Walmart, Inc. Quality Practices

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Introduction

This paper will, as initially described in the Project Proposal from the beginning of the semester, seek to explore and analyze research and other sources as they may relate to Walmart, Inc.'s quality management practices. Specifically, this paper will examine Walmart's supply chain quality practices, employee training and/or benefits quality practices, benchmarking quality practices, and consumer-oriented quality practices. After these four research sections, we will split into a discussion section, analyzing leadership quality practice trends based on the research conducted in the previous sections. Finally, we will summarize the foregoing five sections.

Supply Chain Quality Practices

Walmart's efficiency in supply chain management is one of the reasons why it has dominated, and is dominating, the retail industry. To remain competitive, Walmart needs to keep innovating and implementing new programs and initiatives. As technology continues to become more advanced, the complexity of making supply chain quality practices does as well. This section will explore some of that technology that helps Walmart maintain their superior supply chain quality practices, how Walmart uses technology to manage the flow of information throughout their stores and business, use of technology originating from Blockchain to track their inventory, including mobile apps designed for managers and customers, and tightening supplier delivery requirements.

Management of information flow.

Walmart's suppliers can now use their smartphones to quickly and easily access inventory information. Walmart is using a product produced by Digimarc, a technology firm specializing in, essentially, fancy bar codes. The top of the line "Digimarc Barcode" is invisible, and can be placed

on almost any product at almost any point. The consequence of this is that the barcodes can literally cover the product nearly in its entirety (Digimarc Corporation, 2015). This relates to efficiency in supplier management for two reasons. First, it saves Walmart money initially in scanning and inventory, and second, it allows for that inventory information to be effectively transmitted to suppliers, allowing them to help Walmart monitor its inventory.

Savings to scan.

Walmart uses its workforce to manually scan much of the product going onto its shelves. The article specifically cites that this technology of omnipresent invisible barcodes, Walmart is able to save time in scanning. Normally, an employee would need to pull product from the shelf in-aisle and scan each product, making sure that the scanner fully registers each product's barcode. However, this technology allows for the employees to skip that pulling step, saving time, which saves money. The senior Vice President of the corporation who owns Digimarc, Bill Atkins, was quoted in the article:

"Time is costly for our users, and now with easier, faster scanning we are delivering an app that makes a big difference to the bottom line when it is more important than ever for retail reps to achieve more tasks in shorter periods of time" (Digimarc Corporation, 2015).

This quote clearly shows the emphasis that Digimarc believes companies like Walmart place on saving time, and Walmart itself has certainly not been shy about its goal to reduce all waste, and in this case, excess time is a waste, and increase efficiency to an almost-militant level.

Effective transmission to suppliers.

Combined with the lower cost to actually take inventory, Digimarc is also involved with the implementation of SPARC. SPARC is a phone app. Far from being Angry Birds, it has a real business purpose. By using the data collected with the fancy bar codes, SPARC is able to keep suppliers up to date about what products are being sold and where. This process allows Walmart's suppliers to manage their own levels of supplies at individual locations, and help Walmart in its own supply management. In efforts to retain Walmart's business, suppliers are willing to spend time and resources to make decisions regarding supply chain management for Walmart (Digimarc Corporation, 2015). Furthermore, the article details that the fancy invisible barcodes can also be scanned with a phone, presumably directly into the app, cutting out a requirement to transmit data from a scanner to a phone to an app, and instead being uploaded directly into the app at the source (Digimarc Corporation, 2015).

Blockchain data sharing.

