

- A PUBLICATION OF SONOPATH.COM-

A BLUEPRINT FOR

Incorporating Ultrasound into Veterinary Practice


The Machine, The Curve, the "Me Too" Industry, and The Reality




SonoPath

FOSTERING THE ART OF VETERINARY MEDICINE™

*Teleradiology
Teleoncology
Clinical Sonography & Telecytology
SDEP™ Ultrasound Education
Online Forum & Clinical Archive*



PART 3: WHO SHOULD I DO BUSINESS WITH?



WHO SHOULD I DO BUSINESS WITH?



An ultrasound machine is only as good as the company behind it.

All in all, most machines in a category of price range have little difference in overall quality of image between them, but they do have large differences in:

- Work flow efficiency
- General image preference for your eye
- The supporting distribution company infrastructure and its service company options.

Once you find your sonographic “*eye candy*”, follow the steps I’ve outlined in this article to become the most informed and empowered consumer possible.

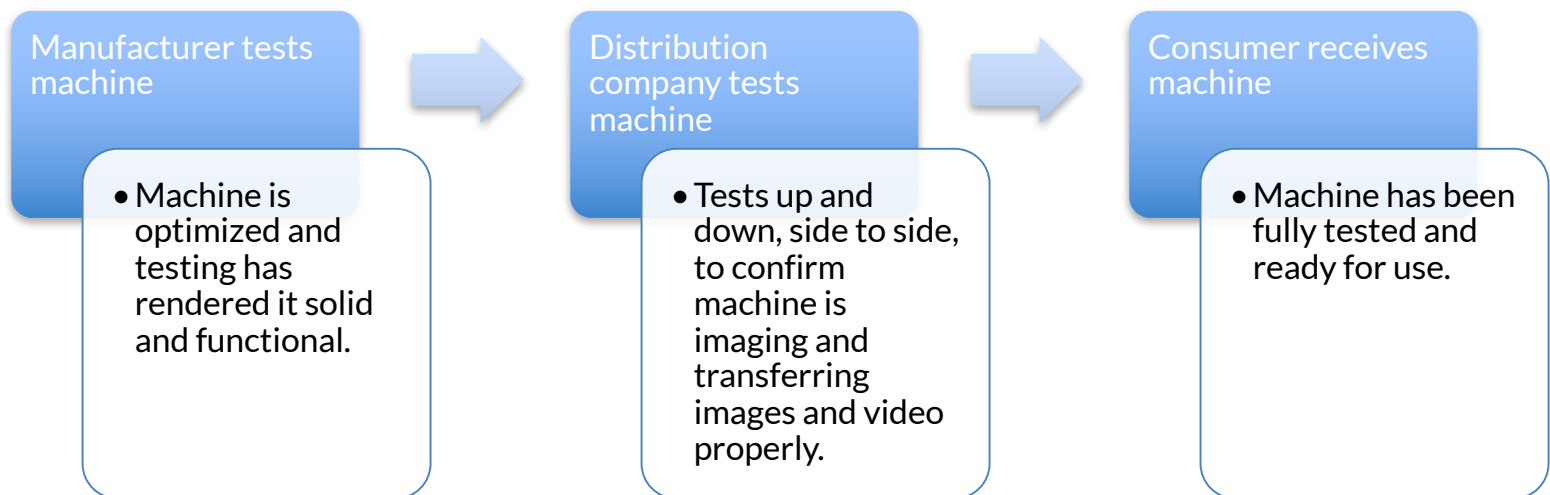
4 SIMPLE QUESTIONS TO

SELECT THE RIGHT SALES COMPANY



- 1 HOW LONG HAS THE COMPANY BEEN IN ULTRASOUND SALES?
- 2 WHAT IS THEIR CUSTOMER SERVICE AVAILABILITY AND UTILITY?
- 3 IS IT ENJOYABLE TO WORK WITH THEM?
- 4 WHAT IS THEIR SERVICE CONTRACT AND WARRANTY STRUCTURE?

