

### Chapter 1 : Brewing blockchain: Tracing ethically sourced coffee - Blockchain Unleashed: IBM Blockchain

*The coffee supply chain involves the planters who produce the crop at one end and the retailers at the other. Along the line, there are hullers, exporters, importers, logistics companies, roasters, marketers, and wholesalers.*

According to Gibbons, that involved taking a complex structure and simplifying it so that every job fell into one of the four basic supply chain functions: For instance, anybody involved in planning—be it production planning, replenishment, or new product launches—was placed in the planning group. Sourcing activities were grouped into two areas: All manufacturing, whether done in-house or by contract manufacturers, was assigned to the "make" functional unit. And finally, all personnel working in transportation, distribution, and customer service were assigned to the "deliver" group. After the supply chain functions were reorganized, the various departments turned their attention to the second objective of the supply chain transformation: As part of that effort, the sourcing group worked on identifying the cost drivers that were pushing up prices. In , the company added a fourth U. The benefits of that approach were quickly apparent; regionalizing its coffee production allowed Starbucks to reduce its transportation costs and lead times, says Gibbons. Moreover, once the new facility was up and running, all of the U. In addition to the four coffee facilities it owns in the United States, Starbucks also operates a coffee plant in Amsterdam, the Netherlands, and a processing plant for its Tazo Tea subsidiary in Portland, Oregon. The company also relies on 24 co-manufacturers, most of them in Europe, Asia, Latin America, and Canada. Getting that under control presented a daunting challenge for the supply chain group. With 70, to 80, deliveries per week plus all the inbound shipments from around the world, we want to manage these logistics in one system. From the port of entry, the "green" unroasted beans are trucked to six storage sites, either at a roasting plant or nearby. After the beans are roasted and packaged, the finished product is trucked to regional distribution centers, which range from , to , square feet in size. Starbucks runs five regional distribution centers DCs in the United States; two are company-owned and the other three are operated by third-party logistics companies 3PLs. It also has two distribution centers in Europe and two in Asia, all of which are managed by 3PLs. Coffee, however, is only one of many products held at these warehouses. Depending on their location, the stores are supplied by either the large, regional DCs or by smaller warehouses called central distribution centers CDCs. The CDCs carry dairy products, baked goods, and paper items like cups and napkins. Because delivery costs and execution are intertwined, Gibbons and his team set about improving both. An analysis of those expenditures allowed Starbucks to winnow its transportation carriers, retaining only those that provided the best service. The logistics team also met with its 3PLs and reviewed productivity and contract rates. To aid the review process, the team created weekly scorecards for measuring those vendors. For example, if a vendor operating a warehouse or DC picked a product accurately, it earned a "1" for that activity. If a shipment was missing even one pallet, the 3PL received a score of "0. Although Starbucks has a raft of metrics for evaluating supply chain performance, it focuses on four high-level categories to create consistency and balance across the global supply chain team: This last refers to cost savings that come from areas outside logistics, such as procurement, marketing, or research and development. In undertaking all of those steps to reduce operating costs and improve execution, Gibbons says, Starbucks was laying the foundation for future supply chain capabilities. For more on this initiative, see the sidebar "Starbucks: Starbucks considers this initiative to be so important, in fact, that Gibbons now spends 40 to 50 percent of his time on developing, hiring, and retaining supply chain talent. The infusion of new recruits will allow Starbucks to stay focused on its supply chain mission of delivering products with a high level of service at the lowest possible cost to its stores in the United States and around the globe. But the coffee retailer is taking a different approach to recruitment these days. Gibbons, executive vice president of global supply chain operations. After that, Starbucks will focus on creating an internship program with an eye toward recruiting underclassmen interested in a supply chain career with the company. Throughout the fall of , executives at Starbucks visited six universities to interview undergraduates and graduate students with backgrounds in logistics, engineering, and operations research. The company will only consider the top 10 percent of the graduating class of the schools it partners with. The ideal candidates will

have exposure to Fortune organizations either through prior work experience or through internships. In addition, they must demonstrate prior leadership experience and be willing to rotate between domestic and international positions. The company also is testing a supply chain training system that will "provide the bulk of our technical training and will add formal coaching and mentoring to round the process out," he adds. If successful, the strategy will yield multiple benefits, according to Gibbons and his team. It will brand Starbucks as a bona fide supply chain organization within both academia and industry. It will ensure a seamless human resources transition over time as Gibbons and his team near retirement. And the company will reap the intellectual windfall of advanced concepts that graduates take out of school and into the workplace. Gibbons says Starbucks expects to learn as much from its new hires as they will learn from the company. Cooke is a supply chain software analyst. Join the Discussion After you comment, click Post. Want more articles like this? Sign up for a free subscription to Supply Chain Executive Insight, a monthly e-newsletter that provides insights and commentary on supply chain trends and developments. Click here to subscribe. We Want to Hear From You! We invite you to share your thoughts and opinions about this article by sending an e-mail to? From bean to cup: Correspondence may be edited for clarity or for length.