Following a recent major outbreak of E. coli in romaine lettuce in the US food industry, Walmart now requires their supply chain of leafy vegetables to adopt digital traceability systems and to join IBM's developed "Food Trust" blockchain platform by January 2019 (Corkery & Popper, 2018). Walmart had been conducting a testing program that has proven that, by using blockchain technology to trace food, it will reduce the time that it previously took to trace a package of mangoes, from farm to store, down from the current system, which uses ledgers of paper, that may take days or weeks, to just two seconds flat (Aitken, 2017). Blockchain is best known for cryptocurrencies, but as corporate America progresses, companies are finding its form of linking of a database is an underutilized and superior technology that can be used in other industries. The

idea behind it is fairly simple, because it's much like how we can track packages. The details of food shipments, especially those that are at a high risk of dangerous disease outbreaks, will be traced throughout the entire supply chain. Distributors and retailers can confidently validate details like the source, where it was inspected, how it was stored, and easily document each time it makes a move along the supply chain (Corkery & Popper, 2018). Even small details like the aforementioned make a big impact on record-keeping (Banker, 2018). This has huge implications for the retailer, because now that it's easier to identify a problem, the retailer, like Walmart in this instance, will have reduced waste expenses and other costs, due to a potentially expensive need to recall entire product lines of food due to contamination. This saves the company and the farmers money, it helps aid in food safety agencies' investigations, and keeps people safe. It also gives the marketable idea of "fresh food" some degree of honesty, because it allows consumers to have more confidence in the quality of their food, knowing systems like this are being implemented widely and successfully. This interchange of electronic business information cuts out traditional complex and fragmented data sharing systems by using a better-standardized format which gives the company more insight on their supply chain operations, and allows for more transparency into how the food is handled (Aitken, 2017). Keeping a tighter control on this part of the value chain will most certainly have a profound effect on the business and the industry itself. Blockchain practices establish ownership that some experts say cannot be faked, and, in turn, help eliminate certain costs with its peer-to-peer structure (Nash, 2018). Through the implementation of Blockchain, Walmart will be able to pinpoint certain batches of product in a matter of seconds if a situation were to arise, which in turn, will lower their costs and allow them to continue their dominance in the retail industry.

Supplier delivery requirements.

This section will explore two separate articles that address "On Time, In Full" practices (hereinafter "OTIF" practices) from two different points in time. The first article will address a period in time before OTIF was established, and the second will address a period in time after OTIF was established. The first article will show expectations, and the second will address future expectations and past results.

2017 OTIF expectations.

The first article was published in Bloomberg in June of 2017, and outlined goals for OTIF, which was set to begin in August of that year, and then additional goals to be met by February of 2018. The next article suggests that the latter goals for February of 2018 were not met, or were extended at the very least to April of 2018. Bloomberg's Matthew Boyle reports in 2017 that Walmart was launching OTIF when OTIF was not a well-known acronym or practice. In fact, the article cites from a business consultancy source, 8th & Walton's director of client services Joel Graham, that OTIF "[was] the hottest subject out there [in the business world in June of 2017]" (Boyle, 2017). Walmart's program would require precise deliveries on specific days in full. The numbers given accept no leniency on the order being incorrect, and allow suppliers to deliver on time a target 75% of the time in order to consider the practice successful. There is no mention of any difference in practice between large and small suppliers (Boyle, 2017). Walmart cites a goal to, by February of 2018, reach a target time consistency of 95% (Boyle, 2017). The evidence will suggest that said goal was extended until April.

2018 OTIF results.

The second article was published in the Wall Street Journal in January of 2018. Here, authors Sarah Nassauer and Jennifer Smith detail a conference scheduled for late January or early February of 2018 where Walmart would announce a plan allowing a one-to-two day window for large suppliers to arrive on time a target 85% of the time, while allowing small suppliers a 50% target. The article cites a previous plan allowing large suppliers 75% and small suppliers 33% (Nassauer & Smith, 2018). This article agrees with the previous that the fine for not arriving on time would be 3% of the shipment's value. Both articles provide that Walmart's motivation is to motivate suppliers, and that they hope to never have to charge the fine (Boyle, 2017; Nassauer & Smith, 2018).

Synopsis of "Supply Chain Quality Practices."

Throughout this section we addressed numerous supply chain practices that Walmart is either currently incorporating, or will be incorporating in the near future. Each one of them is driving the already dominant company that is Walmart into the future. Through the use of the Digimarc barcodes, they are not only able to lower costs, but also receive real time information from products that are on the shelf. Coupled with SPARC, Walmart's suppliers are able to manage their own levels of supplies in individual locations. With "Blockchaining" seeing more results in other industries than cryptocurrencies, Walmart aims to have multiple of their suppliers imputing their data into the platform. This will not only save them time when trying to find where any contaminated produce may originate from, but also save them money in the long run. Walmart continues to improve their supply chain practices for the better. These practices that they have put in place allow them to stay ahead against their competitors.

