seasonal demand fluctuations, and assessing potential cannibalization effects. They know precisely when to enact alternative shipping methods and thus even though BATJ is solely an import company, its products are nearly never "out of stock," or OOS. Logistics coordinating shipments with their distributor and diligently practicing FIFO does a great deal to ensure that the greatest possible quantity of product reaches the consumer. NPI are the real project managers working to ensure brand department's visions become a reality within expected timeframes.

In regard to combating the decrease in demand, BAT's decision to sever business dealings with their US based partner was a bold, but necessary decision. This shift of production facilities to Korea will substantially decrease shipment lead times as well as the amount of products required in the pipeline. Shorter travel distance has the additional benefit of fewer write-offs as a result of cargo being damaged while at sea. However, it is not without risk due to the Plant Build Complexity phenomenon, but one could argue that the benefits outweigh the risks.

BATJ showed the foresight and willingness to explore new markets; the next generation tobacco product market and is doing exceptionally well thus far with introduction of their new tobacco heating product, “Glo” in Sendai (Delventhal, 2017). They exhibited an excellent ability to quickly imitate and improve upon a competitor’s innovation. As stated by BATJ president Ms. Roberta Pallazetti, “"Our ambition is to be a leader in next generation-products in Japan" (Reuters , 2017). British American Tobacco is aware that people are more health conscious recently and the trend will likely continue. Thus, they will continue to seek out healthier ways to satisfy customer needs.

Lastly, knowing that they operate in a controversial industry, BAT does its utmost to achieve sustainability by conducting itself environmentally and socially responsible in the areas in which it operates and the quality of its corporate governance is shown through awards it has received (British American Tobacco). In a controversial industry transparency and accountability are paramount.

Being a solely import company in this oligopolistic market creates numerous challenges for BATJ to overcome in order to remain competitive with the competition. BATJ possesses the reactiveness and flexibility to deal with the introduction of new innovation. It also has measures in place to respond to unforeseen events so that its

supply with always be able to demand. Success in any industry or market is never guaranteed, but it is apparent that BATJ does as much as it possibly can to increase the chances of achieving success. This is an excellent company in regard to the quality of their work and will likely remain a force in the Japanese market for years to come.

Bibliography

British American Tobacco Japan Quality Manager. (2016, August). (R. Clemente, Interviewer) Tokyo, Japan.

BATJ Japan Leadership Team Member. (2016, September). (R. Clemente, Interviewer)

BATJ Logistics Team Member. (2016, August). (R. Clemente, Interviewer)

BATJ Procurement Team Member. (2016, August). (R. Clemente, Interviewer)

BATJ Procurement Team Member. (2016, August). (R. Clemente, Interviewer)

Bloomberg. (2017, March 8). *Big Tobacco Has Caught Startup Fever*. Retrieved May 2017, from Bloomber Businessweek: https://www.bloomberg.com/news/features/2017-03-08/big-tobacco-has-caught-startup-fever

British American Tobacco. (n.d.). *A sustainable approach*. Retrieved May 2017, from British American Tobacco: http://www.bat.com/group/sites/UK__9D9KCY.nsf/vwPagesWebLive/DO9DCF

JG

British American Tobacco. (n.d.). *Corporate governance*. Retrieved May 2017, from British American Tobacco: http://www.bat.com/group/sites/uk__9d9kcy.nsf/vwPagesWebLive/DO5TUMM8

British American Tobacco. (n.d.). *Harm Reduction*. Retrieved May 2017, from British American Tobacco: http://www.bat.com/group/sites/UK__9D9KCY.nsf/vwPagesWebLive/DO9DCGG2

British American Tobacco Japan Logistics Team Member. (2016, August). Logistics Induction [PowerPoint Presentation]. Tokyo, Japan.

British American Tobacco Japan Quality Manager. (2016, January 21). BCP Product Recall – Japan Review [PowerPoint Presentation]. Tokyo, Japan.

British American Tobacco Japan Quality Team Member. (2016, August). Quality Induction [PowerPoint Presentation]. Tokyo, Japan.

British American Tobacco Legal Team Member. (2016, September). (R. Clemente, Interviewer)

British American Tobacco NPI Team Member. (2016, August). Japan Supply Chain Overview [PowerPoint Presentation]. Tokyo, Japan.

Campaign for Tobacco-Free Kids. (2016, December). *THE GLOBAL CIGARETTE INDUSTRY.* Retrieved May 2017, from global.tobaccofreekids.org: global.tobaccofreekids.org

Chopra, S., & Meindl, P. (2007). *Supply Chain Management: Strategy, Planning, & Operation.* Upper Saddle River, New Jersey, USA: Pearson Education, Inc.

Delventhal, S. (2017, March 17). *BAT: High Demand for Glo No-Burn Tobacco in Japan* . Retrieved May 2017, from Investopedia: http://www.investopedia.com/news/bat-high-demand-glo-noburn-tobacco-japan/

Electronic cigarette. (2017). Retrieved May 2017, from Wikipedia: Electronic cigarette

Flavor Capsule Filter. South Korea.

Johannesburg. (2017, February 26). There's a growing awakening of health consciousness. *The Sunday Independent*.

OECD. (2014). *Daily smokers*. Retrieved May 2017, from The Organisation for Economic Co-operation & Development: https://data.oecd.org/healthrisk/daily-smokers.htm

Pickar, P. (2016, Spring). Plant Build Complexity [PowerPoint Presentation]. Beppu, Japan.

Prof. Namba, M. (Fall 2015). Ritsumeikan APU, GSM, Management of Technology, Imitative Innovation [Lecture]. (R. Clemente, Interviewer)

Prof. Yamamura, N. (Spring 2016). Ritsumeikan APU, GSM, Project Management [Lecture]. (R. Clemente, Interviewer)

Reuters . (2017, May 30). British American Tobacco to expand "glo" smokeless tobacco sales in Japan from July. Tokyo, Japan.

Urh, B. (2015, April). LIFESTYLE OF HEALTH AND SUSTAINABILITY - THE IMPORTANCE OF HEALTH CONSCIOUSNESS IMPACT ON LOHAS

MARKET GROWTH IN ECOTOURISM. *QUAESTUS MULTIDISCIPLINARY RESEARCH JOURNAL*, 167-177.