## Chapter 2 : List of coffeehouse chains - Wikipedia

*The green (unroasted) coffee bean travels through many steps in the supply chain (also known as the value chain) from harvest to final customer. A summary of some of the key players found in the value chain is presented in Figure "Coffee Global Supply Chain".*

**Planting** A coffee bean is actually a seed. The seedlings will be watered frequently and shaded from bright sunlight until they are hearty enough to be permanently planted. Planting often takes place during the wet season, so that the soil remains moist while the roots become firmly established. Harvesting the Cherries Depending on the variety, it will take approximately 3 to 4 years for the newly planted coffee trees to bear fruit. The fruit, called the coffee cherry, turns a bright, deep red when it is ripe and ready to be harvested. There is typically one major harvest a year. In countries like Colombia, where there are two flowerings annually, there is a main and secondary crop. Whether by hand or by machine, all coffee is harvested in one of two ways: All of the cherries are stripped off of the branch at one time, either by machine or by hand. Only the ripe cherries are harvested, and they are picked individually by hand. Pickers rotate among the trees every eight to 10 days, choosing only the cherries which are at the peak of ripeness. Because this kind of harvest is labor intensive and more costly, it is used primarily to harvest the finer Arabica beans. A good picker averages approximately 20 to 40 pounds of coffee cherries a day, which will produce 20 to 40 pounds of coffee beans.

**Processing the Cherries** Once the coffee has been picked, processing must begin as quickly as possible to prevent fruit spoilage. Depending on location and local resources, coffee is processed in one of two ways: The Dry Method is the age-old method of processing coffee, and still used in many countries where water resources are limited. The freshly picked cherries are simply spread out on huge surfaces to dry in the sun. In order to prevent the cherries from spoiling, they are raked and turned throughout the day, then covered at night or during rain to prevent them from getting wet. The Wet Method removes the pulp from the coffee cherry after harvesting so the bean is dried with only the parchment skin left on. First, the freshly harvested cherries are passed through a pulping machine to separate the skin and pulp from the bean. Then the beans are separated by weight as they pass through water channels. The lighter beans float to the top, while the heavier ripe beans sink to the bottom. They are passed through a series of rotating drums which separate them by size. After separation, the beans are transported to large, water-filled fermentation tanks. Depending on a combination of factors -- such as the condition of the beans, the climate and the altitude -- they will remain in these tanks for anywhere from 12 to 48 hours to remove the slick layer of mucilage called the parenchyma that is still attached to the parchment. While resting in the tanks, naturally occurring enzymes will cause this layer to dissolve. When fermentation is complete, the beans feel rough to the touch. The beans are rinsed by going through additional water channels, and are ready for drying. These beans, still inside the parchment envelope the endocarp, can be sun-dried by spreading them on drying tables or floors, where they are turned regularly, or they can be machine-dried in large tumblers. The dried beans are known as parchment coffee, and are warehoused in jute or sisal bags until they are readied for export.

**Milling the Beans** Before being exported, parchment coffee is processed in the following manner: Hulling machinery removes the parchment layer endocarp from wet processed coffee. Hulling dry processed coffee refers to removing the entire dried husk -- the exocarp, mesocarp and endocarp -- of the dried cherries. Polishing is an optional process where any silver skin that remains on the beans after hulling is removed by machine. While polished beans are considered superior to unpolished ones, in reality, there is little difference between the two. Grading and Sorting is done by size and weight, and beans are also reviewed for color flaws or other imperfections. Beans are sized by being passed through a series of screens. They are also sorted pneumatically by using an air jet to separate heavy from light beans. Typically, the bean size is represented on a scale of 10 to 30. Finally, defective beans are removed either by hand or by machinery. Beans that are unsatisfactory due to deficiencies unacceptable size or color, over-fermented beans, insect-damaged, unhulled are removed. In many countries, this process is done both by machine and by hand, ensuring that only the finest quality coffee beans are exported.

**Exporting the Beans** The milled beans, now referred to as green coffee, are loaded onto ships in

either jute or sisal bags loaded in shipping containers, or bulk-shipped inside plastic-lined containers. Tasting the Coffee Coffee is repeatedly tested for quality and taste. This process is referred to as cupping and usually takes place in a room specifically designed to facilitate the process. First, the taster – usually called the cupper – evaluates the beans for their overall visual quality. The beans are then roasted in a small laboratory roaster, immediately ground and infused in boiling water with carefully-controlled temperature. After letting the coffee rest for several minutes, the cupper breaks the crust by pushing aside the grounds at the top of the cup. Again, the coffee is nosed before the tasting begins. To taste the coffee, the cupper slurps a spoonful with a quick inhalation. Samples from a variety of batches and different beans are tasted daily. Coffees are not only analyzed to determine their characteristics and flaws, but also for the purpose of blending different beans or creating the proper roast. An expert cupper can taste hundreds of samples of coffee a day and still taste the subtle differences between them. Most roasting machines maintain a temperature of about degrees Fahrenheit. The beans are kept moving throughout the entire process to keep them from burning. When they reach an internal temperature of about degrees Fahrenheit, they begin to turn brown and the caffeol, a fragrant oil locked inside the beans, begins to emerge. This process called pyrolysis is at the heart of roasting – it produces the flavor and aroma of the coffee we drink. After roasting, the beans are immediately cooled either by air or water. Roasting is generally performed in the importing countries because freshly roasted beans must reach the consumer as quickly as possible. Grinding Coffee The objective of a proper grind is to get the most flavor in a cup of coffee. How coarse or fine the coffee is ground depends on the brewing method. The length of time the grounds will be in contact with water determines the ideal grade of grind Generally, the finer the grind, the more quickly the coffee should be prepared. Espresso machines use pounds per square inch of pressure to extract coffee. We recommend taking a moment to examine the beans and smell their aroma – in fact, the scent of coffee alone has been shown to have energizing effects on the brain. Brewing Coffee To master how to brew coffee , use our guide for tips and methods on how to make the perfect cup for any preference.

