

Claremont Colleges

Scholarship @ Claremont

CMC Senior Theses

CMC Student Scholarship

2019

The Effectiveness of Collaboration Within Supply Chain Management: A Case Study of Adidas Group

Daniel Carr

Follow this and additional works at: https://scholarship.claremont.edu/cmc_theses



Part of the [Business Administration, Management, and Operations Commons](#), [International Business Commons](#), [International Economics Commons](#), [International Relations Commons](#), and the [Operations and Supply Chain Management Commons](#)

Recommended Citation

Carr, Daniel, "The Effectiveness of Collaboration Within Supply Chain Management: A Case Study of Adidas Group" (2019). *CMC Senior Theses*. 2078.

https://scholarship.claremont.edu/cmc_theses/2078

This Open Access Senior Thesis is brought to you by Scholarship@Claremont. It has been accepted for inclusion in this collection by an authorized administrator. For more information, please contact scholarship@cuc.claremont.edu.

Claremont McKenna College

**The Effectiveness of
Collaboration Within Supply Chain Management:
A Case Study of Adidas Group**

Submitted to
Professor Hilary Appel

By
Daniel Carr

For
Senior Thesis
Fall 2018
December 10, 2018

Acknowledgments

I would like to thank my reader, Professor Appel, for introducing me to the engaging intricacies of supply chain management through her International Political Economy class. I want to thank Professor Taw for being an incredibly helpful advisor through all the ups and downs of my college career. Lastly, I am incredibly thankful for my mother and for her diligence and commitment in homeschooling me. My opportunity to attend Claremont McKenna College is as much a product of her hard work as it is mine.

Table of Contents

I.	Introduction.....	1
II.	Review of Adidas’s Supply Chain Structure.....	4
III.	Compliance vs. Collaboration: Adidas Breaking Convention.....	12
IV.	Adidas’s Current Collaborative Approach to Supply Chain Management.....	16
V.	Tangible Improvements Attributed to the Collaborative Approach.....	24
VI.	Shortcomings of Adidas’s Collaborative Approach.....	30
VII.	Conclusion.....	32
VIII.	Bibliography.....	34

I. Introduction

There is no doubt that Adidas is one of the most influential and widespread brands in the world today. From humble beginnings as a German family's shoemaking business to gaining global recognition after a pair of the family's sneakers was worn by sprinter Jesse Owens in the 1936 Summer Olympics, Adidas has grown to be the second-largest sportswear brand in the world, and once dominated the market entirely until Nike gained a greater share of the market.¹ In recent decades, Adidas has branched out from sportswear to making high fashion sneakers, collaborating with celebrities, and becoming integral to everyday fashion for millions of people. Even on college campuses, classic Adidas products like the "Superstar" sneakers remain extremely popular, and more advanced running shoes have gained attention as fashionable shoes with performance-based qualities. A multinational corporation whose products are in increasingly high demand, Adidas produced 403 million pairs of sneakers in 2017.² Supply chain management is one of the most crucial aspects of Adidas's business operations. Products cannot be sold unless Adidas's supply chain is well-managed and efficient, and public perception of a brand/company is critical to its success. Matters of sourcing play heavily into public perception and Adidas knows this.

The apparel industry has had a less-than-favorable record when it comes to sustainability and worker safety within its vast sourcing operations. A significant incident that tarnished the apparel industry was the collapse of a garment factory in Bangladesh in 2013 that killed over 1,000 people, which placed the apparel industry under scrutiny from many NGOs and made the

¹ Ina Heumann, "I bet you didn't know this about Jesse Owens," *Adidas Blog*, August 10, 2011, <http://blog.adidas-group.com/2011/08/sport-history-jesse-owens/>.

² "The adidas Group's footwear production worldwide from 2008 to 2017 (in million pairs)," *Statista*, accessed October 21, 2018, <https://www.statista.com/statistics/227015/the-adidas-groups-footwear-production-worldwide/>.

industry the subject of more recent coverage by media outlets on the working conditions within sweatshops in Asia, South America, and the United States.³

Perhaps the most important indicator of the improvements and shortcomings in the apparel industry is the annual Corporate Human Rights Benchmarks report. The Corporate Human Rights Benchmarks assess the supply chains of the 30 largest apparel companies based upon their efforts (or lack thereof) in upholding human rights, worker safety, environmental sustainability, and other factors. In the 2017 CHRB report on the apparel industry, Adidas received the second-highest score behind Marks & Spencer Group, beating Nike and VF Corporation.⁴

Adidas's high score and its more recent sustainable product initiatives (such as the Parley line of sneakers that are made from recycled plastic) reflect the growing sentiment in Western society (especially among young people) of valuing sustainability and workers' rights. Young people now more than ever pay attention to where their products come from and the environmental and humanitarian impacts of what they buy.

While consumer sentiments have evolved to include such concerns, supply chain operations have become more and more convoluted and complex. To keep up with demand, Adidas sources from hundreds of factories around the world, and those factories have their own suppliers as well. With so many complexities and so many components within its supply chain, it would seem unlikely for Adidas to achieve notoriety for its human rights standards without major incidents, especially considering how it has received higher praise than other apparel companies with smaller operations that have fewer variables and complexities to contend with.

³ Julhas Alam, "Bangladesh marks 5 years after garment factory collapse," *The Star Tribune*, April 24, 2018, <http://www.startribune.com/study-bangladesh-must-do-more-to-protect-garment-workers/480639371/>.

⁴ "Apparel," *Corporate Human Rights Benchmarks*, accessed October 21, 2018, <https://www.corporatebenchmark.org/apparel>.

How has Adidas managed to achieve such high scores in sustainability and the protection of workers' rights? How has Adidas's supply chain evolved to meet consumer needs for goods that are sourced with sustainability and worker well-being in mind?

I argue that Adidas has set the bar for the apparel industry because of its distinct “collaborative approach” to supply chain management, which is characterized by not only monitoring and auditing suppliers, but also training them to make Adidas's standards their own and approaching suppliers with the intention of building long-term relationships where the suppliers can become self-sufficient. Adidas wants to ensure that its codes of supplier conduct are not only followed but are further built upon to suit the needs of workers and managers in a wide variety of countries. Adidas knows that the nature of sourcing and the challenges that workers face (lack of representation, legal protections in developing countries, etc.) are ever changing and staying in touch with the needs of its suppliers and workers is crucial to managing its supply chain effectively. Many other companies utilize a top-down approach to supply chain management, through which they impose their workplace safety standards on suppliers through intermediaries and through managers. Adidas is looking to change the game with a different approach that involves working closely with the managers and workers from its suppliers to implement workplace safety standards that also take the prevailing issues in vastly different countries into account to improve effectiveness. By analyzing the structure of Adidas's supply chain and its own initiatives to uphold safety and worker rights through its more recent collaborative approach, the questions of how Adidas's collaborative approach to supply chain management functions and how Adidas has achieved such high scores in corporate social responsibility can be answered.

