



Stryker Corporation LoadProof Rollout - Case Study

1. Introduction

LoadProof (<https://loadproof.com/features>) is a Centralized Cloud based Enterprise Photo Documentation System for Supply Chain. It is built on the premise that photos and videos are vital documentation serving as compelling proof of important operations performed in the supply chain within and across organizations. These operations may be related to fulfilling customer orders, meeting contractual obligations, or while transferring merchandise across different parties partaking in the Supply Chain functions and operations.

Photo and video data are too important to be left stored in someone's smartphone, inbox or computer. They should be carefully collected and saved in a professional Centralized Enterprise system, where data can be pushed into super-fast, stored securely, and be accessible to all stakeholders, while facilitating super-fast and secure retrieval and sharing.

LoadProof is as important for your organization 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, or a WMS (Warehouse Management System), that holds indispensable information related to orders shipment/fulfillment data.

Just like Instagram, Facebook, Snapchat etc. have evolved into platforms that enable individuals to showcase how pretty they or their clothes are, LoadProof is a similar Enterprise system that holds 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 their functions and operations, as well as for increased visibility within the Supply Chain.

2. Stryker – Company Background

Stryker is a multinational medical technologies corporation based in Michigan. It was founded in 1941 in Kalamazoo, Michigan, by Dr. Homer Stryker, orthopedic specialist and innovator who developed the Turning Frame, a mobile hospital bed that allowed for repositioning of injured patients while providing necessary body immobility; the cast cutter, a cast cutting apparatus that removed cast material without damaging underlying tissues; and the walking heel, among others. Today, Stryker is one of the world's leading medical technology companies committed to making healthcare better, by offering innovative medical products and services to improve patient and hospital outcomes. Stryker's products include implants used in joint replacement and trauma surgeries; surgical equipment and surgical navigation systems; endoscopic and communications systems; patient handling and





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emergency medical equipment; neurosurgical, neurovascular and spinal devices, as well as other medical device products used in a variety of medical specialties. Their top priority in delivering products and services is quality.

Stryker sells its products in over 100 countries through company-owned sales subsidiaries and branches as well as third-party dealers and distributors.

3. Stryker Supply Chain Macro Picture

Being one of the biggest manufacturers of medical supplies globally, Stryker runs manufacturing and warehousing operations all over the world. Their supply chain is complex and involves a series of partners across the globe. Stryker is very careful in selecting its partners and suppliers. Those that want to work with Stryker complete an onboarding process that identifies the requirements each must meet. Supply chain quality is overseen by Stryker's global supplier quality team, who are responsible for compliance to regulations and standards like ISO13485, monitoring, auditing and improving their suppliers. They are highly aware of their environmental impact too, and as such, pay great attention to eco-relevant aspects of sourcing, such as traceability of raw materials.

4. Stryker Supply Chain - Micro Picture

Known as a leading supplier of medical equipment, Stryker have warehouse facilities all over the USA. As suppliers of medical equipment, they must ship their high-value products, such as medical beds, wheelchairs, prosthetics, with perfect packing and strapping. They also provide bulk goods to physicians, clinics and healthcare facilities. The company had been using digital cameras to capture photos of the whole shipping process; they would then upload these photos for storage to a PC. In case of a claim, no one would be held accountable for the shortages the company would face, as finding the right document meant wasting precious man-hours and a lot of frustration.

Stryker has 10 warehouse facilities to ship across the US and also a systemic facility for drivers that make deliveries.



5. What is the Problem?

Being a leading medical equipment manufacturing company, Stryker are experts in packing and palletizing loads properly, shrink-wrapping shipments, adding dunnage bags and ensuring overall proper trailer conditions. However, they still kept losing money on claims. So, the main problem they faced was loss of revenues due to unjustified claims. These happened because:

1. Even though they were paying extra attention to safe and proper packaging, they couldn't deliver proofs of condition of products they had shipped due to lack of readily available evidence.