Employee Training and/or Benefits Quality Practices

As with any successful business or corporation, proper employee training is crucial to seeing not only the forecasted results, but also in preventing employee errors and accidents on the job. With Walmart being one of the most dominate retail chains throughout the country, it is no surprise that they would put an emphasis on employee training to help drive their success. Throughout this section, we will take a look at the different ways Walmart is preparing their employees to help drive their business.

Training through a mobile app.

One main issue with any workplace is employee accidents on the job. Some of these "accidents" could be prevented by proper and engaging employee training methods. With this day and age with great focus on social media and receiving pertinent information in short tidbits, it is no surprise that lengthy, drawn-out training sessions are not achieving the desired results. With shorter employee attention spans, companies like Walmart are looking to rethink their corporate training. Their solution to this issue is with the use of a mobile app that is being used by 80,000 of the Walmart's warehouse and logistics workers (Clancy, 2017, p. 30). The training app features three minute presentations on how to perform routine tasks for warehouse and logistics-style workers. The article cites tasks like driving a forklift. The app includes tests to then see whether or not the employees have retained the training information. In a 6-month span of testing with 5,000 employees, reportable injuries fell by about 50% (Clancy, 2017, p. 30). On average, corporations will spend roughly \$1,000 per employee on training and certifications (Clancy, 2017, p. 30). Through the use of this new training app, Walmart is able to cut training time and costs, and any

reduction in costs and overhead is certainly something that Walmart has always been interested in for their day to day operations.

Lessons from the military.

As with any corporation, or in this case, retailer, the business hopes to ensure that their stores are being lead in the right direction by upper management at each location, and at each level. Leadership from managers is one of the foundations that ensures everything is running smoothly. With the ever fast-paced growing retailer that is Walmart, there has been, and will continue to be, the need for qualified managers to step in and lead the newly developed stores (Pollitt, 2013, p. 12). With this in mind, Walmart has launched a leadership academy in order to develop highpotential candidates, which would then increase the speed managers are able to be promoted. The academy, which started out as a trial run, will soon become the center for developing leadership skills for upcoming managers with plenty of opportunities for promotion (Pollitt, 2013, p. 12-13). Walmart chief executive, Bill Simon, enlisted the help of business-execution expert, the business McKinney Rogers' Damian McKinney. The academy's approach is based on leadership lessons from the military. McKinney, the firm's UK Marine founder's words on its business strategy explained, "The military has substantial expertise in developing individuals who can quickly execute complex missions in the most demanding environment" (Pollitt, 2013, p. 13). The article later goes on to explain that the leadership academy delivers a greater impact and relevance then the generic managerial training could ever offer. Senior vice-president of talent development at Walmart, Celia Swanson provides an inside perspective on how Walmart views their employees:

"We know our associates are our greatest asset. Investing in the development of our future leaders is essential. Through the leadership academy, we have developed talented leaders, managers and associates around the country, providing immersion training and broader development for our leaders." (Pollitt, 2013 p. 13)

From this program, we see an example of how Walmart's efforts towards its employees are designed to improve the quality of training that those employees receive.

Synopsis of "Employee Training and/or Benefits Quality Practices."

From the section above, we have seen that Walmart has put a great deal of resources into setting up their employees for success. With the rapid growth that Walmart has experienced from the early days, it's no surprise that Walmart needs quality leaders to achieve their ever growing goals. The training practices that were discussed in the above section show that not only does Walmart greatly value their customers, but also their employees. Well trained employees/managers have become one of their greatest assets for their business. Walmart has even realized that the old generic, long winded training is growing more obsolete with today's current workforce, and have focused instead on integrating technology, and using other military-inspired techniques to generally improve their employee quality.