### Chapter 3 : Starbucks - Wikipedia

*The 10 Best Coffee Chains in America When it comes to coffee, we've already looked at it from many angles, including the best chains to work for, the coolest around the world, and the best local shops in America.*

A value chain is a series of activities or processes which aims at creating and adding value to an article product at every step during the production process. Thus the logic behind it is simple; the more value a company creates, the more profitable it is. When more value is created, the same is passed on to the customers and thus further helps in consolidating a competitive edge. The business activities are divided into primary activities and secondary activities. The primary activities are directly related to the creation of a good or service while the support activities help in enhancing the efficiency and work to obtain a competitive advantage among peers. Company value-chain can be divided into two groups: Support activities in value creation, on the other hand, include infrastructure, human resources management, and procurement. The value of value-chain analysis in practical level can be explained in a way that it allow to critically analyse each component of a business practice in an individual manner, and search additional sources for competitive advantage within the component. In the case of Starbucks, the green or unroasted beans are procured directly from the farms by the Starbucks buyers. These are transported to the storage sites after which the beans are roasted and packaged. These are now ready to be sent to the distribution centers few of which are company owned and some are operated by other logistic companies. The company does not outsource its procurement to ensure high quality standards right from the point of selection of coffee beans. Operations Starbucks operates in 65 countries either in the form of direct stores operated by the company or as licensed stores. Outbound Logistics There is very little or no presence of intermediaries in product selling. Majority of the products are sold in their own or licensed stores only. As a new venture, the company has launched a new range of single-origin coffees which will be sold through some leading retailers in the U. Marketing and Sales Starbucks invests in superior quality products and high level of customer services than aggressive marketing. However, need based marketing activities are carried out by the company during new products launches in the form of sampling in areas around the stores. Service Starbucks aims at building customer loyalty through high level of customer service at its stores. Starbucks well designed and pleasing stores are complemented with good customer service provided by the dedicated team of employees in green aprons. Starbucks employees are motivated through generous benefits and incentives. The company is known for taking care of its workforce and this is perhaps the reason for a low turnover of employees, which indicates great human resource management. There are many training programs conducted for employees in a setting of a work culture which keeps its staff motivated and efficient. Technology Development Starbucks is very well known for use of technology not only for coffee related processes to ensure consistency in taste and quality along with cost savings but to connect to its customers. Many customers use Starbucks stores as make a shift office or meeting place because of the free and unlimited wifi availability. The company in the year also launched mystarbucksidea. The company has implemented some of the suggestions given via this forum. Procurement This involves procuring the raw material for the final product. The company agents travel to Asia, Latin America and Africa for the procurement of high grade raw material to bring the finest coffee to its customers. The agents establish strategic relationship and partnership with a supplier which is built up after reconnaissance and communication about the company standards. High quality standards are maintained with direct involvement of the company right from the base level of selecting the finest raw material which is coffee beans in case of Starbucks. Bottom Line The concept of value chain helps to understand and segregate the useful which help in gaining a competitive edge and wasteful activities which hamper market lead accompanying each step during the product development process. It also explains that if value is added during each step, the overall value of the product gets enhanced thus helping in achieving greater profit margins.

## Chapter 4 : The Best Coffee Chains in America

*This coffee chain of Massachusetts is not just a coffee house chain, but also a doughnut company. This coffee chain has its origin back in Quincy, Massachusetts. The Starbucks is the prime competitor for the sales of coffee, whereas, for the doughnuts, Krispy Kreme is the prime competitor.*