II. Review of Adidas's Supply Chain Structure

Before assessing Adidas's recent initiatives to integrate collaboration and cultural sensibilities into the implementation of standards across its global supply chain, it is important to firstly look at recent developments and the general structure of its global supply chain. While Adidas is the second largest sportswear manufacturer in the world (behind Nike), Adidas has more supplier factories than Nike, with almost 800 first tier supplier factories across 60 countries, while Nike has 566 factories in 44 countries.⁵ With so many suppliers (almost all of which are independent factories), logistical coordination is a serious challenge, and Adidas faces this ever-growing challenge of efficiently and effectively imposing its worker safety, human rights, and sustainability guidelines across so many suppliers.⁶ To face this challenge, Adidas claims to implement a comprehensive approach towards managing its relationship with its suppliers, and an understanding of this approach can be achieved by reviewing the significant developments in Adidas's supply chain, the types of relationships that Adidas maintains with its suppliers, the types of suppliers that Adidas sources from, and how Adidas maintains these relationships and ensures that its standards are upheld.

Adidas established its first supplier Code of Conduct in 1997 and a Compliance Team to oversee adherence to this initial code that was integrated into the manufacturing agreement for all contracted suppliers.⁷ This initial code was revised into Adidas's Workplace Standards in 2006, which included the following guidelines:⁸

⁵ "Is Nike More Successful Than Adidas? Shoe / Apparel Company Comparison," YouTube video, 3:15-4:00, posted by "The Infographics Show," December 13, 2017, <https://www.youtube.com/watch?v=P1siFAXZeaU>.

⁶ "Global Factory Lists," *Adidas Group*, accessed October 7, 2018, <https://www.adidas-group.com/en/sustainability/compliance/supply-chain-structure/>.

⁷ "Supply Chain Approach," *Adidas Group*, accessed October 7, 2018, <https://www.adidas-group.com/en/sustainability/compliance/supply-chain-approach/#/uberwachung/>.

⁸ *Ibid.*

- Business partners are banned from using forced labor.
- Partners must not employ children younger than 15 years old.
- Partners must not discriminate in recruitment practices based on personal characteristics and must protect migrant employees from any form of discrimination.
- Wages must be equal to or exceed the minimum wage of the relevant country or the prevailing industry wage, whichever is higher. Employees must also be compensated for overtime work.
- Employees must not be required to work more than 60 hours a week including overtime or the local legal requirement, whichever is less.
- Partners must respect the right of employees to organize of their own volition and bargain collectively, and partners must have mechanisms in place to resolve employee grievances.
- Employees are to never be subjected to any forms of harassment or abuse or to disciplinary fines. Furthermore, partners must adopt a non-retaliation policy that allows employees to voice concerns about workplace conditions directly to their managers without fear of termination or punishment.
- Partners must provide a safe and clean workplace and must provide adequate protection for workers from fire hazards and toxic substances. Adequate ventilation and heating systems must be provided as well.
- Partners must work towards improving their own environmental performance and must adopt general principles of sustainability into their operations including responsibly using natural resources and implementing environmentally-conscious production measures to prevent pollution.

To ensure synergy across the enforcement of these supplier guidelines, Adidas joined the Fair Factories Clearinghouse in 2006, which was adapted from Reebok’s Human Rights Tracking System after Adidas’s acquisition of Reebok.⁹ Adidas uses this central database to record all reports and information relating to the suppliers’ compliance with Adidas’s Workplace Standards. Furthermore, Adidas set a precedent of transparency for the apparel industry when it started disclosing information on all of its supplier factories in 2007 and has continued to do so twice every year.¹⁰

The ongoing publication of Adidas’s list of suppliers was a groundbreaking transparency initiative for the apparel industry and set a precedent for the company to make more information on its supply chain structure readily available. From these datasets and other resources, it is fairly easy to gain an understanding of Adidas’s supply chain structure.

Adidas outsources most of its production, and some of its supplier factories are directly contracted with Adidas while others are not. According to its 2017 report, the top five countries per region by number of supplier factories were:¹¹

- **Asia (68%):** China, Vietnam, South Korea, Indonesia, and India
- **The Americas (20%):** United States, Brazil, Argentina, Canada, and Mexico
- **Europe, the Middle East, and Africa (12%):** Germany, Turkey, Italy, Spain, and South Africa

The relationships that Adidas maintains with its suppliers fall under three categories: direct sourcing, indirect sourcing, and local market production relationships. Direct sourcing model relationships are direct contractual relationships that Adidas has with its suppliers, and these

⁹ Ibid.

¹⁰ “Global Factory Lists.”

¹¹ “Supply Chain Approach.”

suppliers are supervised by Adidas's Global Operations department. These core suppliers produce the majority of Adidas's products. Indirect sourcing model relationships are with non-contracted suppliers that are sourced by agents who place orders with their personally preferred suppliers. These suppliers are considered "indirect supply chain" components but they complement the directly sourced relationships by meeting Adidas's Workplace Standards.¹² They are not monitored by Global Operations, rather by the agents/licensees. Local market production relationships are maintained by Adidas's subsidiaries to source from smaller local suppliers to address more niche or localized market opportunities within their respective countries. While these relationships are not overseen by Global Operations, these relationships must be authorized by Adidas's Social and Environmental Affairs team.¹³

Across these relationships, Adidas's suppliers can be divided into five broad categories: main suppliers, subcontractors, material and other service providers, licensees, and agents.¹⁴ Main suppliers have direct contractual relationships with Adidas to produce and supply products both for export and domestic market consumption. Subcontractors are factories that are commissioned by the main suppliers to manufacture components and materials that the main suppliers are not capable of doing in their own facilities. Suppliers that act as material and other service providers, while not having a direct business relationship with Adidas, supply materials and other goods to the main suppliers. Licensees are companies that conduct independent business operations (including design, production, and distribution) of Adidas products under license. Lastly, agents are independent companies that act as intermediaries to source product

¹² Ibid.

¹³ Ibid.

¹⁴ All categories are described in Adidas's "Supply Chain Approach" website at <https://www.adidas-group.com/en/sustainability/compliance/supply-chain-approach/#/uberwachung/>.

manufacturing and manage their own manufacturing processes, and then turn around and sell the finished products to Adidas.