Benchmarking Quality Practices

In this section, we were hoping to take a look at some of the benchmarking practices that Walmart may incorporate to assess their competitiveness against other retailers in the business. However, after researching the topic, we were unable to find any relevant sources or information pieces suggesting that Walmart benchmarks itself against its competition. With that being said, we are able to come to one rational explanation for this: Walmart is so dominant in their market that they do not benchmark against their competitors; but, their competitors benchmark against them.

Simply said, Walmart is the benchmark. Throughout this section, we will instead take a look at how certain other business can benefit from benchmarking their own practices against the quality practices that Walmart incorporates, especially in the realm of supply chain quality management, which practices have propelled Walmart to a best-in-class retailer.

Walmart, leading example

In an article published by "Benchmarking: An International Journal," authored by Cherie Blanchard, Clare L. Comm, and Dennis F.X. Mathaisel (2008), the authors bring up a point that most of us already know as a common fact today. Walmart is widely considered a best-in-class company for their supply chain management. It is no surprise that the practices that Walmart incorporates have enabled them to achieve leadership in the retail industry for decades (Blanchard, Comm, & Mathaisel, 2008, p. 166). The article is a composition on how certain service industries, like healthcare, can learn from example that Walmart sets based on their enormous success sustained over the years from their development of "best practices" (Blanchard, Comm, & Mathaisel, 2008, p. 167). There are four key practices, according to the article, that other industries should learn from Walmart in order to add value to their own industry and business. Of these four key practices in the following subsections we will be taking a look at two out of the four practices explained in the article.

Strategic alignment.

Through strategic alignment, Walmart was able to recognize the importance of controlling and containing supply chain costs (Blanchard, Comm, & Mathaisel, 2008, p. 168). With a company having their main selling point being "everyday low prices," it was, and is, crucial for them to

minimize costs in every way humanly possible in order to produce those discounted prices.

Walmart's distribution is second to none in the best-in-class practices.

Logistics & distribution.

Related to this, Walmart is very meticulous when it comes to entering a new geographical area. The new area needs to be able to contain enough stores to support a distribution center, which is not a light undertaking (Blanchard, Comm, & Mathaisel, 2008, p. 168). This distribution center is crucial with Walmart as inventory at the store level is kept to a minimum "just-in-time" activities, while any inventory is kept in the distribution center, ready to be shipped off to surrounding stores. Small, frequent deliveries to the surrounding stores lower their shipping costs, and coincide with their "everyday low prices" (Blanchard, Comm, & Mathaisel, 2008, p. 171). With the dominance that Walmart has had in the retail industry, other industries should certainly learn a thing or two from them inasmuch as efficiency of supply chain is concerned. The article suggests that, with any company, one must examine their industry and their own business strategy, and then determine if a supply chain management technique will support their own company goal (Blanchard, Comm, & Mathaisel, 2008, p. 175).

Synopsis of "Benchmarking Quality Practices."

As a whole, Walmart's implementation of their supply chain management practices have resulted in, not only their continuous growth, but also their sustainability. The article suggests that industries other than retail could learn from Walmart's example, and gauge whether or not some of their practices could better their business.

Throughout this section we revisited the theme of our first section by examining some of the supply chain management practices that Walmart incorporates to help sustain their dominance in the market. We also saw that some of their practices could be used by other industries, and certainly the retail industry, to benchmark their own supply chain management practices. It is also clear through paucity of literature that Walmart is such a driving force that it does not benchmark against their competitors. Based off of this information alone, as well as common sense for a world leader, there is significant reason as to why there is no relevant evidence to show that Walmart benchmarks its business against other competitors in any way. If other services can gain an insight to better themselves in a completely different industry, Walmart has revised and toned their current strategy to a point where they all they need to worry about is how to improve what they are already currently doing.

Consumer-Oriented Quality Practices

This section will explore various ways in which Walmart works with and around its consumers to provide them with a quality experience in stores. This section is written with the understanding that, while all of the foregoing sections contribute to the consumer's perception of quality in some direct or indirect way related to product quality, some actions made by the company are specifically targeted at influencing the consumer directly without necessarily considering the product sold. Some sources explored in this section include information about how managers are expected to interact with consumers and evidence to show that the company may be moving away from direct customer interaction in the future.