Tracing ethically sourced coffee August 8, Written by: A survey by the National Coffee Association finds that 64 percent of Americans, age 18 and over, drink coffee daily. After factoring in the less-caffeinated casual coffee drinker, this results in million cups of coffee consumed daily in the United States. That may seem like a lot, until compared with most European countries who drink even more coffee on a per-capita basis. All this to say, there are a lot of coffee drinkers! Yet despite this growing coffee culture, most consumers have no idea where their coffee actually originates. Consequently, there are significant challenges in trust and transparency across the complete supply chain for coffee and other products. Explore food traceability with IBM Food Trust Coffee accountability One of the biggest challenges facing this industry is the use of unethical labor practices. While retailers may not buy directly from blacklisted plantations, they lack the full ability to trace and verify the provenance of each bean. Even the largest coffee retailers in the global coffee market cannot guarantee the use of ethical labor practices in the plantations that supply their coffee. Because they have limited upstream visibility within a complicated supply chain of middlemen, resellers and shippers. This is where blockchain comes in. Tracing compliance Blockchain has the unique characteristic of immutability. Once data has been written to the blockchain, it cannot be removed or edited. Couple that characteristic with the ability to automatically record data to the blockchain without human intervention and you have a cryptographically secure, tamper-proof record of transactions. In the coffee industry, there are two key components necessary to verify that beans have been ethically sourced. Coffee origin In general, supply chains have been slow to adopt new technologies, with much of the transaction and legal documentation still paper-based. By digitizing these workflows not only can organizations reduce costs, they can also introduce trust and transparency into their supply chain. Coffee beans can be traced using simple radio frequency identification device RFID tags attached to the coffee bags or other transportation containers, which can be scanned at each point along the supply chain. Organizations can also record characteristics such as the coffee variety, processing method, bean grade and even sugar content to ensure the beans inside the container match the data associated with the RFID tag. Labor compliance One of the biggest problems facing coffee plantations are lack of worker documentation, non-existent labor contracts and forced labor or low pay. When plantations utilize forced labor, one of the first things they seek to do is erase documentation associated with the workers; as such, the first step in addressing this problem is to document the workers. Once each worker has trusted identification represented on the blockchain, plantation owners can then create and record a labor contract that specifies information such as payment terms, expected work hours or output, contract length and labor conditions. Workers can then receive payment digitally, of which the receipt is automatically recorded to the blockchain and payment confirmation is shared with organizations downstream. While blockchain is capable of recording the data, the success of this use case is predicated upon its adoption and enforcement. Similar to other labor-practice certifications, farmers and cooperatives would be incentivized to adopt this solution as a means of increasing the value of their produce. Since data including origin, product quality and labor data can be verified, the beans would inherently represent less downstream risk increasing their appeal to buyers. As farmers seek to differentiate from competition and increase the value of their produce, more plantations and co-ops may adopt the solution. Eventually, there may be a tipping point where an origin country may enforce heavier regulation, requiring exporters to submit origin and labor compliance documentation prior to export approval. Moving toward reality While ending unethical labor practices with blockchain may sound overly optimistic, many of the technological and social components are already in place to bring it to reality. With farm to shelf food tracing, supply chain digitization and identity consortiums already using blockchain to disrupt their industries, connecting the pieces has potential to drive social change on a global scale. While there have been innumerable technological advancements over the last 30 years, none of them have been able

to solve the problem of trust. With the advent of blockchain, however, we can finally begin to solve these problems â€” all that remains is connecting the pieces.

### Chapter 5 : The 10 Best Coffee Chains in America

*Like cocoa, coffee is a soft commodity. The primary source of caffeine around the world (beating teas, sodas and energy drinks), coffee is the second most sought-after commodity in the world.*

Share via Email More than million smallholders rely on the coffee supply chain for their livelihoods. While companies may once have diversified their suppliers in the face of supply risk, the systematic impact of climate change across coffee-growing regions requires a radical rethink of production models and sourcing relationships, according to Alejandro Litovsky, the founder and CEO of the Earth Security Group. With this in mind, we brought together four experts to debate how coffee, and those who produce it, can be supported. Climate change is already causing problems It is threatening the livelihoods of producers we work with. We see the impact, they are producing less. These are the words of Steven Macatonia, co-founder of Union Hand-Roasted Coffee , who said that changing weather patterns such as erratic rainfall, increased temperatures, and more pests and disease are having a negative effect on the volume and quality of coffee produced. Aaron Davis, senior research leader of plant resources at Royal Botanic Gardens, Kew, said that while some of the more recently published work on coffee and climate change is probably too pessimistic, it is very clear that coffee farming worldwide is being negatively influenced by climate change. The effects will be far reaching Climate change is happening already but its impacts will not be distributed equally. A quarter of Ethiopians make a living from growing coffee, for example. This gives farmers a better understanding of where they are on the scale of risk, and what adaptation measures need to be implemented, said Davis. The most obvious interventions are irrigation, shade management and mulching, but terracing also has clear benefits. Shifting to another coffee species for example, from Arabica to Robusta , or using more drought resilient cultivars of existing species, may also be an option. Farmers need protection from financial instability Hugo Villela, regional agribusiness specialist at Oikocredit, pointed out that as well as the problem of smallholder coffee producers being exposed to increased price volatility as a result of climate change, there is also the issue of long-term investors withdrawing their investments if they deem coffee too risky. Fairtrade is one solution, said Villela, as the certification provides a minimum price which buffers some of the effects of price volatility caused by the impact of weather on crop supply. But only a small portion of coffee producers can access this benefit, he said, since not all coffee producers hold a Fairtrade certificate. The increased challenges faced by farmers requires them to improve their commercial skills in order to buffer the blows. For example, said Villela, they will need better stock control, improved price risk management incorporating more varied financing options, tighter controls over their business commitments, and to adopt more long-term, diversified approaches to their small-holdings. Much of this work relies on modern technology, such as remote sensing “ the use of satellite data ” and advanced computer modelling. But not all farmers will be able to afford this technology, said Davis, and it is not a complete cure: It is clear that for many farmers even the most sophisticated adaptation interventions will not ensure resilience against climate change and climatic perturbations.