THE IDEAL SALES PROCESS OF CAPITAL EQUIPMENT



Above is how the process **SHOULD** work but research and development and engineers cost money in the corporate manufacturing world and they don't necessarily translate directly into profitability.

When economies are struggling, or if the financial strategists of a company are looking to increase their bottom line, the R&D sector **MAY** be targeted first. Manufacturer engineer cutback can occur which can translate into machines that are not optimized before they are released.

In the corporate "real world", and when the rubber hits the road in tough times, sales people are measured by their direct profitability; therefore, monetary investments and efforts are always invested in sales but infrastructure can be cut back which results in more and more defective machines in circulation.

This is the reality I've seen and lived over the years especially during recession periods. ***The people that lose are the consumers unless we take an active role in the sales process.***

Fortunately, these unfortunate potential events that I speak of are rare but in the purchasing process it is wise that you ask the right questions and safeguard yourself so you are prepared if a similar scenario happens to you.

STEP 1:

SCHEDULE A MACHINE DEMO

ULTRASOUND MACHINE DEMO

CHECK LIST



TEST BODY TYPE SPECTRUMS

Test the machine out on animals that fit within your body type spectrum to cover what you will see on a daily basis:

- Thin Cat
- Golden Retriever
- Beagle
- Obese Rottweiler



ASK QUESTIONS

Be sure the sales rep tells you which probe to use for the abdomen and thorax for each size patient to minimize technical difficulties and which frequency; lower frequency for bigger body real estate.



OPTIMIZE IMAGES

The representative should be able to optimize images for you during the demo over and over adjusting to the different body types and not just "wing it" with a sales pitch and try to move on by distracting you or saying something isn't important.

*This is red flag behavior so be on the lookout for this.



ASSESS WORKFLOW

How easy is it to operate, store, remove, and transfer the images? Every machine has different settings for exporting cases in a reasonable size (150-400 mb for 20-25 3-second video clips) and optimal quality. Ensure your representative can demonstrate this on the machine.



COMPARE PRESETS

Presets make or break a machine. Great presets allow for awesome scanning and will win in a head to head competition if you are able to make this happen with 2 machines you are evaluating in the final phase of purchase.

As I've mentioned before, *the number one mistake I see on a regular basis is not driving the machine enough before buying.*

Your sales rep should be willing and able to schedule a machine demo. Use this checklist to properly critique the machine **AND** sales representative during the demo.

Finding a sales representative with the following qualities will increase the likelihood they won't disappear after they have received their commission:

- **Machine Knowledge**
Adequately prepared and able to navigate through your demo checklist.
- **Professionalism**
Timeliness of returning calls or responding to emails.
- **Resourcefulness**
Inherent problem solver that adjusts with what you put in front of him/her.

SOURCE:

www.sonopath.com



MOVING IMAGES AROUND

Every machine has different settings for exporting cases in a reasonable size and optimal quality.

There are two ways to send images from the machine:

- ***Sending directly from the machine using a network*** – also known as a “Dicom send”
- ***Exporting to a thumb drive and sending through the Internet*** – also known as “Sneaker sending”



During the demo, ask your representative to demonstrate **BOTH** methods because you, or better yet your tech, will do it many times per day.

I HIGHLY ADVISE that you take pictures or better yet video of the process for future use.

Workflow efficiency is very important and many forget about it until they are tediously lost in a slow workflow the next 5 years of the life of the machine.

SENDING DIRECTLY FROM YOUR MACHINE VIA DICOM

- ***Test the connectivity with your telemedicine specialist.***
 - Confirm he/she can read the image set adequately.
 - Get their opinion on the image quality.
 - Your telemedicine specialist is putting their name on a report that you are paying for so make sure they like the image sets as well. They will be happy to convey a gut feeling enjoying reading your image sets while not having to work hard to try to interpret a case with a suboptimal image quality.