Based upon its most recent list of supplier factories released in July of 2018, Adidas has 772 primary (first tier) suppliers and 758 subcontracted (second tier) suppliers.¹⁵ The hierarchy of first and second tier suppliers and the division among the supplier categories is illustrated in Figure 1.¹⁶

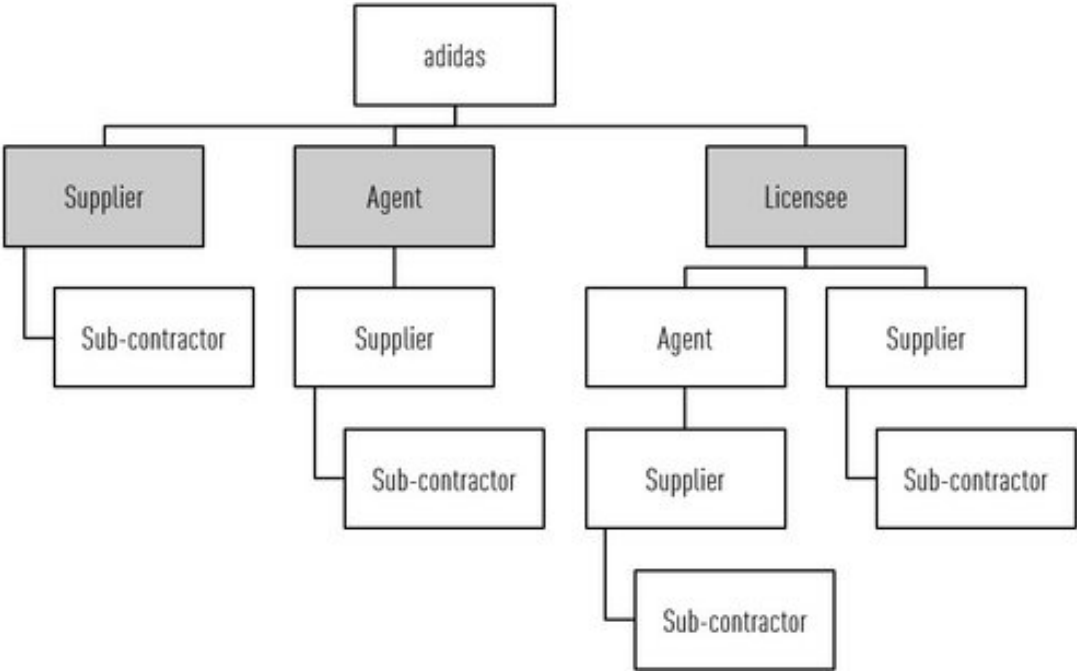


Figure 1. Adidas Supply Chain Structure

The maintenance and establishment of the previously noted relationships with first and second tier suppliers follow specific protocols and processes to select new suppliers, audit current and potential suppliers, rate the performance of suppliers, address worker concerns, and

¹⁵ “Global Factory Lists.”
¹⁶ “Supply Chain Approach.”

encourage a trickling-down of Adidas's own standards and practices into Adidas's indirect suppliers. The selection process for new suppliers, or "onboarding", is the responsibility of Adidas's SEA (Social and Environmental Affairs) team in collaboration with the Global Operations team.¹⁷ They assess prospective suppliers based upon their reported workplace safety and condition issues. Suppliers are rejected on the basis of having significant or repeated issues. However, rejected suppliers can be reevaluated by the SEA team after concerns have been addressed. Auditing is crucial to ensuring that Adidas's large network of suppliers all uphold similar standards. Third-party agents are commissioned by the SEA team to visit and audit supplier factories. Additional independent auditors are used to assess the effectiveness of Adidas's own initiatives to impose its codes of conduct on its suppliers. When gaps in implementation are identified, Adidas provides additional training and assists with improving production capacity. As another means of auditing and correcting shortfalls among Adidas's suppliers, supplier factories are given scores. Primary suppliers are regularly assessed in their adherence to Adidas's Workplace Standards, their general fair treatment of workers, and their upholding of safety standards. At the end of each year, every primary supplier receives a score from the SEA team and that score is provided to Adidas's sourcing managers. The sourcing managers add the SEA team's score to their own scores for quality and efficiency of production and decide whether to retain or terminate relationships with suppliers. However, before pursuing termination, Adidas will contact a supplier factory that has failed to treat their workers fairly or provide a safe workspace with a warning letter requesting that the problems be fixed. If issues remain unresolved, Adidas will leverage its relationship by stopping orders with the factory or terminating their relationship completely. If serious safety or worker rights issues are uncovered,

¹⁷ All information on Adidas's onboarding/auditing process can be found on Adidas's "Supply Chain Approach" website at <https://www.adidas-group.com/en/sustainability/compliance/supply-chain-approach/#/uberwachung/>.

Adidas may report the factory to the local government. Adidas also publishes these violations in its annual reports. Adidas sees workers as a valuable source of information when it comes to assessing the performance of suppliers, and in recent years has encouraged communication between workers and managers. Adidas requires primary suppliers to provide their employees with the contact information for managers for the sake of reporting factory issues or expressing concerns. Workers are also provided with contact information for local workers' rights organizations and Adidas's own field staff. If a factory does not have the capacity to create a solution to a reported issue, then Adidas may step in and respond.¹⁸

The upholding of Adidas's Workplace Standards within all of its indirect second-tier suppliers and licensees could prove to be a difficult challenge given the sheer number of just first-tier suppliers, but Adidas has a strategy to encourage such practices. To ensure that workers' rights and safety standards are upheld among Adidas's many indirect suppliers (such as those sourced by licensees and agents), Adidas not only asks its first-tier suppliers, agents, and licensees to emulate its own monitoring procedures for their second-tier suppliers but requires it. The "compliance performance" of the indirect suppliers is seen as an extension of the performance of the first-tier suppliers, and they are held accountable as such.¹⁹ In addition to the requirements that Adidas places on its first-tier suppliers to adhere to its Workplace Standards, Adidas requires suppliers that source materials and products from second-tier suppliers and sub-contractors to develop and submit their own "three-year plans" that detail their initiatives to ensure that compliance trickles down to the indirect suppliers.²⁰ To assess the effectiveness of the first-tier suppliers' own efforts, they also must commission external monitors that are hand

¹⁸ "Supply Chain Approach."

¹⁹ Ibid.

²⁰ Ibid.

picked by Adidas to audit their indirect second-tier suppliers and report on the results of the audits in regards to the compliance of the indirect suppliers. The results of these audits for the indirect suppliers are taken into account when the Adidas SEA team scores the first-tier suppliers on their Workplace Standards compliance.

Overall, Adidas claims that they place utmost value in maintaining long-term relationships with suppliers. Long-term contracts are a product of favorable assessments of performance and adherence to Adidas's Workplace Standards, which has led to Adidas sourcing the majority of its products from 109 suppliers, half of which have had contracts with Adidas for over ten years.²¹

²¹ Ibid.