### Chapter 6 : Top 10 Largest Coffee Chains in the World - List Dose

*The soft drinks giant Coca-Cola is buying the Costa Coffee chain in a near-£4bn deal that underlines the scale of the global coffee revolution.. The takeover will overnight turn Coca-Cola into.*

Article by ektajalan , May 2, When you are buzzed and busted by stress, all you need is the right cup. And, there is nothing better than the hot brew coffee cup in those situations. A hot cup of coffee is also the best thing in the weather where it is raining and the lights are dim. A coffee house is the best place to hang out together with a bunch of friends or even with a girlfriend. The coffee has its magic because of the coffee beans. It is the beans that give the coffee its taste and strong flavor. Coffee is known to provide energy instantly and refresh your body and mind. No one would want to spoil the taste by having a poorly blended coffee. To avoid such scenes, here is the list of the best coffee chains spread all over the world to give the perfect cup of freshness. Originated in Seattle, Washington , the company started to expand slowly and has now reached overseas to Japan and South Korea. It serves coffee, espresso and pastries in the house and also sells whole coffee beans. The first center was located in Berkley, California. The specialty of this brand is the dark coffee roaster. It is an Arabica coffee type which is darker and roasted, say for example, French roast. It sells fresh roasted coffee beans as well as brewed coffee in the coffee house. The espresso drinks available in-house really deserves high grades. The headquarters are situated in Emeryville, California which is also the base country of this brand. There a lot of fans of this brand who buy roasted beans to blend at home and also brewed coffee which has an amazingly different taste. This is another coffee chain in US which is based in Flushing, Michigan. Discovered in , Coffee Beanery sells the franchise of coffee shops and earns more from the equipment and product sell at the franchisees. The franchise of Coffee Beanery includes coffee bars, Double-wide drive-through, and obviously, coffee stores. One can have the best taste here and the best coffee fandom. This brand was popular in less than no time and all its franchisees started spreading like fire which has not stopped yet. Tim Hortons is a company based in Canada. This brand is very well known for the coffee they sell, as well as the special doughnuts made here. There is a very simple menu offering only doughnuts and coffee to its customers; but in spite of the short menu, the quality of the products is A-class and undoubtedly one of the best. It also offers some bakery products like bagels and Timbits at some centers. In the home country itself, the brand Tim Hortons has over centers exactly coffeehouses. All in all, it has restaurants and centers out of which, excluding the home nation houses, it has over centers in US, and 27 in Gulf of Cooperation Council. This coffee company is a retailer in coffee and espresso. Other than coffee, this restaurant also provides tea and other bakery goods. There are over coffee houses owned by the company in 40 states of Columbia. As it is an international coffee chain, it has franchise centers all over the world. Apart from this, there are a number of flavors offered to the customers along with plain coffee and espresso and all of those are truly awesome beverages. This coffee brand also has its history traced back in USA. Without keeping any track of time, they took the company international and presently this brand stands with more than a thousand stores all over the world, out of which stores are in Australia because the owner is Australian and over hundred stores in USA. They provide their customers with the best quality espresso coffee, cold drinks, tea, pastries, and a few coffee accessories. This is an American Coffee chain but now has centers and stores spread all over the world. It has more than outlets in 23 countries across the globe. Most of the centers outside California are franchisees. The very unique feature of the Coffee Bean stores is that they provide free Wi-Fi access to their customers at most places. This coffee chain was founded in by Mona and Herbert Hyman in Los Angeles but Sunny and Victor, entrepreneurs in Singapore, bought the company in Costa coffee was initially started in London by two Italian brothers named Sergio and Bruno Costa; and it has now become a multinational coffee chain. It has its headquarters situated at United Kingdom and has centers in UK itself. The stores can be found anywhere from airports to bookstores, Hotels, Pizza Hut branches, etc. They are planning to set up new centers at some universities and hospitals, where the coffee beans used will be of the same type. This coffee chain of Massachusetts is not just a coffee house chain, but also a doughnut company. This coffee chain has its origin back in in Quincy, Massachusetts. The Starbucks is the prime competitor for

the sales of coffee, whereas, for the doughnuts, Krispy Kreme is the prime competitor. William Rosenberg is the name of the person who is responsible for such a great chain. This coffee house has its stores and centers in more than 36 countries worldwide. There are more than 13, centers of this coffee chain in the country where it was originated, that is, US. Starbucks Corporation is originally an American coffee company which is now the best global coffee house chain in the whole world. This coffee chain has 20, stores spread over in 62 countries. Out of these many centers and branches, it has centers in Canada, Japan has centers, centers in China, centers in UK, more than centers in South Korea, more than centers in Mexico, around centers in Taiwan, more than are situated in Philippines, and Turkey, Thailand, and Germany has more than centers each. Rest all of them, that is, remaining centers are located in the US itself.

## Chapter 7 : The Coffee Industry's Supply Chain

*Starbucks - Supply Chain Essay Words | 3 Pages. Starbucks Expectations of Starbucks' customers in terms of Starbucks' coffee beverages The expectations of Starbucks' customers regarding coffee beverages would be to receive a perfectly made coffee, which is also recognized by the Starbucks' mission statement.*

