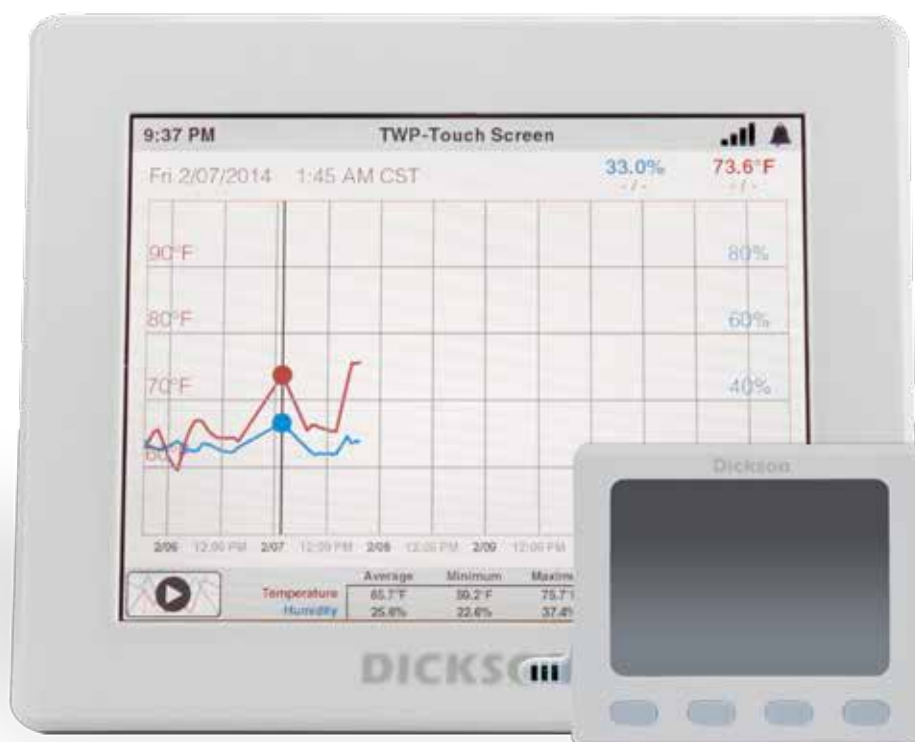


DICKSON insights

THE DICKSON FAMILY JUST GOT A LITTLE BIGGER



Introducing the DSB

YOU'RE TERMINATED

MACHINE LEARNING AND AI MAY ONE DAY CURE ALL DISEASE

```
$('.panel').addClass('is-visible');
});

//open the lateral panel
$('.panel').on('click', function(event){
  if( $(event.target).is('.panel') ){ $(event.target).toggleClass('is-visible');
    $('.panel').removeClass('is-visible');
    event.preventDefault();
  }
});
});

jQuery(document).ready(function(){
  //open the lateral panel
  $('.panel').on('click', function(event){
    event.preventDefault();
    $('.panel').toggleClass('is-visible');
  });
});
```

PAGE 21

JEFF RENOE • INSIGHTS EDITOR-IN-CHIEF

FEATURES

02-04

Dickson Resources

- Letter from the Editor
- Calibration
- New Database

05-09

Dickson One

- About
- Overview
- The Touchscreen
- Pricing

10-13

Dickson Resources

- Pulled Apart
- Tradeshows

14-20

Dickson Solutions

- The DSB
- Replaceable Sensors
- Temperature Mapping
- Validation
- Products
- Dickson Mobile App

21-23

Feature Story

- Gaming the System

Data and its security is the concern of billions around the world. Whether it's our social security numbers or our medical data, we keep it all close to the vest. We don't want our identity to be stolen and we certainly don't want our neighbors to know about our high cholesterol.

But, what if hidden within those records is the missing piece of a puzzle that's stumped us all for decades. What if it's the piece that'll make sure you'll be back to your doctor for annual physicals for years at a time. What if the data hidden away in your hospital's files could one day offer the cure for cancer. Would you reconsider your data's privacy?

This month we'll delve into this topic and understand the future possibilities of machine learning in health research as well as the roadblocks that may stand in its way. In the pages ahead you'll read more on this as well as other topics related to keeping your assets safe and your auditors happy.

Thanks for reading, and I hope you enjoy the June issue of Dickson Insights.



Temperature mapping your facility, warehouse, or equipment is a daunting task. We know, we've done it a lot.

Read more on how Dickson can help on page 16.

SETTING THE STANDARD

Calibration Services

Calibrations are essential to all devices that measure a variable. However, we often get the questions, "Why isn't it accurate already?" "Isn't it made to be accurate?" The answers are: it is, and yes. However, while our devices are accurate without calibrations, we can't be positive they are accurate to a specific measurable degree (and thus can't prove their accuracy) unless we perform a calibration.

HOW CALIBRATION WORKS

STEP ONE

We compare your sensor with a standard sensor in a stable environment across a range of temperature readings.

STEP TWO

If there are any differences between the sensor and the standard, we adjust the sensor to align with the standard.

