

1. Introduction

LoadProof (<https://loadproof.com/features>) is a Centralized cloud based photo documentation System for supply chain. LoadProof is built on the premise that photos and videos are vital documentation that serve as compelling proof of important operations that are performed in the supply chain within and across organizations when fulfilling customer orders, while meeting contractual obligations that organizations have committed to operate by as they transfer merchandise across different parties that partake in Supply Chain functions and operations. These photo and video data should not be stored in someone's smartphone or inbox or in their computer, instead should be stored in a Centralized Enterprise system, where the data can be pushed into super-fast, stored securely, accessible to all stakeholders in an org as well as facilitates super-fast retrieval and sharing with utmost ease. LP is also an Enterprise System of record for photo/video documentation and is as important as an ERP (Enterprise Resource Planning) which is an enterprise system of record for critical documents such as Purchase Orders, Sales Orders, Contracts between parties etc. that have tremendous legal ramifications, also as important as a WMS (Warehouse Management) that hold indispensable information such as shipment/fulfilment data of orders. Like how Instagram, Facebook, Snapchat etc have evolved into social media platforms/systems that enable individuals to showcase how pretty they are/how pretty their clothes are/how pretty the cosmetic they wear is, LoadProof is a similar Enterprise system that holds similar photos, but for a different reason, not so much for show off, but to serve as proof even in the court of law when there is a dispute between organizations while they perform many facets of the functions and operations, as well as for visibility within the Supply Chain.

Recently American Textile implemented LoadProof in four facilities. This document describes the benefits that were accrued and the associated cost savings.

2. American Textile – Company Background

Known to be one of the largest bedding companies across the United States and the largest supplier to many worlds' best-known retailers. The company is a manufacturer of mattress, pillow protectors, mattress pads, pillows, sheets, weighted blankets. American Textile Company was founded when the 5 Ruttenberg brothers started a textile factory in downtown Pittsburgh, Pennsylvania in 1925. The company has over 1,000 employees. The company has over 90 years of experience in business.

Their First product was a mattress cover sold to Sears & Roebuck in 1930. Ironing Board Cover patented by Charles Ruttenberg in 1939. American Textile Company expanded their operations, moving their office to Lawrenceville, PA in 1950. American Textile manufactures American flags after Hawaii and Alaska joins the Union in 1959. Reid Ruttenberg was named CEO of the company in 1964. New Merchandise was manufactured in 1966. The company received





American Textile LoadProof Rollout - Case study

recognition as an exceptional supplier to one of the largest retailers in 1968. Jack Ouellette joined the team in 1976. American Textile Company completed 60 years of business in 1985.

Excellence awarded to the company as first ever Target Vendor in 1988. The city of Pittsburgh created American Textile Day in 1990. The company opened their first showroom in New York City in 1991. Jack Ouellette was named president of the company in 1992. American Textile Company expands internationally, opening a manufacturing plant in El Salvador in 1994. The company launched the first allergen barrier bedding brand named AllerEase in 1995. AllerEase made its debut in New York City at the Textile Market in 1996. 3M personal care and American Textile Company became partners in 1997. American Textile Company completed 75 years of business in 2000. The Company's headquarters moved to Duquesne, Pennsylvania in 2003. The company expanded their business with their sleep pillow manufacturing operation in Duquesne in 2006.

American Textile Company expanded their operations with a new facility located in Salt Lake City, Utah in 2007. A new facility was expanded by the company in Dallas, Texas in 2008. The company was again recognized for its innovative bed bug barricade construction in both pillow and mattress covers in 2010. American Textile Company expanded manufacturing operations with a new facility located in Tifton, Georgia in 2011. Lance & Blake Ruttenberg were named as CEO & Executive Vice President of the company in 2013. American Textile Company launched AmeriFill, a contract manufacturing division in 2015. Sealy Trademark License Agreement expands includes pillows, matters pads, and comforters. American Textile Company earned Walmart Supplier of the year award in 2019. AllerEase Ultimate patents for innovative bed bug barrier mattress Protector on 2020.