Comment When its original logistics and procurement model threatened to constrain its rapid growth, the U. Costa Express was created to serve this need in when the Whitbread Group, the largest hospitality company in the United Kingdom and owner of Costa Coffee, acquired Coffee Nation, a provider of self-service coffee concessions. The new company, Costa Express, partners on a revenue-sharing basis with retailers that service public places like airports, railway stations, hospitals, universities, convenience stores, gas stations, and offices, enabling them to profit from the growing consumer demand for premium coffee "on the go" as well as the strong Costa brand. Costa Coffee is the largest coffee retailer in the U. Costa Express provides its partners with up-to-date, self-service coffee machines and regularly restocks the coffee and supplies, so very little investment is required to get the business up and running. After achieving early success in its first year, Costa Express set ambitious plans to increase the number of machines in operation what it refers to as its "estate" from 1,000 to 3,000, by 2010, and at the same time to expand internationally. For months after the launch, the business was pushed to the limit as the existing machine estate was rebranded from Coffee Nation to Costa Express, and new partners signed on. In April 2007, the company realized that in order to deal with all the expected growth, it would need to make some changes to the way it managed its supply chain. That was when I joined Costa Express, specifically to fill the newly created position of supply chain manager and to join a strengthened operational leadership team. Prior to that time, there had been no dedicated supply chain function in the company. Instead, traditional purchasing and logistics activities were split between the finance and engineering teams. One of my first tasks was to identify three fundamental supply chain functions that were driving the business. Managing and replenishing coffee-making ingredients to partner sites Procuring and maintaining spare-parts inventory Effectively managing the process of procuring new Costa Express machines and preparing them to be installed at customer sites For the purposes of this article, I will describe how we managed the first and most critical of these three functions: When I joined the company, the finance team carried out this replenishment activity with support from trained employees known as "Brand Guardians," who work in the field. In order to sustain this unique model during a phase of significant growth, Costa Express would need tight control over and visibility into its supply chain. Central to this would be an awareness of exactly when and how much stock needs to be replenished at each partner site, so that money would not be wasted on excess inventory or unnecessary logistics activities. That meant Costa Express would need to understand not just aggregated order information, but also the size and frequency of the individual orders. These systems had a twofold purpose: The system that informed replenishment decisions comprised thousands of linked spreadsheets that contained detailed information for each site and product. Based on the size of our partner network, the system had multiplied to host more than 50,000 replenishment combinations and was edging toward 100,000, as new sites were added. One thing that greatly concerned me: Despite having invested in coffee machines with built-in programs designed to provide real-time sales data, Costa Express could not take advantage of this capability because our spreadsheet system could not extract, consolidate, and present up-to-the-minute data. The next area I examined within the ingredients supply chain was logistics. Our current logistics provider was furnishing a full service: Although this setup might have worked well in the beginning, it meant we had very few direct relationships with ingredients suppliers, making it difficult to negotiate and communicate changes we wanted to make as our business grew. It became clear to me that in order to deliver sustained growth, we would have to transform our supply chain and redefine roles within the wider business A fresh start During my first month April 2007, it was clear that I needed to make some changes without delay. These initial changes would lay the foundation for the rest of the strategic changes that would be necessary. I therefore immediately moved responsibility for partner replenishment from finance to the new supply chain team. This change would ensure that partner replenishment would receive the right amount of attention during

the transformation. I next undertook a review of providers of replenishment and demand planning software, which included looking at how we could tap into our valuable telemetry data and use this to maintain the inventories at partner sites. In June , I initiated a tender process designed to seek out a new logistics partner. This process included reviewing relationships with suppliers and assessing whether Costa Express should start to purchase ingredients directly from suppliers. By November , my team and I had come up with both a new replenishment planning tool and a new logistics provider, Howard Tenens, and planned to have them both up and running by January . As part of this plan, we had decided to start purchasing ingredients directly. By doing so, we would be able to negotiate and control our costs more effectively as our volumes grew. Howard Tenens collects stock from suppliers including coffee beans, flavored syrups, cups, lids, stirrers, and napkins , stores it in a central warehouse, and delivers stock as needed to Costa Express partners. Besides enabling us to purchase ingredients directly, having a new logistics partner has simplified our logistics model. Our previous model was more distributed, with one central warehouse and nine regional ones. Now that we hold everything in one central location, we are able to make more next-day deliveries. Another advantage is that Howard Tenens runs most of its fleet on either dual fuel combined gas and diesel or biomethane fuel. This means we are on track to save approximately 73 metric tons of carbon emissions in our first year working together. We have also started working with another division of Howard Tenens to support our coffee machine-installation logistics. Despite initial reservations within the business, I was adamant it would be best to implement these changes all at once instead of sequentially, challenging the conventional wisdom. This meant that by January we were in the midst of three major supply chain changes: We chose it because it could help us improve forecast accuracy while at the same time maintaining high customer service levels with less inventory. This went live in January as planned and was fundamental to the enabling of other changes involving both people and processes. Before implementing that application, Costa Express had used the spreadsheet system to estimate how much inventory to supply to each site, using a calculation based on current stock holding and average cup sales. The new system allows us to compare the actual sales data to the levels of stock on hand at the sites, a feature that gives far better visibility and control. The system uses sales data produced every four minutes collected from each of the 3, machines to identify trends and forecast future demand. It then calculates how the demand is likely to vary, and therefore how much backup stock must be kept at each site. Finally, the system creates a schedule for resupplying the right amount of inventory to each site in order to maximize availability without overstocking. All of this is done automatically and in the cloud. The new system allowed the business to make an important fourth change: Because the software was so much faster, more accurate, and easier to use than the old spreadsheet system, these people were able to take on the new role of Brand Excellence Advisors, whose main responsibility today is helping partners sell more effectively and deliver a great customer experience. With this new role, the Advisors help to increase sales, improve service quality, troubleshoot if necessary, and, in general, enhance the overall Costa Express experience for the customer. Savings in six months Just six months after going live with the new IT system, new third-party logistics provider, and new purchasing processes, we measured some very significant operational savings, including: Previously, the average site was expected to stock well over 20 cases of various items. This has now been reduced to approximately 12 cases, just one case of each item. Although we have approximately 50 SKUs, individual sites typically use 15 or fewer. For example, there are three different types of stirrers, but a site will use only one. Costa Express also needs to make managing stock as simple as possible, employees can focus on serving customers and increasing sales. This new system has given our partners the confidence that their stock will be replenished efficiently and in a timely manner, so that they can get on with running their businesses. Along with the changes to the Brand Excellence Advisor role, statistics show that our Net Promoter Score, a popular customer-loyalty metric, grew by more than 10 percent in a six-month period. Furthermore, overall satisfaction and reuse scores the likelihood of a customer using our services again grew by 5 percentage points, and recommendation levels the likelihood of a customer recommending our services were up 6 percentage points. A foundation for sustainable growth When Whitbread acquired Coffee Nation, the target was to have 3, machines in place by . With the help of our new systems, processes, and roles, we are confident that we can grow internationally while maintaining confidence in the brand with top quality and great service.