STEP THREE

We run through this process multiple times, adjusting the device as it is compared at multiple temperatures.

STEP FOUR

We perform a final check of one or more points, depending on the order, and create the necessary calibration certificate.

CALIBRATION OPTIONS

What works for my company?

1-POINT NIST

- One specific temperature point calibration
- Good if your temperature varies little
- Choice to specify the temperature point to best reflect your application

3-POINT NIST

- Three-point (high, middle, and low) temperature point calibration
- Grants a larger proof of accuracy
- Choice to specify the temperature point to best reflect your application

Need help? Let us be your calibration expert. | (630)-923-6565 | support@dicksondata.com



NEW DATABASE

SHOWS PROMISE OF TECHNOLOGICAL INNOVATION IN PHARMA

Expediency is often an appreciated trait for someone to have when one's life is at stake. While that should work the same way when an organization is involved, you'll rarely, if ever, hear anyone say the FDA is expedient about anything.

The same, frankly, can be said about healthcare in general. We've said as much here in the past. The FDA, however, has instituted some changes that they hope will speed drug approvals, labeling changes, and delivery for pharmaceuticals.

"When your physician or other health care professional prescribes your medicine using their e-prescribing system, the new safety information now displays much faster than with our previous system," said Mary E. Kremzner, PharmD, MPH, and CAPT, of the U.S. Public Health Service.

According to a piece by Kremzner, what's taken weeks, if not longer in the past, should now be handled within days.

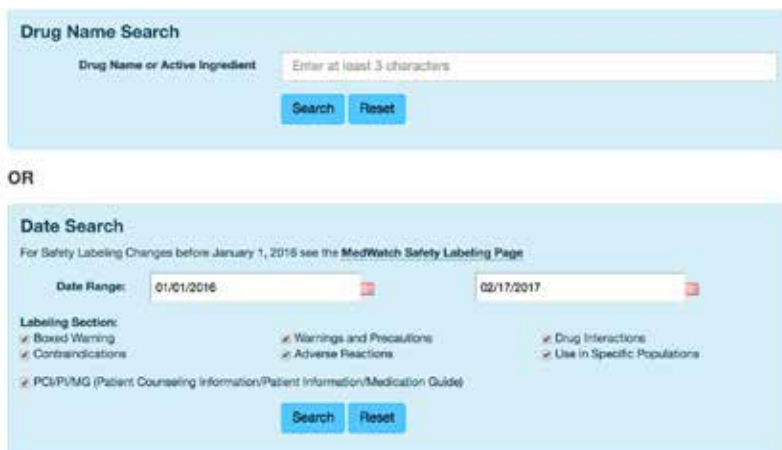
"Within days of FDA approval of new drug safety information for a drug product, the information is entered into the safety labeling changes database. Health IT vendors that provide clinical and drug information support for hospitals and pharmacies are then alerted to integrate the safety labeling changes data into their systems."

That database is even open to the public. With a quick search you can see

information on a variety of drugs that are contained within. Earlier this year we talked about a number of medical practices that were quickly becoming outdated. One we discussed was a lack of detail listed on pharmaceutical labels. This new database would seem to help fill in any gaps that may currently exist in the data readily available.

While the industry still has a long way to go in order to recoup the \$30 billion we've estimated in the past that the American healthcare system could save with improved technology and communication practices, this is a great first step.

Have something personal you'd like to add to the conversation? Send your thoughts to jeff@dicksondata.com for a chance to be featured in a future blog or article in our magazine.



The image shows two screenshots of the FDA's public search interface. The top screenshot is titled "Drug Name Search" and features a text input field labeled "Drug Name or Active Ingredient" with a placeholder "Enter at least 3 characters". Below the field are "Search" and "Reset" buttons. The bottom screenshot is titled "Date Search" and includes a link: "For Safety Labeling Changes before January 1, 2016 see the [MedWatch Safety Labeling Page](#)". It has a "Date Range:" section with two date pickers set to "01/01/2016" and "02/17/2017". Below this is a "Labeling Section:" section with several checkboxes: "Boxed Warning", "Contraindications", "Warnings and Precautions", "Adverse Reactions", "Drug Interactions", "Use in Specific Populations", and "PCI/PI/MG (Patient Counseling Information/Patient Information/Medication Guide)". "Search" and "Reset" buttons are at the bottom.

With a quick, open to the public search, you can see information on a variety of drugs that are contained within at accessdata.fda.gov/scripts/cder/safetylabelingchanges/

WELCOME TO THE CLOUD

DATA AT YOUR FINGERTIPS. ANYTIME. ANYWHERE.