Manager interaction.

In his 1998 article on total quality environment paradoxes, Dr. Kenneth R. Thompson makes multiple mentions of Walmart's managers' interactions with customers. This knowledge comes from his first hand experience working with Sam Walton and other top Walmart executives (1998, p. 64). As Dr. Thompson explains as a preface to his paradoxes, Sam Walton appears to be a paradox in and of himself, inasmuch as a manager is expected to act. As Dr. Thompson writes:

"Consider, for example, the paradox that might be stated as 'the best control comes from not controlling.' ...Sam Walton...was a living demonstration of this contradiction. Walton was normally in his office only from Thursday through Saturday noon." (1998, p. 62)

It seems difficult to comprehend how a highly successful manager might spend little more than 2.5-3 days in office, and perhaps more of a mystery as of yet is how this might relate to consumer quality practices. The resolution to this lies with Sam Walton's answer to a question about how he could possibly run his stores whilst out of the office for most of the week.

Sam's belief was that it was factually impossible for him to run Walmart while in his office because he believed that his brand represented a "consumer-focused organization" (Thompson, 1998, p. 62). What he meant by this was that he needed to spend time, as a top-level executive, a C-Suite executive, on the floor of his stores, interacting with customers. In fact store managers at that point in Walmart's history, according to Dr. Thompson, were without offices to force them to do what Sam Walton did by choice - interact with the floor (1998, p. 62). Without that interaction, follows the argument, how can one hope to keep up with the expectations of those who use the store to shop?

A movement away from direct consumer interaction.

To find evidence for Walmart's journey away from consumer quality practices, we examine an article published in the 2017 California Management Review by the Hass School of Business at Berkeley. The article is co-authored by Dr. Andrew Spicer and Dr. David Hyatt and explores Walmart's efforts to sell "sustainable" products. The meaning of "sustainable" in this context refers to environmental or socially-responsible sustainability. Drs. Spicer and Hyatt explain that their study focuses explicitly on a specific objective to "sell products that sustain[] people and the environment." (p. 117).

In discussing their findings, the authors examine a few dimensions. Among them are dimensions representing Walmart's focus on suppliers, and Walmart's focus on consumers. The authors discuss that their study determined that, while Walmart's sustainability movement gives suppliers a chance to stand out on their website for meeting certain criteria, their communication of sustainability to their customers leaves much to be desired (Spicer & Hyatt, 2017, p. 131).

The authors explain that Walmart's initiative appears to try to train its suppliers to cut costs and increase efficiency in many of the same ways that Walmart has (Spicer & Hyatt, 2017, p. 133). Though not argued by the authors, there seems to be some element of cynicism present in that there is some implication that Walmart's primary concern throughout all of this is cutting costs for suppliers (and themselves by proxy) rather than any primary goals for sustainability.

On the supplier front, Spicer and Hyatt report that the standard for sustainability were based upon an overall assessment, rather than product by product. "Suppliers that scored at least 80% or ranked top in their category were deemed 'sustainability leaders." Every product offered by that supplier is given a badge, visible to consumers (Spicer & Hyatt, 2017, p. 130). If this practice were truly a consumer-focused practice, then these badges would need to be vetted as to not miscommunicate

certain products as sustainable. However, because the practice is focused on the suppliers' benefit, consumers were often found to be confused or misled with the badges the way that they are currently implemented. For example, the article cites an instance where a massive roll of bubble-wrap was given the "sustainable" badge (2017, p. 131). This more current example contrasts the older example from Sam Walton, and shows that, while Walmart may have a history of focusing on the consumer, more current practices slide the focus onto the supplier first.

Synopsis of "Consumer-Oriented Quality Practices."