American Textile Company product line:

Brands:

1. AllerEase: Manufacturer's mattress, pillow Protectors, pillows, comforters and Mattress pads.
2. Sealy: Manufacturer's mattress pads, pillows, mattress, mattress, pillow protectors, sheets and weighted blankets.
3. Tempur-pedic: Manufacturer's mattress pads, mattress, pillow protectors and sheets.
4. Tranquility: Manufacturer's weighted blankets.

3. American Textile supply chain Macro Picture

American Textile Company has Brands, manufacturing facilities and offices globally. Their main aim is to invest on their customers with initiative, creativity and customer satisfaction. They have about 8 manufacturing facilities.

Location:

1. Duquesne, Pennsylvania: Headquarters and facilities
2. Tifton, Georgia: Distribution centre
3. Tifton, Georgia: Manufacturing
4. Dallas, Texas: Manufacturing
5. Salt Lake City, Utah: Manufacturing
6. Shanghai, China: Office
7. McKeesport, Pennsylvania: Distribution

4. American Textile Supply Chain – Macro Picture

The objectives to accomplish as part of this project are listed below.

1. American textile had been capturing photos of all the shipments leaving their facilities using their facilities smartphones of the loading personnel as well as using Digital cameras.
2. American Textile had been doing this to prove they have been doing their job right. The product has been leaving their facility in great condition. In case of any claims the warehouse team took a long time to capture the photos, the documents were not well organized, it took a very long time to retrieve the files.

5. What is the problem?

As a bedding supplier, the company was mainly focused on shipping good quality goods to their customers. Their products were in good condition when leaving the facilities but they were constantly receiving chargebacks. The company's auditing team had been making sure their bedding supplies which are shipped in cartons were having the accurate load count. Before using LoadProof, American Textile had been storing their audits in multiple spreadsheets. It took a long time to retrieve the photos in case of any chargebacks. American Textile had been following all the shipping guidelines but still received chargebacks due to damaged loads and lost thousands of dollars. They were using manual devices to capture their photos; retrieval of the captured photos was time-consuming.

6. What is the Solution?

American Textile's Compliance Manager Kristin Schmitt had found LoadProof through Google. So, Kristin Schmitt reached out to LoadProof by submitting a contact form. The LoadProof team performed a demo, and the American Textile company was convinced LoadProof is a good solution that not only solved all the current problems the company was facing, but also made capabilities that made everything related to capturing, retrieving, and sharing of the photos so easy.

American textile implemented LoadProof in their Duquesne, Pennsylvania facility. American Textile personnel started taking photos of their bedding products that left the facility daily. These photos were uploaded to the LoadProof cloud, and are available for American Textile when needed. In the event they need them, all they do is log on to LoadProof and type in the Bill of Lading Number to retrieve the specific Photos, so they can be demonstrating the condition of the bedding products that have left their facility. Later realizing all the benefits, American textile has turned on LoadProof in two other facilities as well, that are in Tifton, GA.



7. What are the capabilities that American Textiles obtained with LoadProof?

LoadProof is a Centralized Enterprise Photo Documentation system for the American Textile Supply Chain Network.

7.1 Super-fast Photo Capture

After downloading the LoadProof app from the app store, American Textile users were able to take photos using their mobile devices in just few seconds and then upload those photos to the LoadProof cloud, tagging them in the meantime with the appropriate contextual data elements. While uploading photos, Kohler personnel can add notes, and to tag photos with the following meta-data

1. User that captured the photos
2. Date when the photos are captured
3. Time when the photos are captured
4. GPS coordinates of the location where the photos are captured
5. Device that was used to capture the photos
6. Android OS version that was running in the device that was used to capture photos

Photos are captured in multiple resolutions based on the plan, the different resolutions available are Low Resolution, Medium Resolution, and High Resolution. Kohler uses high resolution photos to capture photos of the documents such as Packing Slip, Bill of Lading, and Trailer Inspection Form.