III. Compliance vs. Collaboration: Adidas Breaking Convention

Labor standards and corporate codes of conduct are amenable means of promoting corporate social responsibility. Such codes allow companies to approach worker rights and well-being in unique ways that are appropriate for their respective supply chains and corporate cultures, while also benefitting employees by improving wages and working conditions by imposing standards across multiple suppliers. On the consumer side, such measures reflect positively on the company's image and products. However, not all approaches to implementing such codes in supply chain management are equally effective, and depending on their implementation, can be very ineffective.

The Levi-Strauss Company made the first major foray into implementing a code of conduct for suppliers in the apparel and footwear industry in 1992, and Nike quickly followed Levi-Strauss's example in the same year.²² Both codes of conduct were made in response to public allegations of utilizing sweatshops and paying workers well below appropriate wages. As more scrutiny was placed on the apparel industry, more and more human rights violations were uncovered in Asian supplier factories and more leading apparel companies adopted their own codes of conduct. Generally, these codes of conduct reflected the International Labor Organization's four core labor standards (standing for the elimination of child labor, eliminating discrimination in hiring practices and forced labor, and providing freedom of association) and these codes required first tier suppliers to abide by the codes in addition to local labor laws.²³ Failing to do so would result in termination of the supply contract. Levi-Strauss pioneered the

²² Stephen J. Frenkel, Dunkan Scott, "Compliance, Collaboration, and Codes of Labor Practice: The Adidas Connection," *California Management Review*, Vol. 45, 1 (2002): 29-44.

²³ *Ibid.*

use of dedicated staff that monitored the implementation of codes of conduct within supplier factories, and inspired others to follow suit.²⁴

However, reports of failures to adhere to standards arose in subsequent years among supplier factories for Nike and other leading apparel companies in Indonesia, Vietnam, Cambodia, and Mexico. For example, in 2001 a factory in Mexico that was a major supplier for Nike and Reebok had a worker dispute that turned into a riot. According to Stephen Frenkel and Dunkan Scott's 2002 study of the sportswear industry, the dispute was caused by the management's failure to adhere to Nike's code of conduct in relation to working conditions and wages.²⁵ Nike took an approach of "compliance" in implementing its code of conduct and hired an auditing firm to monitor the implementation of its code of conduct.²⁶ However, while the audit uncovered these violations before the dispute, little was done to resolve the discrepancies as there was a lack of protocol in addressing code violations among suppliers, so a course of action was not reached. It took a further nine months after the strike broke out to resolve the issues, and Nike ultimately terminated its relationship with the factory. This incident highlighted the need for a different approach to managing relationships with suppliers. Imposing codes of conduct with the hope of effective compliance among suppliers had proved to be ineffective as a lack of standardized procedures and effective communication channels between Nike and the supplier's employees and managers led to a delayed reaction that hurt the workers (given Nike's detrimental exit from sourcing with the supplier) that were supposed to be helped by the codes of conduct. In order to ensure that similar problems were avoided in its own supply chain, Adidas realized the importance of not only being more selective in who it sources from, but also

²⁴ Ibid.

²⁵ Ibid.

²⁶ Ibid.

proactively collaborating with suppliers to implement codes of conduct. This “collaborative approach” is what ultimately set Adidas apart from prior approaches to supply chain management.

The different approaches among apparel companies towards managing relationships with suppliers has a direct effect on how the suppliers implement the companies’ codes of conduct which furthermore has a direct effect on the well-being of supplier workers and supplier productivity. Before assessing Adidas’s collaborative approach to supply chain management, a distinction needs to be made between the conventional compliance approach to supplier relationships and the collaborative approach. The compliance approach is defined by an apparel company having a dominant role in the relationship. The firm devises the code of conduct and upholds the code of conduct as a necessity for the supplier if a relationship is to be maintained. Monitoring and enforcing the code of conduct are responsibilities taken by the firm. In contrast, a collaborative approach involves an apparel company working closely with its suppliers to develop and implement a code of conduct that enables ongoing improvement of workplace conditions, productivity, and worker well-being.²⁷ The collaborative approach is defined by partnership and mutual involvement in implementing codes of conduct rather than imposing a code of conduct at arm’s length. However, the most definitive characteristic of Adidas’s collaborative approach is what Professor of Business Administration Jeanne Liedtka calls “Shared purpose.”²⁸ In her paper on the integration of ethics in business management, “Constructing an Ethic for Business Practice: Competing Effectively and Doing Good,” Liedtka asserts that what is most beneficial to productivity and the success of a multi-national company

²⁷ Ibid.

²⁸ Jeanne Liedtka, “Constructing an Ethic for Business Practice: Competing Effectively and Doing Good,” in *Leading Corporate Citizens: Vision, Values, Value Added*, ed. Sandra Waddock, (Burr Ridge: McGraw-Hill, 2002), 265-272.

like Adidas is that the collaborative approach creates a sense of “shared purpose” between suppliers and the MNC.²⁹ Liedtka compared different approaches to improving supplier performance and found commonalities. Based on her research, Liedtka asserts that creating this sense of “shared purpose” is extremely beneficial to productivity and can be achieved by giving employees a logistical perspective where they understand their roles and how their roles are interdependent.³⁰ Employees also need to be free to not only make decisions on the processes of their own work, but to also train and develop skills while having open dialogue with their managers to express concerns.³¹ When initiatives are taken to improve conditions in supplier factories, recognize cultural differences, and encourage feedback from employees that are familiar with local customs, applying a code of conduct can be more effective.³²

²⁹ Ibid.

³⁰ Ibid.

³¹ Sandra Waddock and Charles Bodwell, “Philosophy Applied II: Total Responsibility Management,” in *Rising Above Sweatshops: Innovative Approaches to Supply Chain Management*, ed. Laura P. Hartman, Denis G. Arnold, and Richard E. Wokutch (London: Praeger, 2003), 131.

³² Ibid.

IV. Adidas's Current Collaborative Approach to Supply Chain Management

The approaches that multi-national corporations such as Adidas take towards implementing corporate social responsibility and supplier codes of conduct have a direct effect on the productivity of the supplier employees and ultimately the success of the MNC for whom they make products. While apparel companies often use international labor standards (most notably the ILO's core labor standards) as a foundation for their own codes of conduct, effectively implementing codes of conduct among suppliers across multiple countries requires applying practices that take local cultural sensibilities into consideration.³³ The application of practices has to be modified to the unique situations found in different countries, cultures, and factories with employees from different ethnic backgrounds. For example, child labor has been a reoccurring issue for the apparel industry. When establishing relationships with suppliers in Vietnam and Thailand, Adidas was faced with the challenge of making the most sensible approach to child labor within the contexts of these particular countries and cultures where child labor was a significant problem. Looking at these cases can act as a microcosm of the broader initiative that Adidas has taken to collaborate with suppliers to ensure that standards are not only being followed but are built upon and continually improved.