DicksonOne

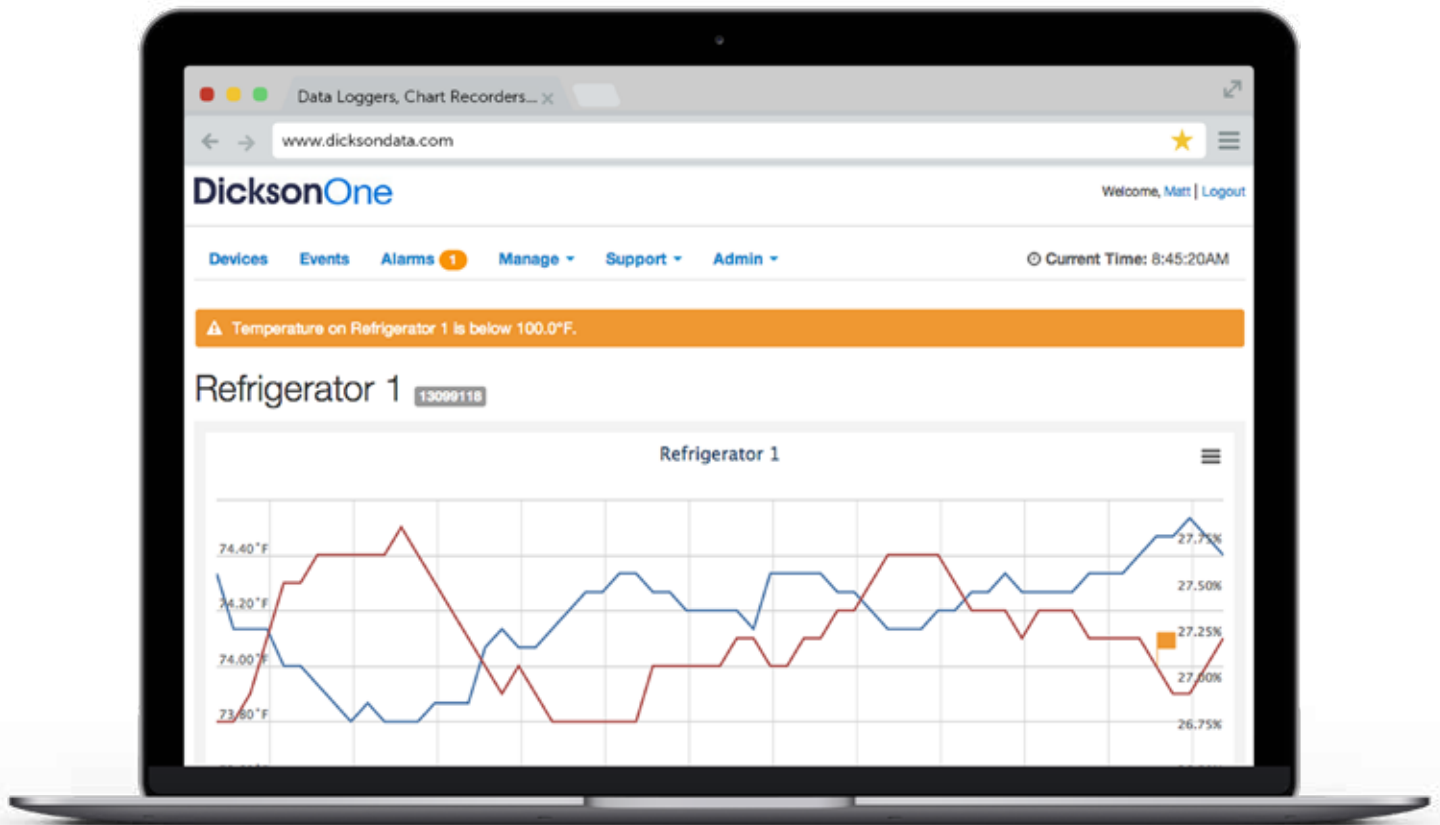




TAKE
POWER
OVER YOUR ENVIRONMENT

We've re-thought temperature and humidity monitoring making it easier, scaleable, and cost effective.
Your data. How you want it. When you want it.





Secure

We utilize bank-grade security and Amazon Web Services for unparalleled reliability.



Anywhere

Wherever you are, access your data anywhere, anytime, 24/7.



Infinite

Securely store all your data in the cloud, whether you're recording for days, months, or years.



Automated

Devices send all collected data to the DicksonOne servers automatically, so you don't have to.



On Your Time

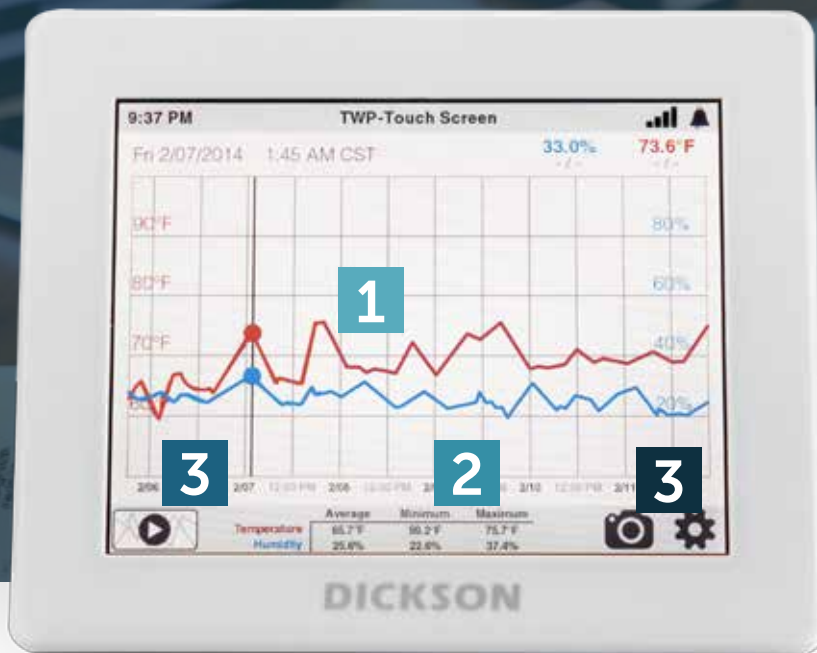
Create customizable reports delivered exactly when you want them.