7.2 Super- fast Photo Retrieval

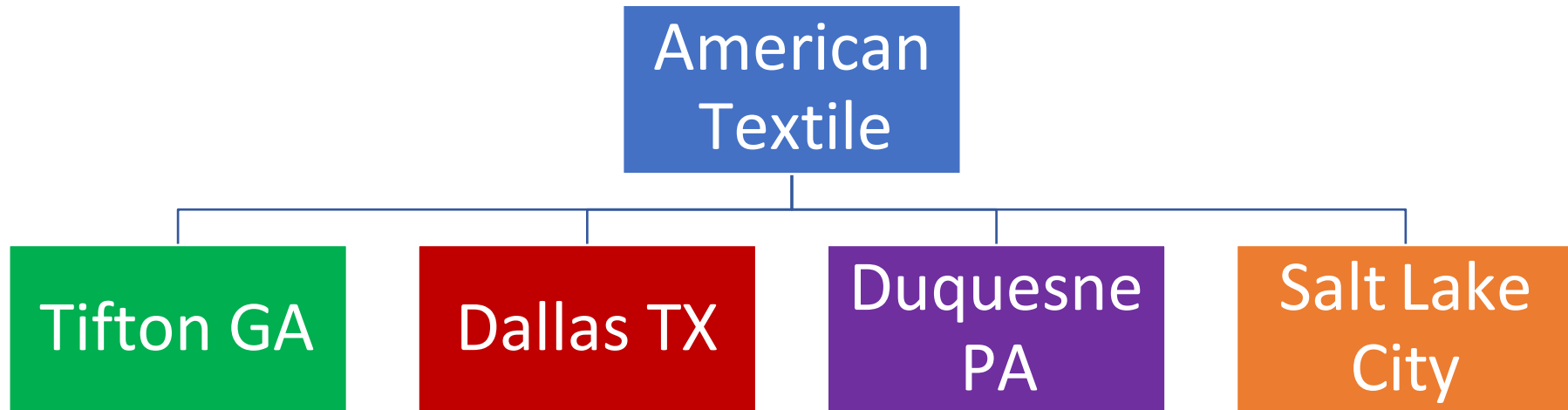
So now the photos are uploaded to the LoadProof cloud, users can easily log on to the LoadProof cloud through the browser and look up photos from wherever they need to. Users' logon to the cloud browser by providing their credentials, which includes a user id and password. Then users are able to input one or more of the contextual data that had tagged the Photos with and then perform a super-fast search. Now users can retrieve the Photos they need, drill down further and look at the Photos individually, zoom in, zoom out, save them locally if they need to (not recommended often) and also examine any notes that was entered and also look at the date stamp, time stamp, GPS coordinates etc. if there is a need to validate any of these data set for each Photo.

7.3 Super-fast Photo Sharing

After retrieving Photos users can share the Photos with anybody else, usually customers, vendors, partners, carriers, cross dock facilities, insurance companies, claims processors, Retailers, consolidation facilities etc. in multiple ways as listed below,

1. By generating one PDF document for the entire load
2. By sending the entire load to a customer by inputting an email address
3. By setting up a customer as a user within LoadProof
4. By generating a LoadProof URL for each Photo and then sharing that URL in an email
5. By generating multiple LoadProof URLs for all Photos and then sharing those URLs in an email

7.4 Supply Chain Network Architecture



1. American Textiles has corporate level users set up that have visibility to look at Photos across all the sites
 - a. These users could be Photo taker users or Photo viewer users or both
 - b. These users could also be Admin users or Non admin users
2. American Textiles also has Network level users that have visibility to look at the Photos at the Supply Chain Network level
 - a. These users could be Photo taker users or Photo viewer users or both
 - b. These users could also be Admin users or Non admin users
3. American Textiles has site level users that have visibility to look at the Photos at the site level
 - a. These users could be Photo taker users or Photo viewer users or both
 - b. These users could also be Admin users or Non admin users

7.5 Integrations with other Systems

1. LoadProof supports integration with other systems.
2. LoadProof is already integrated with Mercury Gate, MyEzClaims System.
MyEzClaims is a Freight Claims Processing system that helps shippers process their Freight claims with multiple carriers faster and easier.
3. LoadProof can be integrated by setting up a field to look up from any other system using a hyperlink so that LoadProof data can be pulled into a browser directly by clicking a link in the external system.