From the sections above, we have shown that Walmart has a significant history of forcing its lower-level managers into interacting and realizing its desire to have an organization that is focused on the consumer. We have also shown that there is some evidence to suggest that the upper-level managers of Walmart have shifted focus from Sam Walton's view of an entire company focused on customers first to a much more supplier-oriented organization. Notably, there was no evidence from the last subsection to suggest that a consumer focus has been removed from the repertoire of lower-level managers at Walmart, only that the organization's current overall strategy seems to favor suppliers over customers. Thus, the initial article, much older than the last one, while historical, has some likelihood, shown by the paucity of current literature on any potential change in management style or philosophy, to still be relevant today.

Leadership Quality Practice Trends

This section will explore the previous sections, and attempt to organize the various elements identified by the research to be "trends" in the leadership practices conducted by Walmart. The sections examined will be: under "Supply Chain Quality Practices," subsections "management of

information flow," "Blockchain data sharing," and "supplier delivery requirements"; under "Employee Training and/or Benefits Quality Practices," subsections "training through a mobile app" and "lessons from the military"; under "Benchmarking Quality Practices," subsection "Walmart, leading example"; and, under "Consumer-Oriented Quality Practices," subsections "manager interaction" and "a movement away from direct consumer interaction."

Trend of supplier-focus.

As multiple sources have explained thus far (Spicer & Hyatt, 2017; Boyle, 2017; Digimarc Corporation, 2015; Corkery & Popper, 2018; Aitken, 2017; Banker, 2018; Nash, 2018; Nassauer & Smith, 2018), Walmart Inc. puts a great deal of emphasis upon managing its suppliers. Based on the sheer number of citations alone, not to mention conventional wisdom and common knowledge on the subject, one would expect there to be emphasis from the leaders of the company on extraordinary supplier quality. It should be noted that, in the context of this paper, a "supplier" in the eyes of Walmart is not a manufacturer of a part, it is instead the provider of the fully-formed products that line the shelves each day. There is specific evidence, explored in the "Consumer-Oriented Quality Practices," section under subsections "manager interaction" and "a movement away from direct consumer interaction," that the culture of Walmart is continuing to focus on suppliers' benefit, perhaps even to the nominalization of consumer importance; a notion that would likely shock many conventional business ideals of focusing a majority of efforts on the customer.

Trend of technology-focus.

Multiple subsections have examined ways in which Walmart's leadership is pushing technology to the forefront of their company's way of doing business. Under the "Supply Chain Quality Practices" section, subsection "managing information flow," we detail an app called "SPARC" (Digimarc Corporation, 2015). Under the same section, subsection "managing information flow," we detail a way that Walmart created a new technology using data sharing to track product (Digimarc Corporation, 2015). Under the "Employee Training and/or Benefits Quality Practices" section, subsection "training through a mobile app," we detail an employee training app (Clancy, 2017, p. 30). While the exact uses of each of these items is different, one is for supplier use, another for company use, and a third for employee training, each has one thing in common. Technology. It is clear through these trends in literature, all within a few years of today, that Walmart, not surprisingly, appears to be trending in the same direction that the rest of the world is going insofar as they are investing in technological intelligence, integration, and efficiency in their company.

Trend of leadership-focus.

This is a brief section, mostly acknowledging the trend of leadership that exists insofar as Walmart being a world leader in cost-reduction and efficiency, especially as has been shown in the "Benchmarking" section, under the exclusive subsection, "Walmart, leading example." Synthesizing the source from that section with the information present and explored from the earlier sections on supply chain management, it is clear that Walmart and its leadership trends overall towards an emphasis on their supply chain quality.

Synopsis of "Leadership Quality Practices."

Based on analyses conducted on the literature referenced herein, we have presented evidence backed by the references listed herein to suggest various trends (supplier-focus, technology-focus, and leadership-focus) in Walmart's management. While no supporting literature was found to

perfectly support our analyses presented, we argue here that the only trends presented are so overwhelmingly likely and/or obvious based on logical processes, or otherwise supported by empirical evidence, as to be only foolishly rejected on the grounds of lack of verbatim support.