Diana Winstanley, Joanna Clark, and Helena Leeson conducted a case study of Adidas's sourcing operations in Vietnam and published their findings in 2002. This case study effectively showcases Adidas's collaborative approach to implementing their Workplace Standards while taking unique cultural challenges into consideration as the researchers not only spoke with key stakeholders but visited Adidas's supplier factories themselves to see the implementation of

³³ Ibid.

Adidas's Workplace Standards firsthand. Adidas began sourcing for shoe production in Vietnam in 1996 in the middle of Vietnam's export-based economic boom.³⁴ When the research was being conducted in 2000, Adidas had six footwear suppliers in Vietnam. While Adidas had the benefit of sourcing from newly-built factories that already had basic facilities and assembly line production equipment, it also faced the challenge of preventing child labor violations. Vietnam as a new market economy had a vast young labor force. According to Vietnam's 1999 census, 65% of Vietnam's population of 76.3 million was under the age of 25.³⁵ Vietnamese labor law required that children could not be employed unless they had completed primary education around the age of 15 or 16, but with such a large percentage of young people that could be easily exploited for low wages, child labor and underpaid labor were serious problems. Adidas's own Workplace Standards stated that suppliers could not "employ children who are less than 15 years old or who are younger than the age for completing compulsory education in the country of manufacture where such age is higher than 15."³⁶ It would seem at first that Adidas's Workplace Standards were perfectly compatible with the local labor laws in Vietnam. However, Adidas decided to implement a minimum age of 18 in their Vietnamese suppliers. It would seem arbitrary for Adidas to set its minimum age three years above Vietnam's minimum and its own minimum, but this decision was reached through discussion with the managers of the supplier factories who believed that this minimum was appropriate for the dexterity needed to perform tasks in footwear assembly. The minimum age of 18 also provided a safety buffer for employing new workers given how difficult it was to acquire proof of an employee's age. When establishing relationships with these six suppliers, initial audits uncovered a significant number

³⁴ Diana Winstanley, Joanna Clark, and Helena Leeson, "Approaches to child labour in the supply chain," *Business Ethics: A European Review*, Vol. 11, 3 (2008), 215-220.

³⁵ *Ibid.*

³⁶ *Ibid.*

of underage workers. The Nan Kang Shoe Factory for example (which employed 3,500) had twelve girls between the ages of 14 and 15 and 130 more workers that were between the ages of 16 and 17, most of whom were employed after presenting fake documents.³⁷ Adidas had to do something with all these underage workers, but outright termination would have harmed the children that were acting as important sources of income for their families and terminating the relationship with the supplier would have harmed all the employees. Furthermore, none of the twelve girls had completed Vietnam's compulsory education requirements and most of the younger employees had some illiteracy. For the sake of ensuring that the girls completed their compulsory education and that literacy was improved among younger workers so that they could follow safety instructions effectively, Adidas implemented an educational program that allowed the girls to pursue education full-time while being compensated their wages, and a part-time program was introduced for the workers that were 16 and 17 years old. With wages on the line, Adidas also needed to implement enforcement mechanisms to ensure that the workers were adhering to the program. For the 14-15 year old girls specifically, Adidas and the factory managers made an arrangement for the girls to take classes on the factory premises. This would ensure that the factory could keep track of the girls' attendance so that they couldn't work elsewhere while continuing to be paid by the Nan Kang factory. Adidas commissioned an NGO that specialized in "project implementation in the field of corporate social responsibility" to provide instructors and design the curriculum.³⁸ Adidas encountered these challenges as a result of Vietnam's extensive young workforce and addressed them accordingly so that Vietnamese laws were adhered to with caution and compulsory education requirements were fulfilled. In doing so, Adidas engaged with the supplier's employees, and worked with the young employees

³⁷ Ibid.

³⁸ Ibid.

so that they could continue to provide income for their families instead of being terminated outright. Furthermore, Adidas's educational program in Vietnam, while being their first major attempt at such a program, set a precedent for other apparel companies. So much so that Nike established a similar "work + education" program with their suppliers in Vietnam in 2001.³⁹

In the case of Thailand, industry was more developed than Vietnam, but workers in supplier factories in Thailand encountered barriers to collective bargaining and representation to promote their own interests.⁴⁰ As a result, Adidas's concerns with sourcing from Thailand included the exploitation of migrant workers, workers being paid below Thailand's minimum wage and outright nonpayment, and workers commonly exceeding the maximum working hours outlined in Adidas's Workplace Standards.⁴¹ Laura Hartman, Richard Wokutch, and J. Lawrence French consulted with staff from Adidas's Liason Office in Bangkok and Kitty Porter, who was Adidas's Regional Manager of Social and Environmental Affairs for South Asia (ultimately acting as an overseer for the implementation of Adidas's Workplace Standards across the region), to conduct a case study of Adidas's implementation of its Workplace Standards in Thailand. The first concern with sourcing from suppliers in Thailand was prevalent age discrimination. Workplace Standards staff noticed that some supplier managers preferred hiring workers from 18-25 years old and let go current employees once they exceeded this age range.⁴² These discriminatory practices were done with the assumption that people within this age range had better dexterity for the assembly-related tasks in the supplier factories.⁴³ However, these

³⁹ Laura P. Hartman, Richard E. Wokutch, and J. Lawrence French, "Adidas-Salomon: Child Labor and Health and Safety Initiatives in Vietnam and Brazil," in *Rising Above Sweatshops: Innovative Approaches to Supply Chain Management*, ed. Laura P. Hartman, Denis G. Arnold, and Richard E. Wokutch (London: Praeger, 2003), 149-150.

⁴⁰ "Adidas-Salomon: Child Labor and Health and Safety Initiatives in Vietnam and Brazil," 202-209.

⁴¹ *Ibid.*

⁴² *Ibid.*

⁴³ *Ibid.*

practices were detrimental to employee morale given the sense of impending termination. To address this, Workplace Standards staff encouraged the managers to hire workers and retain them based upon their abilities and implemented various tests that the managers could use to assess dexterity instead of age. Adidas also wanted to pay special attention to the treatment of migrant workers in factories, as migrant workers are historically exploited and abused due to their legal vulnerability and lack of language skills. Effectively monitoring suppliers and conducting interviews with employees without obstruction were crucial to ensuring worker well-being, and challenges had to be overcome in order to do so. Initially, factory managers were given 24-hours notice of an impending inspection, but concerns were raised that by giving notice, managers could rush to make their factories presentable for the Workplace Standards inspectors.