8. What are the benefits?

The results were fantastic, Kristin mentions in her testimonials, she was able to reduce the number of the freight claims and damage claims. Now they are not spending a lot of time just looking for photos. Now they are saving anywhere from 25 hours per week per facility on the time that is spent on organizing the photos and retrieving them when a retailer comes back for damage and freight claims.

8.1 Measurable Hard Benefits

1. Now there is one centralized place to get the Photos from, retrieval of Photos is super easy, American Textile personnel retrieve the Photos in seconds instead of spending hours and hours looking for those Photos. All the time related to this activity is saved now.
2. With the centralized sharing of Photos is super easy, all American Textile personnel have to do is put in the email address and push a button, the person on the other end gets the Photo within minutes and there are no more back and forth conversations wasting time. All the time related to this activity is saved now.
3. Our operators are doing a much better job, when everyone knows the quality of the work we are doing is documented. This directly results in improved customer satisfaction rating, in our customer satisfaction surveys we can see the improved customer satisfaction ratings and hence the relationship with the customer has improved significantly.
4. We are setting up our both internal and external customers as users within LoadProof, basically it is a self-service model, which helps tremendously because now, instead of they calling me, they can look and download the Photos whenever they need, life is so much better, everything related to the Photos is super easy. All the time related to this activity is saved now.
5. Before customers will call us and say, hey there was damage to the product they received, we wouldn't have anything to show that we did our job right, so all we can tell is hey you know what, we will replace that part for free. But now with LoadProof, we can show the Photos and say, hey we did everything perfectly and look at the condition of the product when it left our facility, so it is not our fault, it is not fair for us to replace this free. All the free replacements we have been doing have reduced now



6. With Freight Claims now by providing Photos we get our freight claims processed faster and also a smaller number of freight claims are rejected.
7. Also, now less loads are rejected, before when a load gets rejected, our only option is to pull the load back, which means our transportation cost doubled, fix the issues and we have to ship the product once again. Now with Photos we are able to prove that we did our job right, it is much easier to have that conversation in a rejected load scenario and also, we can push back on the customer as we have proof.

8.2 Intangible Soft Benefits

1. Now there is one centralized place to get the photos from, retrieval of photos is super easy, their personnel retrieve the photos in seconds instead of spending hours and hours looking for those photos. All the time related to this activity is saved now.
2. Everybody in the distribution centre feels good about the centralized picture documentation system. There is no more uneasy feeling in the stomach when a retail customer reports damage and submits a damage claim. Nobody is losing sleep over damage claims and rejected loads.
3. The visibility to the steps they do to ensure the product is shipped in excellent condition to all parties, customers, Carriers, internal stake holders such as the Salespeople, Customer Support people, Support Technicians, etc... makes them feel much Better, if there is any complaint, and they can immediately pull the photos and show them. The visibility has enhanced transparency, so the trust with their partners has improved significantly, their reputation in the industrial products supply has improved as well.
4. Inbound Quality Process – They have also started to take photos in their inbound loads for Quality Audits, with photos now we are able to push back on the vendors, and also, they understand the issues faster and better as photos are worth thousand words, these results in getting the quality issues addressed faster and better.
5. Ability to set up multiple facilities and multiple personnel at the facility level and at the corporate level is very helpful also. It has eliminated unnecessary calls quite a bit; nobody has to wait for the other person to inspect loads.
6. It made everyone in their supply chain to be accountable for whatever actions they do. This resulted in better discipline and work culture in their supply chain as a whole.

9. What are cost savings?

The savings are summarized below under different sections as appropriate.

9.1 Savings due to implementing a Centralized Enterprise class Documentation System for Photos & Videos

# of Hours saver per facilities per week	25
# of Facilities	1
Hourly rate of employees that manage these Photos	\$20
Total Savings in a year per facility	$25 \times \$20 \times 54 = \$27,000$
Total Savings across 3 facilities per year	$\$27,000 \times 1 = \$27,000$
Total Savings per Year within the entire Supply Chain Network	\$27,000