Immediate

Receive real-time email, text, or phone call alarms when excursions occur.

Stay Connected. **Wherever You Are.**



01

THE GRAPH

We updated the user-interface, and made it easy to view and manage your data.

02

YOUR CHANNELS

The touchscreen automatically calculates and updates summary data for the selected time range.

03

MONITORING

Pushing the play button brings you back to the most recent readings, updating the view in real-time.

04

SETTINGS

Easily adjust sample rates, set alarms, and connect to DicksonOne.

The Touchscreen

The Touchscreen gives you the option to connect directly to DicksonOne. You get all of your data at your fingertips, and now you can access it anywhere too. Just connect your device to your local WiFi network or plug it into an Ethernet port, log into DicksonOne, and boom, complete data control.



DicksonOne Enabled • Capacitive LCD Touchscreen
Replaceable Sensors • WiFi, Ethernet, and USB Connectivity

Email us at support@dicksonone.com | Talk to a specialist at 800.452.4626

DicksonOne Touchscreen

MODEL	REMOTE PROBE	PRICE
TSB	USB Download	\$369
TWE	DicksonOne Wifi/Ethernet Connection and Download	\$419
TWP	DicksonOne Download and Power over Ethernet	\$489



DicksonOne Display Logger

MODEL	REMOTE PROBE	PRICE
DWE	DicksonOne Wifi/Ethernet Connection and Download	Starting at \$350



DicksonOne Software

One of the most common pain points when discussing monitoring is the retrieval of data. DicksonOne loggers send data to the cloud automatically, freeing up resources to do what they do best.

Talk to a specialist now | 630-543-3747

Per device billing
now available!

\$3

per device, per month
requires a credit card

BASIC

\$0

Unlimited Devices
Data stored for 30 days
1 hour sample interval

STARTER

\$300

1-10 Devices
Data stored for life of account
Multiple sample rates
Email, Phone, & Text Alerts
API Access

REGULAR

\$725

11-25 Devices
Data stored for life of account
Multiple sample rates
Email, Phone, & Text Alerts
API Access

PLUS

\$1,400

26-50 Devices
Data stored for life of account
Multiple sample rates
Email, Phone, & Text Alerts
API Access

ENTERPRISE

Call for Quote

51+ Devices
Data stored for life of account
Multiple sample rates
Email, Phone, & Text Alerts
API Access



PULL APART

How Magnetism May Soon Help People Put their Lives Back Together

For most people, solitude is a necessary part of every day.

According to Psychology Today, it can help you balance yourself and find focus. For the extroverted, this is time that's needed to rebalance after being surrounded by others. For the introvert, solitude provides time to recharge our depleted batteries. For those with depression, however, the benefits of solitude often become outweighed by feelings of loneliness. This, according to Louise Hawkley, PhD, a research associate in the psychology department at the University of Chicago, often leads to depression.

"Although depression doesn't always lead to loneliness, feeling lonely is often a predictor of depression, and it certainly leads to sadness," said Hawkley.

Allowing depression to go unchecked is a dangerous game. According to the non-profit Suicide.org, the number one cause that leads to suicide around the

world is related to untreated depression. NeuroQore, a company out of Ontario, believes it can help more receive treatment. They claim to have found a way to cure depression through the use of magnetic pulses. Mehran Talebinjad, co founder of the company, discussed his method's success in an interview with TechCrunch.

"We have an 87.5 percent remission success rate over drug-resistant depression," said Talebinjad.

The method that NeuroQore uses isn't a new innovation. In fact, it's built on Neurofeedback therapy, an idea that's been around for more than twenty years. Tech Times discusses how that treatment has historically worked.

"Neurofeedback therapy entails stimulating parts of the brain to send a positive signal in the form of a pleasant tone through the ears. This happens each time a desirable mood is achieved by the subject. The process is repeated over time in hopes of eventually



AMERICANS WILL DEVELOP MAJOR
DEPRESSION IN THEIR LIFETIME

gmeded.com

Watch for the repeating signs of depression in yourself and others:

- ☒ Decreased energy
- ☒ Trouble concentrating
- ☒ Appetite changes
- ☒ Sleep disturbances
- ☒ Lost of interest in activities
- ☒ Guilty feelings or hopelessness

Don't Wait.

