WHAT KPIs ARE THE MOST IMPORTANT?

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\(^1\) When compared to previous formulations of the same products in Purina Animal Nutrition trials. \(\text{NCT00771748}.\) Correlation of Weaning Numbers to Finishing Productivity. Summary of data from Purina Animal Nutrition Center, August 14, 2015.
Welcome to the 2016 Edition of Benchmark Magazine. Over the past 10 years we have been delighted by the interest that the publication of our annual Benchmarking program results have generated. When we ask what it is about this information that makes it interesting and valuable there are a lot of responses, but one response we hear quite frequently is “You need to understand how you are doing with your KPIs”.

KPIs (Key Performance Indicators; also sometimes referred to in our industry as Key Production or Productivity Indicators) have been used in many industries for a number of years to help organizations understand what’s important for success and monitor how well they are doing on these factors. And like a lot of good ideas it seems like it has become a bit of a “buzzword” without a lot of common understanding and context. So what KPIs are the right ones for pork production? Ask a few people and you find that this can mean a lot more than just the data points you find on page 19. You find that it depends. Size of operation? Geographical location? Environmental or geopolitical factors? People skills? We thought it would be interesting to ask some leaders in the industry what KPIs mean to them and their organization. We were very impressed with the thoughtful insight provided from their respective points of view. We think you will be, too.

Another area we focused on in this issue is the changes in the VFD requirements for use of medically important antibiotics in animal feed that took effect last October and will be fully implemented by January 1, 2017. We collected insights from a variety of experts including the Pork Board, NPPC, leading veterinarians and feed suppliers. We hope you find this information helpful and informative.

As always, we would like to offer our sincere thanks to all our contributors, advisors, advertisers and everyone who makes the publication of Benchmark possible.

The PigCHAMP Benchmarking program is open to pork producers who share their production information. Participants receive free quarterly updates of how their operations compare to the Benchmark averages. PigCHAMP also offers in-depth customized reports for a modest fee. PigCHAMP is part of the Farms.com family of companies which strives to provide innovative information products and services to the global agriculture and food industries.

Welcome to Benchmark 2016

YOU NEED TO UNDERSTAND HOW YOU ARE DOING WITH YOUR KPIs.

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President & CEO
Farms.com Ltd.

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Efficient sow reproduction is fundamental to achieving a successful, sustainable and economically viable swine industry. Many economists have shown us that the swine industry in North America continues to improve on the number of pigs weaned per litter. Therefore, a key production indicator (KPI) used to assess the efficiency of sow performance is the number of pigs weaned per litter, per year, or per lifetime. The modern hyper-prolific sow has a great potential to produce numerous quality piglets at weaning. What has developed as a goal for many producers, my clients included, has been the benchmark of 30 piglets weaned per sow per year (PSY). What one finds is that if performance on a sow unit is less than this target, then the farm staff is often emotionally distressed. Because of this emotional distress, action plans that are frequently developed need to include nutritional management, husbandry, environment and healthcare factors that might be limiting performance. But, one needs to ask is this really the KPI that drives cost of production for sow farms? 

So the question arises: “Which are the most important aspects of performance to improve and how can they be achieved?” Obviously, the most important KPI is pounds of pork sold per unit being measured. If the unit is a nursery-finisher site then the ultimate question is, “How do we optimize market weight with a reasonable usage of the buildings based on pounds of pork sold per square foot?” If the unit is a sow breeding-to-wean facility, then the question is “How do we optimize the number of pigs produced, as well as, the number of quality piglets at weaning?” Substandard pigs often create the need for critical decisions to be made at the sow unit and/or soon after arrival at the nursery. Disease often plays a major role in creating more than the normal number of substandard pigs. Evaluation of production records prior to the walk thru of a unit illustrates both managerial and animal efficiencies. This pertains to both sow and nursery-finish sites although the production parameters examined are much different. In the following illustration, let’s use a sow unit to illustrate KPIs and how facility plus managerial activities intertwine.