Conclusion

Throughout this paper, we have provided support for the following ideas: That Walmart Inc. manages its supply chain quality through use of technology and supplier policy; that Walmart Inc. uses technology and other tactics to train its employees in order to increase quality; that Walmart Inc. is such a leader in its field as to be a major source of other companies' benchmarks; that Walmart Inc. historically focused on consumers, but now may be shifting focus onto suppliers over consumers; and, that Walmart Inc. has several trends in the way its leaders manage quality, such as supplier-focus, technology-focus, and leadership-focus in its field.

Bibliography

- Aitken, R. (2017, December 14). IBM & Walmart Launching Blockchain Food Safety Alliance
 In China With Fortune 500's JD.com. *Forbes*. Retrieved from
 https://www.forbes.com/sites/rogeraitken/2017/12/14/ibm-walmart-launchingblockchain-food-safety-alliance-in-china-with-fortune-500s-jd-com/#1260d8bc7d9c
- Banker, S. (2018, July 25). Blockchain Gains Traction in the Food Supply Chain. *Forbes*.

 Retrieved from https://www.forbes.com/sites/stevebanker/2018/07/25/blockchain-gains-traction-in-the-food-supply-chain/#19c036c61cf9
- Boyle, M. (2017). Wal-Mart Cracks the Whip on Suppliers. *Bloomberg Businessweek*, (4531), 14–15. Retrieved from http://libproxy.lib.ilstu.edu/login?url=https://search.ebscohost.com/login.aspx? direct=true&db=bth&AN=124228144&site=ehost-live&scope=site
- Blanchard, C., Comm, C. L., & Mathaisel, D. F. X. (2008). Adding value to service providers: benchmarking Wal-Mart. *Benchmarking: An International Journal*, *15(2)*, 166–177. https://doi-org.libproxy.lib.ilstu.edu/10.1108/14635770810864875
- Clancy, H. (2017). A New Mind-Set. Fortune, 175(1), 30. Retrieved from https://searchebscohost-com.libproxy.lib.ilstu.edu/login.aspx?

 direct=true&db=bth&AN=120357390&site=eds-live&scope=site
- Corkery, M., & Popper, N. (2018, September 24). From Farm to Blockchain: Walmart Tracks Its

 Lettuce. *The New York Times*. Retrieved from

 https://www.nytimes.com/2018/09/24/business/walmart-blockchain-lettuce.html
- Digimarc Corporation. (2015, December 10). Rockfish Integrates Digimarc Software for Faster Mobile Product Scanning, Greater Inventory Insight for Walmart Suppliers. *PR*

- Newswire US. Retrieved from https://search.ebscohost.com/login.aspx?

 direct=true&db=bwh&AN=201512100800PR.NEWS.USPR.SF78333&site=eds-live&scope=site
- Foster, T. S. (2013). *Managing Quality: Integrating the supply chain* (Sixth Edition). Brigham Young University: Pearson.
- Nash, K. (2018, June 25). Walmart-Led Blockchain Effort Seeks Farm-to-Grocery-Aisle View of Food Supply Chain. *Wall Street Journal*. Retrieved from https://blogs.wsj.com/cio/2018/06/25/walmart-led-blockchain-effort-seeks-farm-to-grocery-aisle-view-of-food-supply-chain/
- Nassauer, S., & Smith, J. (2018, January 30). Wal-Mart Tightens Delivery Windows for Suppliers. *Wall Street Journal*. Retrieved from: https://www.wsj.com/articles/wal-mart-tightens-delivery-windows-for-suppliers-1517266620
- Pollitt, D. (2013) Lessons from the military speed leadership development at Walmart: Academy accelerates high-potential people's rise to the top. *Human Resource Management International Digest, (4), 12.* https://doi-org.libproxy.lib.ilstu.edu/10.1108/HRMID-04-2013-0014
- Spicer, A., & Hyatt, D. (2017). Walmart's Emergent Low-Cost Sustainable Product

 Strategy. *California Management Review*, 59(2), 116–141.

 https://doi.org/10.1177/0008125617695287
- Thompson, K. R. (1998). Confronting the Paradoxes in a Total Quality

 Environment. *Organizational Dynamics*, 26(3), 62–74. https://doi.org/10.1016/S0090-2616(98)90015-8