Switching to entirely unannounced inspections was considered as an alternative but doing so could be wasteful if factory managers are not on hand at any given time. Workplace Standards staff decided to reach a compromise by fostering cooperative relationships with managers and factory staff, so notification is given on a case-by-case basis for logistical needs and confidential interviews are conducted with employees if there is suspicion of a cover up. In order to ensure that truthful information is gathered from employees, Adidas carefully developed a technique to conduct interviews. Workplace Standards staff in Thailand took note that workers tended to be hesitant if they were interviewed in the factory, even if the interview was conducted privately without a manager present. Furthermore, Workplace Standards staff were concerned that workers would not feel comfortable sharing their grievances on factory grounds given the possibility that factory managers could take note of who speaks with inspectors to later harass them. While Thailand has labor laws that provide protection for workers who file complaints, labor advocates in Thailand have complained that the enforcement of such laws is lax, and

unions are uncommon in Thailand so union protection is unavailable. Workplace Standards staff also received feedback from young female employees (who made up a majority of the factory workers in Thailand) that they were more comfortable being interviewed by other young women. In response, the Workplace Standards team developed a preference for interviewing employees off-site outside of work hours, monitoring factory operating hours to arrange interviews, and having female Workplace Standards staff on hand to conduct interviews when needed.⁴⁴ Taking these extra measures ensures that employees are given anonymity and are free to be truthful in their feedback without fear of retaliation from factory managers, and collaborating with these employees enables Adidas to narrowly target improvements and subsequently improve worker morale and productivity.

In addition to addressing specific issues that arise from establishing relationships with suppliers and auditing suppliers on a case-by-case basis, perhaps the most crucial aspect of Adidas's approach to maintaining long-term relationships with suppliers is that they consider "the auditing process to be part of the training process."⁴⁵ Adidas's goal with their collaborative approach is to foster a long-term relationship where suppliers can become self-sufficient in following and building upon Adidas's codes of conduct in a way that suits their own needs. Having self-determined suppliers means that Adidas can devote less resources to constant monitoring and auditing, which saves them money. To reach this point with a supplier, Adidas takes a proactive approach of suggesting solutions when issues are identified through an auditing process, and managers can be trained by Workplace Standards staff (or a third-party contracted by Adidas) to anticipate and prevent these issues in the future.⁴⁶ While some countries that

⁴⁴ Ibid.

⁴⁵ Ibid.

⁴⁶ Ibid.

Adidas sources from may be behind in industrialization or underdeveloped in worker safety laws and enforcement, Adidas fulfills these shortcomings by providing “best practices training.”⁴⁷ Through this training, supplier managers and staff are trained in the most up-to-date safety protocols that align with Adidas’s own Workplace Standards. Furthermore, Adidas aims for factory managers to think of themselves as crucial in the implementation of Adidas’s Workplace Standards, and ultimately their engagement is what will enable their factories to have self-governance and sustainability. To get managers involved in the auditing and implementation processes, Adidas encourages factory owners and managers to accompany factory visits, give feedback on the audits conducted, participate in the training programs that Adidas arranges, attend supplier conventions that are hosted by Adidas, and consult with Adidas’s Workplace Standards staff constantly.⁴⁸

With what seems like so many manhours and resources being poured into these initiatives to promote adherence to Adidas’s Workplace Standards, what prevents suppliers from becoming discouraged by the possibility of having to absorb such costs? For suppliers, providing amenities (such as a dining hall with a variety of food choices, entertainment through the provision of TVs, group sports activities, on site banking services and more) for employees can contribute greatly to worker well-being and productivity.⁴⁹ However, providing these amenities can be costly, and suppliers may be discouraged from cutting into their profits to do so. To alleviate these costs, Adidas subsidizes a significant portion of the costs of these amenities (determined on a case-by-case basis) with the understanding that providing them will contribute to employee productivity, increase the supplier’s output, and will generate greater revenue for Adidas by extension.⁵⁰

⁴⁷ Ibid.

⁴⁸ Ibid.

⁴⁹ “Compliance, Collaboration, and Codes of Labor Practice: The Adidas Connection.”

⁵⁰ Ibid.

Furthermore, Adidas staff advises supplier managers in offsetting the cost of amenities by taking additional cost saving measures in other areas, such as energy consumption and improving lean production.⁵¹

⁵¹ “Supply Chain Approach.”

V. Tangible Improvements Attributed to the Collaborative Approach

Adidas's footwear production, most of which is sourced from Asia, has seen a steady increase from 171 million pairs in 2009 to 403 million in 2017.⁵² Furthermore, increases in productivity led to a steady increase in global sales and net revenue which has grown from 5.83 billion euros in 2000 to 21.2 billion in 2017.⁵³ While Adidas's steady growth in revenue, production, and market share since the 1990s correlate with its ongoing implementation of its Workplace Standards and its collaborative approach to supply chain management that started in 1997, it is difficult to derive causation. However, Stephen J. Frenkel and Duncan Scott's 2002 study of Adidas's approach to supply chain management provides a key comparison between the performance outcomes of implementing the collaborative approach and the compliance approach with two distinct suppliers. Anecdotal as it may be, Frenkel and Scott's study does illustrate how implementing the collaborative approach has tangible benefits for productivity, quality of output, earnings, and safety incident rates over the conventional compliance approach.

Frenkel and Scott's study examined the performance of two of Adidas's footwear suppliers based in China (labeled "Alpha" and "Beta" for anonymity) from 1998 to 2000 by consulting with Adidas's staff, supplier managers and staff, and monitoring output and performance data.⁵⁴ Both suppliers were based in Guangdong province in China, and both manufactured footwear for Adidas exclusively. Both factories were of similar size and were equally up to date in their assembly line equipment, however Alpha had a slightly larger workforce. Both suppliers were tasked with implementing Adidas's Workplace Standards and

⁵² "The adidas Group's footwear production worldwide from 2008 to 2017 (in million pairs)."

⁵³ "The adidas Group's net sales worldwide from 2000 to 2017 (in million euros)," *Statista*, accessed December 7, 2018, <https://www.statista.com/statistics/268416/net-sales-of-the-adidas-group-worldwide-since-2000/>.