We can all help prevent suicide. The Suicide Lifeline provides 24/7, free and confidential support for people in distress, prevention and crisis resources for you or your loved ones, and best practices for professionals.
1-800-273-8255

achieving a permanently positive and healthy pattern, and has been used in clinics that did not rely on drugs as a primary treatment."

The Repetitive Transcranial Magnetic Stimulation, or rTMS, that NeuroQore uses, works similarly. However, instead of using audible tones through the ears, they use magnetic pulses that transmit tones directly to the brain. According to TechCrunch, there's one other subtle difference in the process.

"NeuroQore also measures its results with biomarkers as physical evidence. Unlike with talk therapy or drugs,

this takes out some of the guesswork of if and where the brain might be improving."

The idea was pioneered following Talebinjad's first performed brain surgery.

"Neuromodulation is super important and the brain is so complex," he said. "I realized during this surgery there wasn't a lot of effective approaches out there."

While the treatment is still awaiting FDA approval, it has already been approved in the company's native Canada. As with all treatments that currently exist for this and similar disorders, there is no guarantee that this method will work for every patient. However, the results, mixed with the lack of side effects that the company claims exist, make it a treatment worth exploring. A life without depression could mean something different to a lot of different people. Whatever the meaning, everyone should be lucky enough to experience that.

Have something personal you'd like to add to the conversation? Send your thoughts to jeff@dicksondata.com for a chance to be featured in a future blog or article in our magazine.



The NeuroQore team (Mehran on far left)





Put a friendly face to your data.

Dickson is exhibiting at a trade show near you. Whether you're new to data monitoring or a long-time friend of ours, feel free to stop by and put a face to the name of the world's widest selection of top quality instruments for your monitoring needs.

There's No Reason to
Improve on the Best.
We Did it Anyway.

DSB

The newest member to the Dickson family.

Dickson's Display Loggers, one of our top annual sellers, have been fully redesigned to incorporate features from our best selling devices into non-connected units.

The logger will be able to collect all of the temperature and humidity data you've become accustomed to from Dickson's replaceable sensors. You can learn more about Replaceable Sensors on page 15.

Starting at \$199 the DSB will be available for purchase beginning in Q2. Visit DicksonData.com/DSB for more info.



TEMPERATURE SENSORS STARTING AT \$110

- Ambient Temperature & Humidity Sensor
- Single/Dual K-Thermocouple Temperature Sensor
- Platinum RTD Temperature Sensor
- Ambient Temperature Sensor
- Single/Dual Temperature Thermistor Sensor with buffer solution



**REPLACEABLE
SENSORS**



**UPDATED
DICKSONWARE**



**UP TO 2X THE
BATTERY LIFE**



**MORE
COMPACT DESIGN**

Get more out of **DicksonWare.**

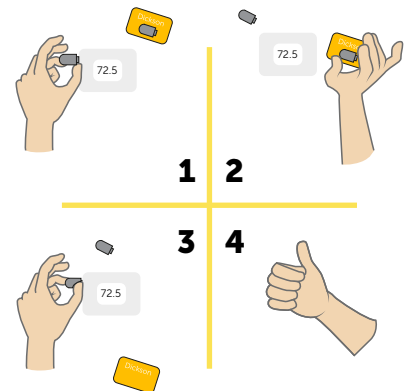
Available in Q2, DicksonWare will allow you to store and share data easily with others in your organization by uploading it to our cloud-based environmental monitoring system, DicksonOne. For more information visit DicksonData.com/DicksonWare.



CONVENIENCE IS KEY

ALL YOUR CALIBRATION DATA RIGHT ON THE SENSOR.

Now, you have the option to calibrate the sensor as opposed to the unit. Think of it like this: the Replaceable Sensor takes an environmental reading, and the data logger or chart recorder records that environmental reading. By splitting up the sensor from the data logger and chart recorder, we've created a plug and play device, that will keep you in compliance, but save you time and resources.



ZERO DOWN TIME



All Dickson sensors come pre-calibrated with upgrade and certificate options.

FAST & EFFICIENT



Pull the old sensor off.
Put the new sensor on.
It's that simple.

COST-EFFECTIVE



Back up units are no longer needed. Pay for a sensor, not an extra device.

TEMPERATURE MAPPING

Want to know your facility better?
Leave it to us.

Temperature mapping your facility, warehouse, or equipment is a daunting task. We know, we've done it a lot. Dickson can help keep your business fully compliant, streamline your business operations, and protect sensitive products with our temperature mapping services.

Some industries are required to have documented evidence that environments are under state of control.
Let Dickson's skilled professionals get you up to date.



**PLAN
OF ATTACK**

We evaluate and decide where to place devices for a successful mapping.



**MEET AUDIT
REQUIREMENTS**

Rely on our expertise to create reports that are defensible in an audit.



**IN-HOUSE
CALIBRATED DEVICES**

No 3rd party vendors here, saving you time and headaches.



**WATCH WHILE
WE WORK**

We'll handle the process from start to finish so you don't lose time.



**ENVIRONMENTAL
INVESTIGATION**

We're here to digest, analyze, and help you understand your facility and its data.