2. Despite the many internal procedures, some parts of the process were left undocumented, allowing for potential drop in quality of performance and accountability.
3. The long and tedious manual documenting processes made data retrieval very hard and time consuming, wasting precious man-hours.
4. Similarly, paper archives made internal audits very difficult, hindering process improvement and streamlining.
5. Organizing photos in file folders was hectic to manage. The main bottleneck here were photos arranged poorly and photos taken by one person using digital cameras and uploaded by another person. Organizing and managing records should be easier.

As warehouse managers, people at Stryker did their job right in shipping products at the right time and with proper packaging. Problems arose from insufficient supply chain visibility. They needed a single system to document outbound loads from where records could be easily retrieved when needed, reducing man-hours spent on searching for photos.

All of these problems would be solved with the introduction of a digital photo-documentation system.

6. What is the Solution?

Looking for a solution to reduce freight claims, Stryker and reliably investigate inaccurate order claims and d and minimize the man-hours wasted in the freight cla records could be easily searched and found when the

LoadProof ensures that the warehouse team is held accountable for all the steps of the process. They capture dunnage bags, trailer numbers, load strappings and any meta data they need. They also capture things like damages in the trailer (FDA Compliance) and inbound damages such as equipment fallen during transit. Their drivers use LoadProof to capture the Bill of lading (BOL), so they don't have to face issues like misplaced or lost BOL documents, potentially resulting in payment delays. They strive to make sure items are delivered in the same condition they left the warehouse. LoadProof improved their efficiency & reduced their labor cost.

Stryker have been using LoadProof for the following scenarios, taking full advantage of LoadProof:



6.1 Process simplification

With LoadProof, the cumbersome digital camera documenting processes were replaced with an easy digitized solution. This helped Stryker decrease their man-hours, redirecting the team's focus to more important aspects of the work, taking out some of the noise of extra work.

6.2 Accountability control

Once photos were embedded in the documents, an extra level of accountability was added to the process. Paper documentation was hard to trace, and took too much time to do so. Even then, it was not clear who did what part of the process, making it impossible to improve for the future.

6.3 Claims control

Thanks to LoadProof, they were finally able to put their unjustified claims under control – whenever a proof of condition was required by clients, they could easily produce it without spending the enormous amounts of time they used to waste on this process. This limited their unexpected costs, and produced savings.

6.4 Efficiency and quality

Being in the medical business, it is crucial for Stryker to ensure high quality of the goods they produce. LoadProof helps them perform audits of the production processes as well, ensuring proper production process performance.

7. What are the capabilities that Stryker gained with LoadProof?

LoadProof is a Centralized Enterprise Class Photo Documentation Solution for the entire Stryker Supply Chain Network.

7.1 Super-Fast Photo Capture

After downloading the LoadProof app from the app store, Stryker users could take photos using their mobile devices within just a few seconds and then upload these photos to a Cloud, by tagging them with the appropriate contextual data elements. While uploading the photos, the personnel could add notes, are tag the photos with the following data:

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

The photos could be captured in multiple resolutions based on the plan - Low, Medium or High Resolution.

Stryker use high resolution to capture photos of documents such as Packing Slip, Bill of Lading and Load Verification sheet.

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 log on to the cloud the 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 Enterprise Supply Chain Network Architecture

1. Stryker has corporate level users set up that have visibility
 - a. These users could be Photo taker users or Photo viewer users
 - b. These users could also be Admin users or Non admin users
2. Stryker also has Network level users that have visibility
 - a. These users could be Photo taker users or Photo viewer users
 - b. These users could also be Admin users or Non admin users
3. Stryker 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, My Ez Claims System. My Ez Claims 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.



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8 What are the Benefits?

LoadProof enabled the warehouse team to be accountable for all our efforts, says Jeremy Miller, Operations Supervisor in his feedback. Data to prove job was done right was readily available, but the consistency in completing internal checks improved as well. The performance improved, as did the cost saving from unjustified chargebacks.