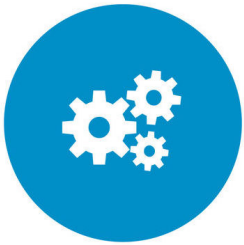


MOVING IMAGES AROUND



“SNEAKER SENDING” WITH A THUMB DRIVE

- **Ask the sales rep to offload the images to a thumb drive in both dicom AND jpeg/mp4 formats, then send to you through the internet.**
 - You will want all file type options.
 - **Dicom** – Most teleconsultation specialists will prefer dicom as the accepted format, as it's easy to manipulate and gives optimal quality.
 - **Jpeg** – For clients that want their images to show their friends at their next BBQ.
 - **Mp4/avi** – Mp4 is a more universal format than avi, but avi is ok if you have to and it can be converted to Mp4 [Movavi](#) to convert to Mp4
- **Send files through the internet** using [WeTransfer](#) or something similar to move large files from a thumb drive if you aren't moving it from your dicom network.
- **Time how long it takes** and be sure it takes only a few minutes for a 25-video case with <400 mb file size total.
- **Open the images** in your dicom viewer, radiology viewer in-house or software ([Osirix](#) or [Horos](#) are great free options).
- **Confirm you see videos as videos** and not just still images.
- **Make note of how jpeg/mp4 versions appear across mac and pc.**



MACHINE PRESETS

Presets are the optimized settings for any specific animal and cavity.

For example, small abdomen, medium abdomen, large abdomen, fat cat, “pancake” cat, small cardiac, large cardiac....you get the idea. During your demo, note how the machine handles scanning different body types.

Presets make or break a machine. Bad presets make a \$80k machine scan like a \$10k machine and vice versa. Good presets allow you to toggle between them to accommodate any body type.

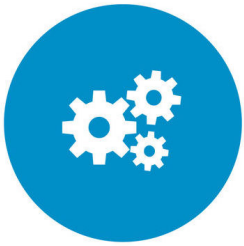
After adjusting presets for 20 years, I have given up on making new veterinary presets. Now, ***I research to find the best stock preset inherent in the machine (uro, abdomen, small parts, etc) and make slight adjustments to:***

- Focal point (single or double)
- Starting depth
- Edge enhancement
- Dynamic range

For cardiac, I start with pediatric and adult cardiac settings, then:

- Adjust workflow settings such as depth
- Baseline for spectral Doppler
- Sweep speed
- Verify color doppler PRF is in the 80 range with a small color sector to avoid color “splash”
- Save the preset
- Adjust gain on occasion based on how the animal is scanning

It’s a “keep it simple, stupid” concept, otherwise you may live in the abyss of preset purgatory of bad images derived from bad presets.



PRESET LONGEVITY

For some reason, presets don't tend to stay persistently functional consistently from machine to machine and seem to wear out over time.

You can reload the presets every 3 months or so to resolve the preset decline issue which is especially an issue when scanning a lot of volume. As a point of reference, I scan about 200-300 cases/month actively and do a software reload every 3-6 months.

Some representatives or manufacturers will tell you that the presets are transferable with the same operating software version. In my (and my many seasoned colleagues') experience, this is not the case. Try the preset purgatory approach but don't be surprised if it doesn't work.

Ultrasound companies spend tons of money on research and development to make new software versions and the presets change with them.

In addition, *the software on one model doesn't typically work the same with another model.* Variation in machines produced from production lot to lot can be incredibly different and interact with software differently. This is why one person may say his machine is great and you purchase the same machine from a different manufacturing time and perhaps a different software and it doesn't scan as well, or maybe it scans even better.

I can attest to an exorbitant amount of time lost over the years being frustrated and not achieving preset compatibility. It's important to select an ultrasound machine that is consistent in this regard over a wide variety of patient conformations producing solid diagnostic and eye friendly images.

STEP 2:

CALL THE APPLICATIONS CENTER

If the sales rep is still standing tall with a solid imaging machine after the demo, then you have someone that makes the cut to the final round in the machine selection process.