Want more information? Contact a specialist today!
630.923.6565

LET'S GET STARTED

Once the mapping has ascertained where the points of temperature variation lie within a temperature controlled environment, then permanent monitoring can be installed so that owners and users can prove their adherence to the related health and safety standards.

SOLUTIONS TO SUIT YOU

VALIDATION SERVICES

IQ

INSTALLATION
QUALIFICATION



TESTS

VERIFICATION OF CORRECT
EQUIPMENT INSTALLATION

ENSURES

CORRECT INSTALLATION OF
SYSTEM PER SPECS

ESTABLISHES

A BASELINE FOR EQUIPMENT

OQ

OPERATIONAL
QUALIFICATION



TESTS

VERIFICATION OF CORRECT
EQUIPMENT OPERATION

ENSURES

CORRECT OPERATION OF
SYSTEM PER SPECS

VERIFIES

SYSTEM MEETS CLAIMS FROM
PARAMETER

PQ

INSTALLATION
QUALIFICATION



TESTS

VERIFICATION OF CORRECT
EQUIPMENT PERFORMANCE

ENSURES

CORRECT PERFORMANCE OF
SYSTEM PER SPECS

VERIFIES

SYSTEM MEETS CUSTOMER'S
INTENDED PURPOSE

Why Dickson?

If you're in the quality assurance business like us, validation is a term you hear every day. "Validation" falls under the umbrella of terms businesses use to discuss the quality of their product, facility, or service. For those not well-versed in the world of quality assurance, hearing "validation" can send you running to hide under your desk. Luckily, Dickson offers validation services for our DicksonOne and DicksonWare software customers, also including temperature controlled equipment such as refrigerators, stability chambers, freezers, walk-in chambers, and much more.

**Is your company ready for a quotation or need more information?
Contact a specialist today at 630.923.6565**

CHART RECORDERS

Want a physical readout right where you are monitoring? Our Chart Recorders have you covered. For ninety years we’ve built the best chart recorders in the business. Check out our models below.

8 and 6 Inch Models

MODEL	FEATURES	STARTING PRICE
KT6P5	6 Inch Temperature	\$369
KT8P0	8 Inch Temperature	\$419
TH6P1	6 Inch Temperature and Humidity	\$489
TH8P0	8 Inch Temperature and Humidity	\$489



4 and 3 Inch Models

MODEL	FEATURES	STARTING PRICE
SL4350	4 Inch Temperature	\$239
SL4100	4 Inch Temperature	\$239
SC367	3 Inch Temperature	\$239



DATA LOGGERS

For data loggers, information (temperature/humidity measurement and date and time) is stored as information. That data is stored in the device for later download (via software) onto a computer, or sent to a cloud application or server for remote access.

Compact

SP125 ————— \$119
 Temperature Logger
 Accuracy: $\pm 1.2^{\circ}\text{F}$, $\pm .7^{\circ}\text{C}$
 Range: -10°F to 176°F , -23°C to 80°C

TP125 ————— \$199
 Temperature & Humidity Logger
 Accuracy: $\pm 0.8^{\circ}\text{F}$, $\pm .44^{\circ}\text{C}$
 Range: -10°F to 176°F , -23°C to 80°C
 Humidity: $\pm 2\%$ RH from 0 to 60%; $\pm 3\%$ RH from 60 to 95%

SK550 ————— \$699
 Temperature Logger Pack of 12
 Accuracy: $\pm 1.8^{\circ}\text{F}$, $\pm 1^{\circ}\text{C}$
 Range: -4°F to 158°F , -20°C to 70°C

TK550 ————— \$699
 Temperature & Humidity Logger Pack of 12
 Accuracy: $\pm 1.8^{\circ}\text{F}$, $\pm 1^{\circ}\text{C}$
 Range: -4°F to 158°F , -20°C to 70°C
 Humidity: $\pm 2\%$ RH from 0 to 60%; $\pm 3\%$ RH from 60 to 95%

Display

SP425 ————— \$159
 Data Logger with Large Display and Probe
 Accuracy: $\pm 1.2^{\circ}\text{F}$, $\pm .7^{\circ}\text{C}$
 Range: -300°F to 2000°F , -184°C to 1093°C

TP425 ————— \$249
 Temperature & Humidity, Pack of twelve units
 Accuracy: $\pm 0.8^{\circ}\text{F}$, $\pm .44^{\circ}\text{C}$
 Range: -4°F to 158°F , -20°C to 70°C
 Humidity: $\pm 2\%$ RH from 0 to 60%; $\pm 3\%$ RH from 60 to 95%



High Temp Solutions INDICATORS

HT300 Waterproof, High Temperature Data Logger — \$349
 HACCP and FDA Compliant. USB Download. IP68 Rating.
 Temperature Range: -40°F to 257°F , -40°C to 125°C
 1 & 3 Point Calibration options available.