⁵⁴ "Compliance, Collaboration, and Codes of Labor Practice: The Adidas Connection."

codes of conduct in 1998. For the sake of comparison, Frenkel and Scott's study was designed to ensure that the suppliers were "matched in regard to variables that might account for performance differences."⁵⁵ However, Frenkel and Scott acknowledged that the data collected had shortcomings in that Alpha provided more data than Beta, and interviews with factory employees were arranged by managers, so there was potential for biases. The sample size of employees that were interviewed was also limited due to time constraints. To account for these externalities, additional steps were taken by double checking data with Adidas's engineering staff to ensure accuracy, and carefully conducting factual interviews to limit biases as much as possible.⁵⁶

The success of the collaborative approach relies just as much on the supplier's participation as it does on Adidas's initiative. The key difference between Alpha and Beta that led to different performance outcomes was that Alpha was very receptive to Adidas's Workplace Standards and Beta was not. As an Adidas regional labor practices staff member stated in reference to Beta, "They saw us as interfering and could not understand why we wanted to improve labor practices...They seem to follow whereas at Alpha they will make improvements without us asking to."⁵⁷ Herein lies the distinction, while Beta complied with Adidas's Workplace Standards, Alpha took a proactive approach to collaborate and improve upon the tools and training given to them by Adidas. After conducting interviews with Adidas staff and the supplier managers, Frenkel and Scott summarized the observed managerial differences between Alpha and Beta as such: Alpha's managers had the objective of improving worker well-being while also improving lean production, and constantly communicated with Adidas and their

⁵⁵ Ibid.

⁵⁶ Ibid.

⁵⁷ Ibid.

workers to achieve these goals. Alpha's managers also emphasized "fairness" by balancing out the discipline of workers with rewards and recognition for good performance and communication.⁵⁸ Beta's managers had the objectives of improving output, performance, cost reduction and profitability, but had less communication with their workers and with Adidas. At Alpha, senior managers communicated weekly with Adidas's Workplace Standards staff, held weekly meetings with middle management to keep them updated on new initiatives and needed changes, and the lead manager made the effort of visiting with and speaking to the employee collective regularly. Alpha published a monthly magazine that was distributed to all employees to keep everyone up to date on developments. In contrast, Beta's senior managers had less regular contact with Adidas's staff, and the general manager visited the factory only once a month. Furthermore, Adidas sought to work with both suppliers to introduce new amenities for workers (such as company shops, TVs, and regular events), and while both suppliers did make these provisions, Alpha expanded their initiatives with Adidas to provide amenities that suited their migrant workers and their female workers by providing a wider selection of food in the factory dining hall that catered to the diverse tastes of the migrant workforce and provided nursing rooms for young mothers. Adidas's regional health and safety manager stated that "at Alpha, management is more open and willing to accept our ideas and they invest a lot of resources in health and safety. They have a good labor practices team and their senior managers communicate with the workers. At Beta, the general manager isn't there much of the time...And they are not so willing to put resources into aspects relating to the code."⁵⁹ Alpha's senior managers' support of Adidas's values of open communication with workers and consideration of workers as key stakeholders in the implementation of a code of conduct reflect Alpha's "stronger

⁵⁸ Ibid.

⁵⁹ Ibid.

emphasis on managing human resources” in its business strategy.⁶⁰ This emphasis on worker and manager involvement aligns with Adidas’s intentions with its collaborative approach, so while both Alpha and Beta started off with rather poor working conditions when they began working with Adidas, Alpha was quick to participate in collaborating with Adidas. Beta’s senior managers saw Adidas’s Workplace Standards as an imposition and did not view the employees on the factory floor as key stakeholders in the process of implementing Adidas’s code.

To summarize, the differences in reception of Adidas’s Workplace Standards by the senior managers at Alpha and Beta allowed Adidas to establish a collaborative relationship with Alpha, while resistance from Beta resulted in a compliance-based relationship. Those differences are:

- Beta, while not outright opposed to implementing Adidas’s Workplace Standards, didn’t fully embrace the process of implementation, which discouraged Adidas’s involvement.
- Beta’s strategy prioritized productivity and efficiency but did not consider assembly line employees as key stakeholders. Alpha saw employee engagement as crucial to their strategy and the success of their initiatives and communicated with employees and Adidas accordingly.
- Beta’s senior managers sought to abide by Adidas’s standards, while Alpha made Adidas’s standards their own, and invested in building upon Adidas’s suggestions to improve productivity and worker well-being.

Given this distinction between Alpha’s close collaboration with Adidas and Beta’s reluctant compliance with Adidas’s standards, it should be unsurprising that at the conclusion of

⁶⁰ Ibid.

Frenkel and Scott's study, Alpha had better performance, productivity, efficiency, and fewer workplace incidents than Beta, even though both suppliers started out with similar conditions and externalities were accounted for to the best of Scott and Frenkel's abilities. These differences in performance are outlined in Table 1, taken from Scott and Frenkel's study.⁶¹ In summary, Alpha's better outcomes can be attributed to its management's participation in a collaborative relationship with Adidas, through which they were responsive to suggestions for improvement from Adidas's Workplace Standards staff, invested in having a dedicated monitoring team, and communicated with Adidas and their employees every step of the way. While Beta also saw improvement in their workplace conditions, they did not make as much progress as Alpha due to Beta's managers' skepticism of Adidas's Workplace Standards, settling for reactive compliance rather than proactive collaboration.⁶²

⁶¹ Ibid.

⁶² Ibid.

	Beta	Alpha
Productivity (average no. of pairs of shoes per 8 hours per employee)	1.68	2.48
Quality:		
• Factory reject rate %	0.75	0.25
• Customer reject rate %	0.24	0.46
Average earnings:		
• in RMB per month as at January 2000	884	983
• average annual increase in % (1998-2000)	4	7
Health and safety:		
• Total recordable incident rate	250	170
• Lost time injury rate	157	2
Labor turnover (annual %):		
• 1999	75.0	36.5
• 2000	43.6	23.8

Note: Productivity and quality data are for 12 months 2000. The *factory reject rate* is the proportion of shoes rejected by factory inspection as a proportion of total production. The *customer reject rate* is the percentage of shoes returned by customers that have been sold. *Earnings*—exchange rate RMB 8.2794 = US\$1.00. *Health and safety* a) and b) figures are for 6 months, June-December, 2000. The *total recordable incident rate* is the number of working hours lost due to employees suffering from fatalities, injuries, occupational illness and doing restricted work divided by the total number of hours worked in the same period multiplied by 1,000,000. The *lost time injury rate* is the number of hours lost arising from fatalities and “lost workday cases” divided by the number of hours worked over the same period multiplied by 1,000,000. *Labor turnover* is calculated as the sum of the number of voluntarily and involuntarily departures from the workplace in that year as a proportion of the average total employment in the same period.