8.1 Measurable Hard Benefits

1. Now that there is one centralized place to get the photos from, and retrieval of photos is super easy, Stryker personnel can retrieve photos in a matter of seconds instead of spending hours on end looking for them. All the time related to this activity is saved now.
2. Stryker operators are doing a much better job, now that everyone knows the quality of the work they are doing is being documented. This directly results in improved customer satisfaction rating: customer satisfaction surveys show improvement on customer satisfaction ratings and hence the relationship with the customer has significantly improved.
3. With the centralized sharing of photos made super easy, all Stryker personnel have to do is put in the email address and push a button, and the person on the other end gets the photo within minutes. There are no more back and forth conversations wasting time. All the time related to this activity is saved now.
4. They were setting up their both internal DCs as users within LoadProof. LoadProof is a self-service model for Stryker, helping tremendously because now, instead of calling other DC personnel, employees can look and download pictures whenever they need too. All the time related to this activity is saved now.
5. With picture documentation Stryker were able to capture the shipping conditions such as addition of load bar, air bags between the pallets and also the condition of the seals they fix in the outside door of the trailer. With these additions they were able to prove that they did their job right. It also made them much easier to have that conversation in a rejected load scenario and as they can push back with solid evidence.

8.2 Intangible Soft Benefits

1. Everybody at Stryker’s facilities feels good about the centralized Photo documentation system. Nobody is losing sleep over damage claims, accountability or quality issues.
2. The visibility gained in all the steps of the process to ensure production and shipping are going flawlessly is excellent. Processes are simplified across all teams, making the operations perform better. If there is any complaint, we can immediately pull the photos. The visibility has enhanced transparency, so the trust with our partners have improved significantly, our reputation in the industry has improved as well.
3. 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 respond.

9 What are the 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 saved per facility per week | 25 |
| # of Facilities | 10 |
| Hourly rate of employees that manage these Photos | \$40 |



| | |
|--|---------------------------|
| Total Savings in a year per facility | 25 X \$40 X 54 = \$54,000 |
| Total Savings across 10 facilities per Year | \$54,000 X 10 = \$540,000 |
| Total Savings per Year within the entire Supply Chain Network | \$540,000 |

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

| | |
|--|--|
| Average # of Shipments in a month | 120 |
| # of Facilities in supply chain network | 10 |
| Average value of a shipment | \$60,000 |
| Average value of all shipments in one facility in one year | \$60,000 x 120 x 12 = \$86,400,000 |
| Average \$ lost (0.5% damages) due to rejected and damages claims submitted by customers in one year in one site | 432,000 |
| Average value of all shipments in one year within the Supply Chain Network across 10 sites | \$86,400,000 x 10 = \$860,000,000 |
| Average \$ lost due to rejected and damages claims submitted by customers (0.5% of Total) | \$4,300,000 |
| With LoadProof that dollars lost is reduced to 20%, hence the savings are 80% | \$4,300,000 |
| With LoadProof that dollars lost is reduced to 20%, hence the savings are 80% | \$4,300,000 X 0.8 = \$3,440,000 |

The dollars lost due to rejected loads and damage claims submitted by customers results in \$4,300,000.