9.2 Savings due to Reduced Retailer chargebacks, also known as vendor chargebacks or retail chargebacks

Average # of Shipments in a month	400
# of Facilities in supply chain network	1
Average value of a shipment	\$20,000
Average value of all shipments in one facility in one year	$\$20,000 \times 400 \times 12 = \$96,000,000$
Average \$ lost (1% damages) due to retailer chargebacks, also known as vendor chargebacks or retail chargebacks	\$960,000
Average value of all shipments in one year within the Supply Chain Network across all sites	$\$96,000,000 \times 1 = \$96,000,000$
Average \$ lost due to rejected and damages claims submitted by customers (1% of Total)	\$960,000
With LoadProof that dollars lost is reduced to 20%, hence the savings are 80%	\$768,000

9.2 Savings due to less Rejected Loads and Reduced Damage claim submitted by customers

Average # of the shipments in a month	400
# of facilities in supply chain network	1
Average value of a shipment	\$10,000
Average value of all shipments in one facilities in one year	$\$10,000 \times 400 \times 12 = \$48,000,000$
Average \$ lost (0.5% damages) due to rejected and damages claims submitted by customers in one year in one site	24,000,000
Average value of all shipments in one year within the Supply Chain Network across 7 sites	$\$48,000,000 \times 1 = \$48,000,000$
Average \$ lost due to rejected and damages claims submitted by customers (0.5% of Total)	$\$24,000,000 - \$240,000$
With LoadProof that dollars lost is reduced to 20%, hence the savings are 80%	\$192,000

The dollars lost due to rejected loads and damages claims submitted by customers result in \$240,000

With LoadProof, that is reduced by 80%. Hence the savings are 80%, which is \$192,000

Industry Numbers: The damage claims vary around 2% as per industry

9.3 Savings due to faster processing of Freight Claims

Average # of the shipments in one facility in one year => 400 shipments per month x 12 months	4800
# of Facilities	1
Average # of shipments within the supply chain network in one year across 1 site	4800
Hourly rate of employees that manage these photos	\$20
Estimated # of shipments (1% of the total shipments) that results in Freight Claims within the supply chain network	48
Hours saved with faster processing of freight claims within supply network (12 hours saved per freight claim)	$48 \times 12 = 576$
Total dollars saved = 567 X \$ 20/hour	\$11,520
Total Savings/Year within Supply Chain Network due to faster Freight Claims Process	\$11,520

9.4 Total Savings per Year

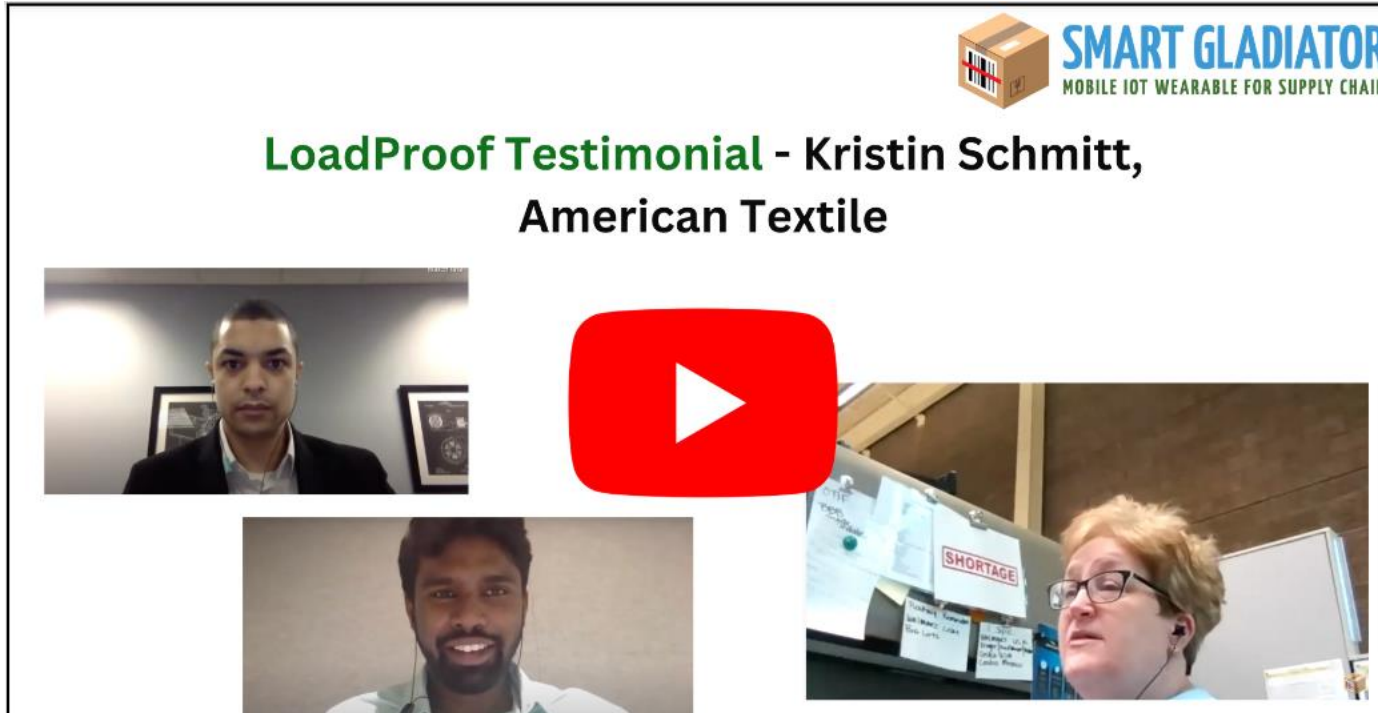
Savings due to Centralized Photo Documentation System	\$27,000
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Savings Due to reduced Retailer Chargebacks, also known as Vendor Chargebacks	\$768,000
Savings due to reduced rejected and damages claims by customers	\$192,000
Savings per Year due to faster processing of freight claims	\$11,520
Total Savings	\$ 998,520

