



## United States Department of Agriculture

USDA Spots Trends in Real Time  
with G10 Data Analytics



Find out how USDA:

- Monitors the activities of each laboratory, machine and operator in real time
- Spots trends in performance over the long term
- Identifies potential problems and intervenes before they even occur



# USDA Gets Real-Time Data Analytics and Visualisation

The US Department of Agriculture (USDA) is considered a gold standard in the cotton industry due to its exacting attention to detail and ability to work quickly and accurately with huge amounts of data.

The primary objective of USDA's cotton grading and classing program is to facilitate interstate and foreign commerce by providing official quality determinations that aid in marketing. Its Agricultural Marketing Service (AMS) inspects, identifies and certifies that product quality is in accordance with official U.S. standards, establishing the quality of the current crop and of the annual carryover.

As part of its mission, USDA maintains a national database of cotton classification data for the current crop year and the previous four crop years.

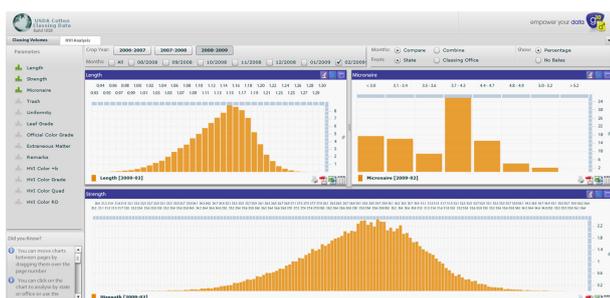
That information is gathered from each of the 10 regional classing offices that USDA maintains around the country. Virtually every single one of the millions of bales produced each year in the United States is classed at one of those offices, and the corresponding data meticulously stored and maintained.

To ensure consistency across all offices, the USDA takes random "checklot" samples each day from all 10 locations and sends them to Memphis, Tennessee to be retested. The data from these retests is pivotal to verifying accuracy and making adjustments. Finding a quick and readily accessible platform to collect, normalise and compile all of that data had always been a huge challenge.

Although USDA's classing offices were all using the same system, the amount of time it took to gather, track and analyse the vast amount of highly complex data limited the usefulness of the information and the way it could be utilised.



By implementing its G10 Framework and d3 Analytics, Generation 10 was able to gather all of the checklot data into a central location and give USDA analytical tools that provide insights into the performance of each individual machine, operator and laboratory ... and now they can do it in real time.



That has enabled USDA not only to identify long-term trends in performance, but also to be proactive and address potential problems before they escalate — and in some cases before they even occur.

For example, taking a detailed look at the performance of individual machines in various measurements using visual graphics provides the snapshot needed to hone in on potential problems rather than having to peruse mass amounts of numerical data.



Now, USDA knows immediately if there are any problems in the performance of a laboratory, its equipment or its operators, and the ability to visualise that data over a given time period helps

to identify trends, better reference the actual data behind the graphs, and intervene before a problem develops.

“The Generation 10 staff were both proactive with ideas and responsive to our requests,” says Darryl Earnest, Deputy Administrator of USDA’s AMS Cotton Program.



Darryl Earnest  
Deputy Administrator at  
USDA-AMS-COTTON

*“Prior to implementing the software, our offices and staff were only utilizing data reports to monitor performance and detect operational issues. Creating any type of graphical depiction of instrument performance was primarily reserved for end-of-year evaluation, when more time was available for loading the vast amounts of data.”*

## About Generation 10

Established in 2000, Generation 10 has a proven track record of delivering innovative, high-value, flexible commodity management software designed to help clients manage their operational and financial risks, optimise supply chains, and improve business transparency. For more information, please visit our website, or call us for a demonstration of all that Generation 10 can do for you.

## What is the G10 Framework?

- The G10 Framework is a highly flexible technology platform that all Generation 10 products and solutions are built upon.
- When combined with a library of Web-enabled components and bespoke applications, it allows us to quickly provide the exact capabilities our customers need, on a platform built for change, at the lowest total cost of ownership.



## What are d3 Analytics?



- d3 Analytics are interactive, visual tools that help you identify trends, increase operational transparency, set benchmarks and achieve goals.
- d3’s intuitive, visual user interface allows you to locate, understand and act on information much more efficiently, making your company more agile and able to capitalise on opportunities whenever they arise.