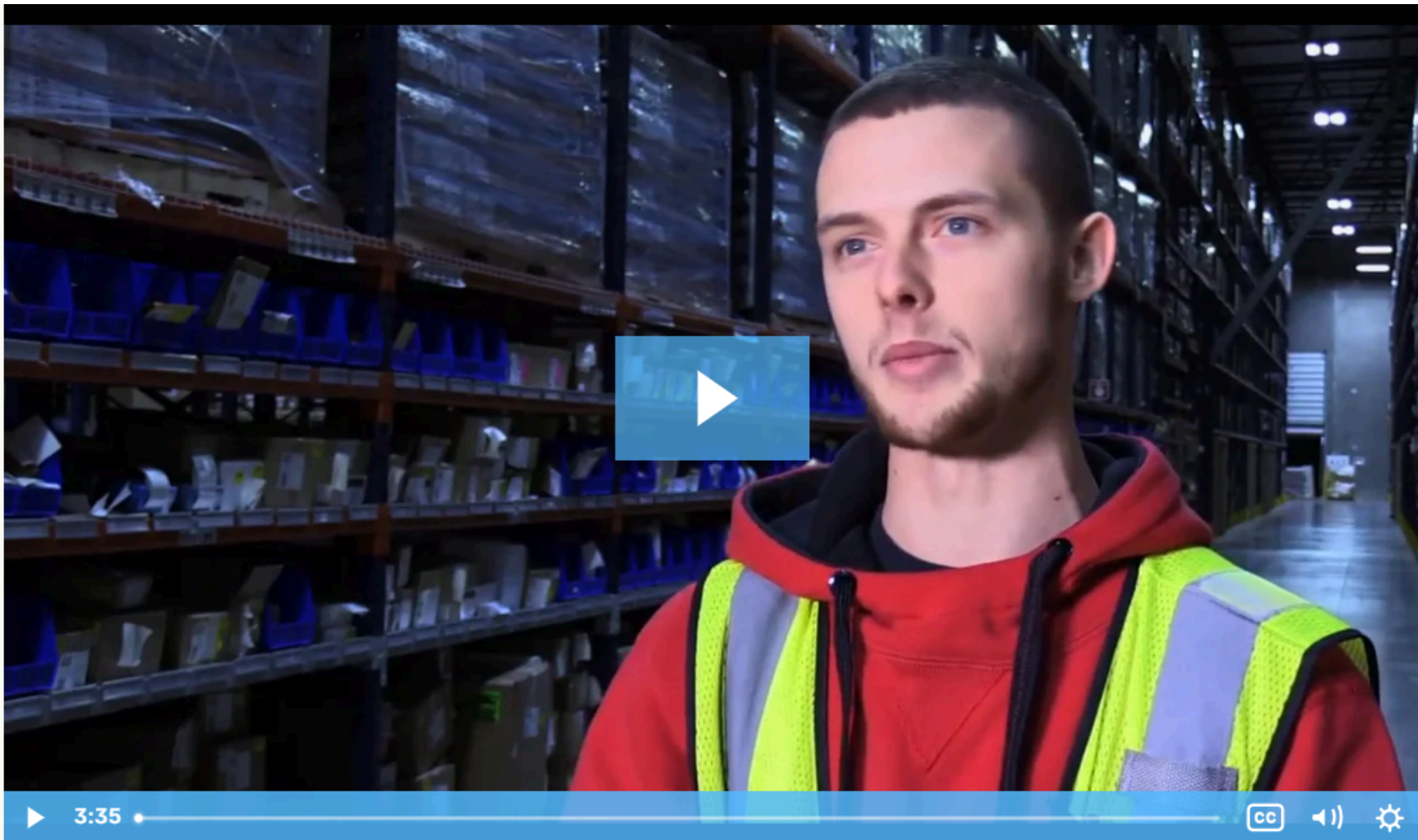
With LoadProof, that is reduced by 80%. Hence the savings are 80%, or \$3,440,000.

9.4 Total Savings per Year

| | |
|---|--------------------|
| Savings due to Centralized Photo Documentation System | \$540,000 |
| Savings due to reduced rejected and damages claims by customers | \$3,440,000 |
| Total Savings | \$3,980,000 |

10 User Testimonial

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



11. Insights

1. If you are a manufacturer and managing large operations, that include production plants and shipping facilities, digitizing your processes will save you both a lot of dollars and a lot of time and headaches. Having photos taken at every step of these processes, even though it might seem like an extra step at first, is actually a huge time-saver. The reason for this is that photos documented by LoadProof contain numerous metadata, such as user who took the photo, date stamp, time stamp, GPS stamp, etc. As such, these photos are stored in an organized manner in a safe Cloud. Hence, when you really need the photo



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as a proof, you can find it in a matter of minutes, instead of hours. The frustration poorly organized documentation brings will be gone forever with the proper photo-documentation in place.

2. Another unexpected benefit has been that, when warehouse operators in your facility realize that the quality of work they do is being documented, they do a better job, their quality of work improves and that results in better overall output.
3. 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.
4. Thanks to the custom categories feature, LoadProof can document any process you need – for safety or quality purposes. For example, if it happens that the quality of raw materials at your plant is sub-standard, you can easily document everything, with the corresponding metadata, and immediately share with your vendors to correct any faults.