Table 1. Beta and Alpha Comparative Performance Data (2001)

VI. Shortcomings of Adidas's Collaborative Approach

While the anecdotal examples of Adidas's initiatives to address geographically unique cultural variables and issues showcase the effectiveness of closely communicating and collaborating with supplier factory managers and employees, Adidas's collaborative approach is not without its shortcomings. The success of Adidas's collaborative approach is contingent upon a supplier's willingness to participate and engage with Adidas constantly. In the case of the suppliers from Scott and Frenkel's study, they produced exclusively for Adidas which gave Adidas immense leverage in making sure that the suppliers implemented its Workplace Standards effectively.⁶³ However, footwear factories for example often have multiple contracted buyers and devote assembly lines to each. Supplier factories that have to take multiple buyers into account, each with their own codes of conduct that may be vastly different from one another, may be spread too thin to devote sufficient manpower and funding to implement Adidas's Workplace Standards effectively.⁶⁴ While Adidas may have leverage to ensure that its Workplace Standards are applied to the assembly lines that are dedicated to their products, it lacks the ability to ensure that employees servicing assembly lines for other buyers are following similar practices. Even if Adidas has a stake in a supplier factory, the lax approach of other stakeholders could allow for safety violations in other areas of a factory, and Adidas would face consequences by extension. With the understanding that collusion with its competitors in an effort to close the gaps in the different codes of conduct can benefit its reputation, Adidas has

⁶³ Ibid.

⁶⁴ "Approaches to child labour in the supply chain."

joined buyer coalitions, like the Fair Labor Association, with other MNCs to coordinate their initiatives and improve workplace conditions in supplier factories that sell to multiple buyers.⁶⁵

⁶⁵ “Adidas-Salomon: Child Labor and Health and Safety Initiatives in Vietnam and Brazil,” 202.

VII. Conclusion

Returning to the introductory questions of how Adidas's collaborative approach functions and how has Adidas achieved high marks in corporate social responsibility, these questions can now be answered.

Adidas's collaborative approach contrasts with more conventional approaches to supply chain management by taking a holistic approach to improving workplace conditions instead of having a narrow goal of imposing rules. Adidas's collaborative approach sees supplier managers and workers as key stakeholders in the implementation process, and encourages open communication between employees, managers, and Adidas staff so that Adidas can effectively identify what improvements need to be made and can effectively meet the needs of the workers that make Adidas's products. Auditing and enforcement mechanisms are in place to make sure that Adidas's standards are being followed, but Adidas's ultimate goal through the collaborative approach is to foster self-sufficient suppliers that not only adhere to Adidas's standards of their own accord, but truly make the standards their own by adapting them to suit unique regional and cultural challenges.

Since Adidas works closely with suppliers to meet the needs of workers that have varying socioeconomic and ethnic backgrounds, the general well-being of these workers improves and results in tangible benefits for supplier productivity and efficiency. While all these initiatives are not done for the sake of marketing, Adidas set a precedent for the sportswear and apparel industries by promoting transparency in their supply chain and by making information on their suppliers and processes publicly available. Such measures resulted in high scores from external assessors of corporate social responsibility initiatives such as the CHRB. While Adidas's

collaborative approach is not without fault, as the effectiveness of this approach relies heavily on supplier participation and incentives are not always strong, Adidas tries to remedy this shortcoming by coordinating with its competitors so that suppliers that source to multiple buyers are not spread thin to adhere to multiple and vastly different codes of conduct.

The collaborative approach effectively improves worker well-being, provides educational and training opportunities for managers and workers, and ultimately is the backbone of Adidas's success. If workers feel engaged and heard, their productivity improves, supplier output increases, and Adidas's sales increase. Clearly the collaborative approach enables Adidas to grow as a company, but it also enables the employees in all levels of Adidas's supply chain to grow with Adidas.

VIII. Bibliography

- “The adidas Group’s footwear production worldwide from 2008 to 2017 (in million pairs).” *Statistica*. <https://www.statista.com/statistics/227015/the-adidas-groups-footwear-production-worldwide/> (accessed October 21, 2018).
- “The adidas Group’s net sales worldwide from 2000 to 2017 (in million euros).” *Statistica*. <https://www.statista.com/statistics/268416/net-sales-of-the-adidas-group-worldwide-since-2000/> (accessed December 7, 2018).
- Alam, Julhas. “Bangladesh marks 5 years after garment factory collapse.” *The Star Tribune*. <http://www.startribune.com/study-bangladesh-must-do-more-to-protect-garment-workers/480639371/> (accessed November 5, 2018).
- “Apparel.” *Corporate Human Rights Benchmarks*. <https://www.corporatebenchmark.org/apparel> (accessed October 21, 2018).
- Fenkel, Stephen J. and Dunkan Scott. “Compliance, Collaboration, and Codes of Labor Practice: The Adidas Connection.” *California Management Review*, Vol. 45, 1 (2002): 29-44.
- “Global Factory Lists.” *Adidas Group*. <https://www.adidas-group.com/en/sustainability/compliance/supply-chain-approach/#/uberwachung/> (accessed October 7, 2018).
- Hartman, Laura P., Richard E. Wokutch, and J. Lawrence French. “Adidas-Salomon: Child Labor and Health and Safety Initiatives in Vietnam and Brazil.” In *Rising Above Sweatshops: Innovative Approaches to Supply Chain Management*, edited by Laura P. Hartman, Denis G. Arnold, and Richard E. Wokutch, 149-150, 202-209. London: Praeger, 2003.
- Heumann, Ina. “I bet you didn’t know this about Jesse Owens.” *Adidas Blog*. August 10, 2011. <http://blog.adidas-group.com/2011/08/sport-history-jesse-owens/> (accessed November 6, 2018).
- The Infographics Show. “Is Nike More Successful than Adidas? Shoe/Apparel Company Comparison.” YouTube video, 3:15-4:00. December 13, 2017. <https://www.youtube.com/watch?v=P1siFAXZeaU>.
- Liedka, Jeanne. “Constructing an Ethic for Business Practice: Competing Effectively and Doing Good.” In *Leading Corporate Citizens: Vision, Values, Value Added*, edited by Sandra Waddock, 265-272. Burr Ridge, IL: McGraw-Hill, 2002.
- “Supply Chain Approach.” *Adidas Group*. <https://www.adidas-group.com/en/sustainability/compliance/supply-chain-approach/#/uberwachung/> (accessed October 7, 2018).

Waddock, Sandra and Charles Bodwell. "Philosophy Applied II: Total Responsibility Management." *In Rising Above Sweatshops: Innovative Approaches to Supply Chain Management*, edited by Laura P. Hartman, Denis G. Arnold, and Richard E. Wokutch, 131. London: Praeger, 2003.

Winstanley, Diana, Joanna Clark, and Helena Leeson. "Approaches to child labour in the supply chain." *Business Ethics, A European Review*, Vol. 11, 3 (2008): 215-220.