Call the applications center (GE, Esaote, Philips, Toshiba, Samsung, Sonosite...etc) and tech support for the distributor companies (Sound, Cuattro, Core, Universal..etc) and start asking questions about how to use the machine in your workflow.

- The content of the questions can be something such as, “How do I save a case that I just imaged?” or “How do I offload the case to a thumb drive in universal format that the pet owner can see on their computer?”

Can you identify and appreciate their service?

- Give a grade to your gut feeling and first impression of each company.
- You may never need them after the purchase BUT chances are, you will and you may need them more than you wish.
- If the rep is stumbling through any of the questions you ask, he/she is likely not adequately prepared and this usually reflects the infrastructure, or lack of it, in the company that is selling and will eventually be supporting the unit you are buying with the warranty or service contract.

Will the sales company do the repairs in-house? Or, do they contract out directly to the manufacturer?

- If they contract directly to the manufacturer, you will be talking to a filtering dispatch person and then taking time to get to the actual problem solver in the large company that produces the machine and services both human and veterinary from across the continent.
- You may get lost in the corporate abyss here. This is not always the case, but expect this potential with the outsourcing service.

You need to work with a company that you identify with and that will be there for you through thick and thin especially when there is no immediate future revenue translation for their time but simply supporting the product they sold you.

BONUS ADVICE FOR ANY CAPITAL EQUIPMENT PURCHASE

- ***Never talk business openly.*** Always correspond through email and exchange on the same thread if possible. Spoken words mean nothing, documented words are points of reference to hold the seller accountable.
 - This may also involve refusing sales calls or sending sales reps to voicemail. It's imperative to do all business in black and white.
 - Accountable sales representatives will get back to you rapidly and you'll find the email thread exchange will be much more efficient in the process and not eat up any of your precious time other than what you can fit in between appointments and other computer work.
 - Always document the negotiation upfront and once you have everything documented then speak all you want but ensure you create your deal in an email thread to use as a point of reference.
 - ***Keep it professional until the deal is done.*** Even if you are friends with the sales representative, don't be so until the deal is done and you have the deal you want.
 - You can always have dinner and light banter AFTER the deal is done. During the deal there is no such thing as friendship.
 - Everyone is your friend or friendlier when they want to sell something to you. This is business. Friendship is friendship. Humanity is humanity.
 - Sales representatives are professionals at convincing people to do things that aren't always in their best interest. It may be, but not always, so you need to protect yourself.
 - When you've negotiated your purchase and agreement, ***hold the sales person accountable for everything that was written*** in the email thread. Save it on file and refer to it through the life of the product.
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In summary, we have discussed multiple issues in this 3-part series but I found it important to relate the 20+ years of experience in the clinical sonography industry so the consumer can make better informed decisions. I wish you the best of luck in your purchase and your clinical sonography learning curve. SonoPath was built and is sustained to "Foster the art of veterinary medicine™" in all that we do.

ABOUT THE AUTHOR



“ *We entered the veterinary field for a reason and that is to employ our best efforts in enhancing diagnostic efficiency™ to improve animal health and well-being. Clinical sonography is a big part of the process.* ”

– Eric Lindquist, DMV, DABVP, Cert. IVUSS

Dr. Eric Lindquist, DMV, DABVP, Cert. IVUSS has provided high-volume mobile veterinary clinical sonography as a specialist in New Jersey since 2001. He boarded ABVP (Canine & Feline) in 2003 and re-certified in 2015.

Founding SonoPath.com in 2008, Lindquist leads a team of boarded specialists who provide Educational Teleconsultation™ Services. He also owns and manages two mobile ultrasound companies.

As the three-time president of International Veterinary Ultrasound Society (IVUSS), Dr. Lindquist has a passion for ultrasound and has created the SDEP™ Protocol. The SonoPath Diagnostic Efficiency Protocol™ is an innovative instructional ultrasound technique used for full and efficient scanning.