Already, I have been part of a team that has helped Costa Express to install new machines in Poland, under the "Coffee Heaven" brand, and we will soon introduce Costa Express to Ireland. The company is also about to embark on two important new projects. Firstly, Costa Express is now part of a new business-to-business division called Costa Enterprises. I will be responsible for managing an enlarged supply chain for Costa Enterprises, which comprises more than 7, locations worldwide and dispenses more than million cups of coffee a year. Secondly, in January we launched our new CEM "intelligent" coffee station concession, based on advanced technology from Intel, Microsoft, and Bsquare. These multimedia machines will be placed in high-end properties, starting in Dubai. I will be responsible for the supply chain elements of bringing this multimillion-pound innovation to the U. Quite simply, without the changes implemented throughout the Costa Express supply chain, the U. We have turned supplier and customer relationships into true team efforts. Partners at both ends of the Costa Express supply chain are engaged. Partners who maintain the machines and sell the coffee are experiencing the kind of efficient, worry-free service levels that allow them to focus on running their businesses. With this foundation in place, I believe we are solidly positioned to sustain our growth while maintaining a trusted and highly respected premium coffee brand. Chris Clowes is supply chain manager at U. Join the Discussion After you comment, click Post. Want more articles like this? Sign up for a free subscription to Supply Chain Executive Insight, a monthly e-newsletter that provides insights and commentary on supply chain trends and developments. Click here to subscribe. We Want to Hear From You! We invite you to share your thoughts and opinions about this article by sending an e-mail to? Correspondence may be edited for clarity or for length.

*Caff  Americano. You can make this type of coffee quite simply by adding hot water to a shot of espresso coffee. It has been said that American soldiers during the Second World War would make this type of coffee to make their beverages last longer.*

Understand what it means to have a supply chain that is sustainable. The Coffee Bean Coffee has been consumed for centuries ever since the coffee bean was first cultivated and used by Arabs as a beverage in the fifteenth century. First discovered and cultivated in Ethiopia, the Arabica bean found its way to coffee houses in the Middle East and spread throughout Europe in the sixteenth century. Aided by Western colonialism, religious missionaries, and explorers to other tropical and subtropical regions of the world, the Arabica bean and the less valuable Robusta bean eventually became global crops. Coffee trees only grow in tropical and subtropical climates, primarily in Africa, Latin America, and Asia. One coffee tree produces one pound of green coffee per year. There are two types of coffee: Specialty coffee is made from the Arabica bean and basic from the Robusta bean. Often times these beans are blended together in the roasting process to lower costs or offer greater variety. Gale, , 1: The United States is the single largest consumer of coffee worldwide and is the largest importer of green before roasting coffee, approximately 2. In Germany was the second largest importer of coffee, followed by Italy, Japan, and France. Combined, the European Union countries imported approximately 5. The largest green coffee producing countries  8 were Brazil, Vietnam, Colombia, Indonesia, and Ethiopia. More than 50 percent of Americans older than eighteen years of age drink coffee every day. This represents more than million daily drinkers. Americans consume four hundred million cups of coffee per day, making the United States the leading consumer of coffee in the world. See the following sidebar. Coffee statistics show that coffee is the most popular beverage worldwide, with over four hundred billion cups consumed each year. Coffee industry statistics show that only 20 percent of harvested coffee beans are considered to be a premium bean of the highest quality. Coffee market statistics show that coffee is grown commercially in more than forty-five countries around the world. Coffee trade statistics show that over five million people in Brazil are employed by the coffee trade. Those employed in the coffee industry are involved mostly with the cultivation and harvesting of more than three billion coffee plants. Coffee consumption statistics show that coffee represents 75 percent of all the caffeine consumed in the United States. Men drink as much coffee as women, each consuming an average of 1. Women seem to be more concerned about the price than men. Among coffee drinkers, the average consumption in the United States is 3. Roasters compete primarily on price, brand, and differentiation. The price of green coffee is based on basic supply and demand economic factors. Supply is dependent on several factors including weather, pest damage, politics, and economics in the coffee-producing countries. Demand for coffee depends on several factors, including consumer preferences; changes in consumer lifestyles; national, regional, and local economic conditions; demographic trends; and health benefits or risks. Key Players in the Coffee Supply Chain An industry supply chain A supply chain is a system of organizations, people, technology, activities, information, and resources involved in moving a product or service from supplier to customer. Supply chain activities transform natural resources and raw materials and components into a finished product that is delivered to the end customer. In sophisticated supply chain systems, used products may reenter the supply chain at any point where residual value is recyclable. Supply chains link value chains. The green unroasted coffee bean travels through many steps in the supply chain also known as the value chain from harvest to final customer. A summary of some of the key players found in the value chain is presented in Figure 9. Coffee roasters or manufacturers are the key or focal player in the coffee supply chain. Image courtesy of the authors. Branding and Market and Product Segmentation The largest US domestic coffee brands A name, term, sign, symbol, design, or a combination of them intended to identify the goods and services of one seller and to differentiate the seller from those of other sellers. Branding is about getting potential consumers to view a seller as the only one that provides a solution to their problem. Market segmentation Targeting audiences into homogenous groups according to demographics, psychographics, or behavioral or geographical characteristics. Generally any firm or group that