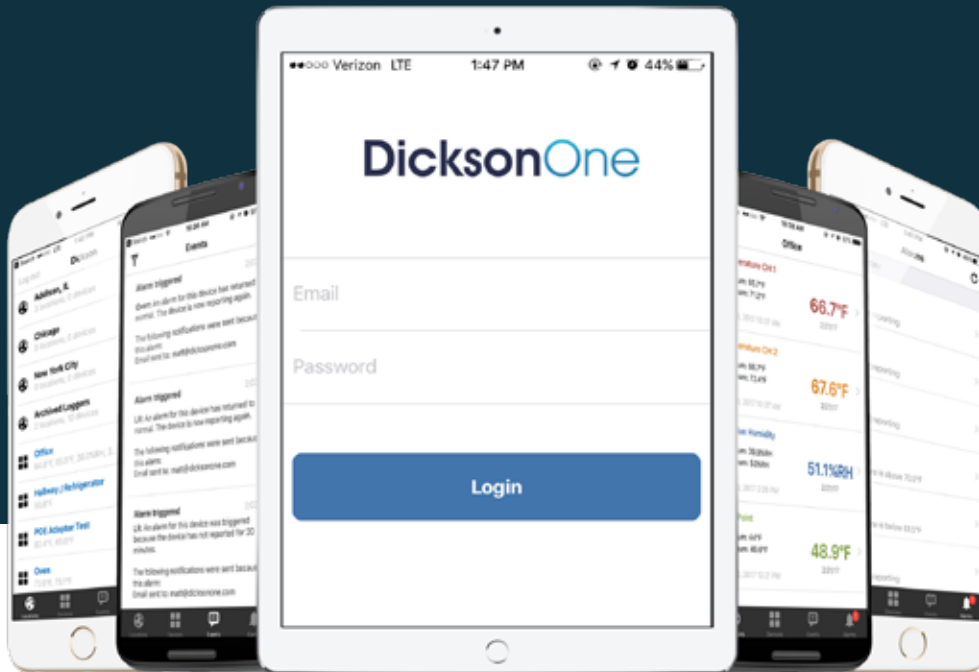
HT350 High Temperature Process Logger — \$349
 HACCP Compliant. K-Thermocouple Probe, USB Download, and a large temperature range.
 Temperature Range: $\pm 1.8^{\circ}\text{F}$ from -22 to 122°F 3.8°F ($\pm 1^{\circ}\text{C}$ from -30 to 50°C 2.1°C)
 1 & 3 Point Calibration options available.

Instant Data Solutions INDICATORS

TC700 Touchscreen Handheld Indicator — \$299
 Instant temperature/humidity data.
 No-slip silicone cover. Battery powered.
 Temperature Range: -40 to 185°F , (-40 to 85°C)
 Humidity Range: 0 to 95% RH (non-condensing)

TH700 Touchscreen Handheld Indicator — \$299
 Instant temperature/humidity data.
 No-slip silicone cover. Battery powered.
 Temperature Range: -200 to 1999°F , (-128 to 1093°C)

MILLIONS OF DATA POINTS RIGHT IN YOUR POCKET



**We know you're always on the move.
So we made sure your data could be, too.**

With the DicksonOne mobile app you can instantly access all
your data and location information in the cloud.

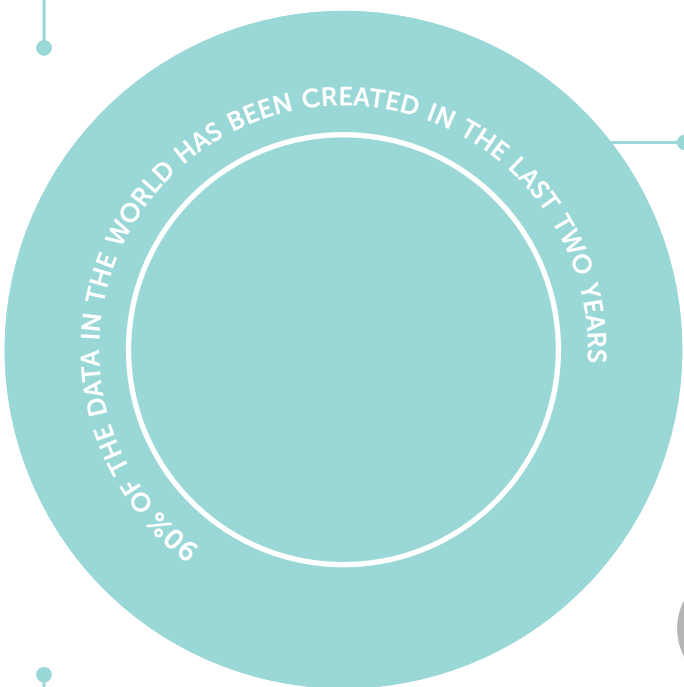
Anywhere. Anytime.



GAMING *the* SYSTEM

How Machine Learning Could Be What Cures Cancer

Smart phones. Tablets. Airlines. Homes. They all are connected. Even video games have the potential to collect data for today's Internet of Things. When this data is harnessed and analyzed, the possibilities are endless.