10. User Testimonial

[Click this to watch the full Testimonial video.](#)



SMART GLADIATOR
MOBILE IOT WEARABLE FOR SUPPLY CHAIN

LoadProof Testimonial - Kristin Schmitt, American Textile

The video player thumbnail includes a large red play button in the center. To the left, there are two small video frames: the top one shows a man in a dark suit, and the bottom one shows a man with a beard and glasses. To the right, a larger video frame shows a woman with glasses in an office setting, with a 'SHORTAGE' sign visible on a bulletin board behind her.

11. Insights

1. If you are 3PL and if you ship to a Retailer on behalf of an OEM or a brand manufacturer, if something goes wrong, you will immediately get hit by both sides. In order to handle such situations where you need to prove to both the OEM/brand manufacturer, which is your customer as well as the retailer, having photo proof helps a lot. And especially when that photo proof is from an enterprise system where in the photos are tagged with user, date stamp, time stamp, GPS stamp, it adds even more credibility. Also, when that is automated such that the receiver themselves can take a look at it without you even lifting a finger, that makes the 3PL's life so much easier. You are not constantly wondering when you are going to get that chargeback email, instead you are focused on doing your job well and documenting everything you do with the utmost sincerity, so you can serve your customers well.
2. If you are a 3PL and somehow your customer has lost trust in your services, LoadProof is a powerful way to show them that you are doing a great job and in the end you care. By documenting everything you do in the form of photos and making it available to them in a form where they can very quickly search and look at the photos over a period of time, helps win that trust back and hence better customer satisfaction rating a long-term relationship.
3. Another unexpected benefit has been, when the warehouse operators in your facility realize that the quality of the work they do is being documented, they do a better job, their quality of work improves and that results in better customer satisfaction and better long-term relationship with the customer.
4. When the warehouse operators realize that they are doing a great job and know that their work is being documented with photo proof, the overall operator morale improves, also the operators trust the systems, the operations, the leadership team, and the overall management, resulting in better trusting, truly collaborating culture and work environment.
5. Ran into this question, where the warehouse operators asked, why we have to do this one extra step now, that is documenting everything we do with photos, once they saw how helpful it was, it helped us find the cause of our issues quickly, and also it protected them, especially when they did a great job, they realized spending that few extra seconds was worth it, because somebody cannot just like that blame them when the fault is not theirs. Once they realized this benefit, they embraced the system whole heartedly.