derives a quarter of its revenue from operations outside of its home country is considered a multinational company and may fall into one of the four categories: According to UN data, some thirty-five thousand firms have direct investment in foreign countries, and the largest hundred of them control about 40 percent of world trade. Starbucks was one of the largest coffee roasters with more than eight thousand stores, or 32 percent market share in the retail store category in Gale, , 2: The Specialty Coffee Retailer Association estimated that at least two-thirds of the US adult population drinks coffee at least once a week. The association estimated that there were 25, coffee shops in , up from 9, shops in The specialty coffee retailers competed with larger food processing companies in the supermarket segment of the industry. The ICO in reported that the simplification of methods for brewing roasted coffee at home along with rising coffee prices was encouraging at home coffee consumption. Even with the growth of coffee shops, the home continued to be the preferred brewing and consumption location in all countries. The ICO reported that one of the reasons could be the development of coffee pods and capsule machines, which made it easier for consumers to make good coffee at home. Talbot, Grounds for Agreement: In , the Fairtrade Labelling Organizations International FLO was formed as an umbrella organization to expand the scope and monitor fair trade with universal standards and labels. The Fair Trade Certified organic coffee movement attempted to reduce the environmental devastation that occurred in coffee producing countries. Fair trade was meant to counteract the practice pursued by large multinational corporations that used mass production methods for coffee farming. These methods conflicted with traditional, more environmentally friendly methods of coffee farming. The mass production techniques included clearing of large tracks of forested farmland, machine harvesting, mechanized warehouse operations, and heavy use of chemicals and pesticides to increase crop yield. Mass production farming caused severe environmental degradation and forced many small farms to close causing economic hardships in many coffee producing areas. In addition, the heavy use of fertilizers and pesticides resulted in significant nitrate runoff into ground water and streams. Farmers and workers and others were exposed to highly toxic chemicals, including some banned in the United States. Concern about the adverse impacts of the change in coffee farming played an important role in the emerging Fair Trade Certified coffee market. From to , million pounds of fair trade products came into the United States. This included million pounds of coffee or 71 percent of all fair trade products imported. Fair trade coffee imports grew 25 percent over Key Takeaways Supply chains are complex open and dynamic systems. A supply chain is composed of multiple players of various sizes who compete on brand, price, and market segmentation. Fair trade and sustainable coffee is an emerging and growing market. Exercise Go to the Institute for Supply Management home page <http://www.ismworldnet.com>

### Chapter 9 : Which coffee shop chain serves the tastiest coffee? – Which? News

*A value chain is a series of activities or processes that aims at creating and adding value to an article at every step during the production process.*

A partnership with Algerian food company Cevital will see Starbucks open its first Algerian store in Algiers. The store is the 7th location at the airport. The company planned to expand to 1, stores in China by In October , Starbucks announced plans to open 1, stores in the United States in the next five years. Since the park does not allow plastic straws due to the animals, this location features special green eco-friendly straws with their cold drinks. In addition to these six, there are locations in Disneyland Main Street, U. The Downtown Disney and Disney Springs locations are Starbucks-operated, while the locations inside of the theme parks are Disney-operated. We were pretty ubiquitous. Schultz also stated that Starbucks will work with both the Colombian Government and USAID to continue "empowering local coffee growers and sharing the value, heritage and tradition of its coffee with the world. On the next day, 1 more coffee shop was opened. In February , Howard Schultz announced the opening of stores in Italy. The first Italian Starbucks store will open in Milan in , [] later delayed to September 6, The company also reaffirmed its commitment to working with local coffee farmers to "implement systems to increase productivity and yields, while also increasing compliance to international standards. The first of these stores will be opened by year-end of Starbucks announced the opening of stores in Serbia in late The coffee shop had been a source of ongoing controversy since its opening in with protesters objecting that the presence of the American chain in this location "was trampling on Chinese culture. Of the new cuts, of the positions were layoffs and the rest were unfilled jobs. Starbucks also announced in July that it would close 61 of its 84 stores in Australia in the following month. CEO Howard Schultz also announced that he had received board approval to reduce his salary. Stealth Starbucks In , at least three stores in Seattle were de-branded to remove the logo and brand name, and remodel the stores as local coffee houses "inspired by Starbucks. It served wine and beer and hosted live music and poetry readings.