OVER ONE BILLION GOOGLE SEARCHES EVERY DAY



2.5 QUINTILLION
BYTES OF DATA ARE
CREATED EACH DAY

294 BILLION EMAILS
ARE SENT EVERY DAY

To an untrained eye, data can look like a lot of 1's and 0's with no discernible pattern. To an experienced observer, the data turns into a picture.

It shows us things we'd have never realized before its compilation. Machine learning is able to look even deeper and help turn a picture into a Picasso.

The idea is extremely potent and has wide ranging application. Take, for example, an article in TechCrunch that uses games as an example of the power behind the potential.

"Last year, Google's artificial intelligence platform, AlphaGo, deployed techniques in deep learning to beat South Korea Grand Master Lee Sedol in the immensely complex game of Go, which has more moves than there are stars in the universe. Those same techniques of machine learning and AI can be brought to bear in the massive scientific puzzle of cancer."

As the article mentioned, this same idea could be leveraged to help solve medicine's ultimate puzzle:

the cure for cancer. Unfortunately, data needs to be readily available for Machine learning to really do its thing. While decades of data exist regarding cancer treatment and results, much of it is unavailable because of one of two reasons. The most obvious is personal data security. HIPAA, the Health Insurance Portability and Accountability Act of 1996, guarantees user privacy and data security regarding personal information. It's important to be sure, but, more often than not, pundits seem to agree that it's become outdated.

The other issue involves a lack of innovation in healthcare. This is something we've spoken about often here and has cost the industry billions of dollars. This, albeit, is partially why HIPAA is so outdated. The world has changed since 1996 and technological advancement is a major reason why.

Consider this: HIPAA was finalized 11 years before smartphones were even a thing. Today we have social media, where personal information can be shared at the push of a button in 140 characters or less, and even offer SaaS based systems in the Cloud. Yet,

375 MEGABYTES OF DATA

ARE CONSUMED BY
HOUSEHOLDS EVERY DAY



OVER 50% OF THE
U.S. POPULATION
OWNS A SMARTPHONE

24 PETABYTES OF DATA A DAY ARE PROCESSED BY GOOGLE

ibmbigdatahub.com

even today, you have to provide HIPAA direction for every single provider you meet with, and it can limit your care. Need to visit a new doctor? Better sign some paperwork. Need to be reviewed for a second opinion? Better resign the same paperwork. It's a system of inefficiency, not only for patients but for researchers as well. TechCrunch touched on this fact briefly in their article.

"Many data sets, including medical records, genetic tests and mammograms, for example, are locked up and out of reach of our best scientific minds and our best learning algorithms."

Now, we aren't advocating for publishing everyone's personal information and data for the purpose of research; far from it in fact. However, there would seem to be a way to provide data access without sacrificing an individual's privacy. In 2015, there was even a Bill that made it through Congress that would have paved the way for such opportunities. The bill was ultimately reworked to remove the provisions that would have altered HIPAA laws, but the conversation was a start. Just because the right answer has yet to be found, doesn't mean that it eventually won't.

There is some good news in all of this. Even without flushed out and updated regulations, some programs have the flexibility to provide some data to get the research kickstarted. TechCrunch discussed a few.

"A number of large-scale, government-led sequencing initiatives are moving forward. Those include the U.S. Department of Veteran Affairs' Million Veteran Program; the 100,000 Genomes Project in the U.K.; and the NIH's The Cancer Genome Atlas, which holds data from more than 11,000 patients and is open to researchers

everywhere to analyze via the cloud. According to a recent study, as many as 2 billion human genomes could be sequenced by 2025."

While the information currently available lacks the breadth that exists behind locked cabinet drawers it still shows promise. The ultimate eventuality of data sharing and machine learning could lead to early recognition of illnesses and accelerate the development of new drugs for things like cancer. If the opinion of TechCrunch is an accurate one, then we're three steps from seeing it all happen.

1. It should be easy for patients to share their data including records, imaging and testing results. It would be easy and legal for this kind of sharing to occur if a common consent form was mandated and in place in the field.
2. There's a lot of funding in the medical world, but more is needed when it comes to technology and machine learning and data science. "Just as the Chan Zuckerberg Foundation is funding new tool development for medicine, new AI techniques need to be funded for medical applications."
3. Data and research needs to be more wide reaching across gender and racial diversity. According to a research study by the University of California San Francisco, clinical studies still miss nearly 40 percent of the U.S. population. If we achieve results in machine learning, it is important that they are applicable to all.

Once the items above are in place, machine learning can do its job and work to reach the maximum of its potential to paint its proverbial Picasso. Like the art goer, even if the average patient can't decipher the data, they'll still be able to appreciate the results.

Have something personal you'd like to add to the conversation? Send your thoughts to jeff@dicksondata.com for a chance to be featured in a future blog or article in our magazine.

DICKSON

DICKSON

930 South Westwood Avenue
Addison, Illinois 60101-4917

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PRSRT:STD
U.S. Postage
PAID
The Dickson
Company

Points that Matter



Dickson will be at Breakthroughs in Washington D.C.
this year! Come visit us at Booth 1029!

DICKSON BLOG

blog.dicksondata.com



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Dickson



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DicksonData



THE DSB

Read more on page 14