One can quickly look through production records by week, by month, or by year to examine trends in productivity levels that are achieved, but this is only the beginning of one’s look at KPIs. A change in building design that has occurred over the last three decades has been in the ratio of inventoried sows per farrowing crate. Why is this important? The ratio of inventoried sows per farrowing crate determines how intense the farrowing house management will be. So older facilities were designed with a different thought about throughput in farrowing, so a ratio of seven inventoried sows per farrowing crate was normal. Today, units are being built with five inventoried sows per farrowing crate or sometimes less. The “intensity” of how the management must function is incredibly more extreme in the older facilities then in a unit constructed more recently. This adult animal to farrowing crate ratio impacts weaning age since the number of gestation crates number more to house the number of adult animals desired. With a 7:1 ratio weaning age is often around 17 to 18 days of age, where a ratio of 5:1 allows a 22 day old or older piglet to be weaned. Please note that if you look at average daily gain (ADG) on nursing piglets we will often achieve 0.55 ADG as an average without including the birth weight. Example: Take a 3 pound birth weight and the piglet is weaned at 21 days. The piglet should weigh 3 + (0.55 X 20 days) = 14 pounds at 21 days. Using 0.55 ADG as a benchmark one can quickly calculate if piglets are achieving proper weaning weights given the length of time they are nursing. The profitability of a unit selling weaned pigs is directly proportional to how the contract is designed. Contracts can be constructed to provide “extra” value to the sow herd owner if older and heavier piglets are preferred by the receiving farm. Another KPI that is often difficult to understand when looking at production records is pre-weaning mortality. Pre-weaning mortality today has received a lot of importance and if one is not achieving 10% or less, farm staff are often again under “pressure”. It was common in our industry at one time to build farrowing rooms that only provided 4.5 feet width per farrowing crate. This allowed for more farrowing crates to be installed; therefore, improving what was known as throughput of the most expensive portion of the sow unit. Today the common width is five feet or greater in some of the newer units. The driving motivation is to provide enough room in the farrowing crate to accommodate the larger number of pigs being born by the modern hyper-prolific sows. The management practices on a farm with more narrow farrowing crates is vastly different than in modern facilities and often leads to a bit higher pre-weaning mortality.

In summary, KPIs can be divided into two main categories. One category is used for benchmarking with another unit or KPIs can be used in a broader benchmarking activity, i.e. across the industry. Each farm is unique in its facility design and managerial efficiencies that are usually reflected in KPIs. The ultimate goal is to improve the overall net value received by a production unit. In-depth discussions that need to occur should demonstrate the impact of the performance targets and profitability. This activity illustrates and establishes where performance parameters, i.e. KPIs, for the farm need to improve with financial evaluation comparing current performance levels to achievable targets. Strategies can then be developed to overcome these deficiencies in production. KPIs continue to provide a quick overview of how well the unit is performing based on general benchmarking parameters, but an in-depth evaluation needs to occur to see if unique aspects of that unit can be examined to improve performances. KPIs can be utilized to monitor the changes as managerial decisions are made with net profitability in mind. The overall objective of any program is to ensure that the modern pig genotypes achieve their genetic performance potential in an efficient, sustainable and financially valuable manner.

**WHICH ARE THE MOST IMPORTANT ASPECTS OF PERFORMANCE TO IMPROVE AND HOW CAN THEY BE ACHIEVED?**
UPCOMING CHANGES REGARDING ANTIBIOTIC USE

Increasing Veterinary Oversight

SAM HOLST, DVM 
LAURA BRUNER, DVM

We are now less than a year away from the implementation of new Food and Drug Administration (FDA) regulations that will eliminate sub-therapeutic (growth promotion) use of antibiotics deemed medically important for human medicine, as well as increase veterinary oversight of antibiotics used for therapeutic purposes.

WHY ARE NEW REGULATIONS BEING IMPLEMENTED?

These regulations are part of FDAs strategy to ensure the judicious use of medically important antibiotics in food-producing animals.

WHAT ANTIBIOTICS ARE DEEMED MEDICALLY IMPORTANT FOR HUMAN MEDICINE?

The majority of antibiotics utilized in the swine industry to prevent, control, and treat disease are deemed medically important to human medicine, with the following exceptions: bacitracin (BMD), carbadox (Mecadox), narasin (Skylica), bambermycin (Flavomycin), and tiamulin (Denagard). These antibiotics are considered non-medically important.

WHAT EFFECTS WILL THE NEW REGULATIONS HAVE?

FDA’s new regulations regarding antibiotic use will have two primary effects:
1) Growth promotion label claims for medically important antibiotics will be phased out
2) Increased veterinary oversight for therapeutic (prevention, control, treatment) use of antibiotics

a) Medically important feed grade antibiotics will require a veterinary feed directive (VFD)
b) All antibiotics delivered via the drinking water will require a veterinary prescription

In addition to increasing veterinary oversight for feed grade antibiotics, additional veterinary involvement will be required for all antibiotics (medically important and non-medically important) that are delivered through the drinking water. These antibiotics will require a veterinary prescription.

WHEN DO THESE REGULATIONS GO IN TO EFFECT?

The portion of the new regulation that dictates the removal of growth promotion claims from medically important antibiotics is currently in effect; however, pharmaceutical companies have until December 2016 to finalize label adjustments.

VFD and prescription requirements will go into effect on January 1, 2017. As of this date, all medically important feed grade antibiotics will require a VFD and all antibiotics administered in the water will require a veterinary prescription.

WHAT DOES THIS MEAN FOR PRODUCERS?

The days of purchasing antibiotics over-the-counter are essentially coming to an end. As of January 1, 2017, producers wishing to utilize VFD or prescription antibiotics will need to work with a licensed veterinarian. In order to issue a VFD or prescription, a licensed veterinarian must have a veterinary-client-patient relationship (VCPR) established with the producer. Only after a VCPR has been established can a veterinarian legally issue a VFD or prescribe an antibiotic.

Maintaining complete and accurate records will be vital to verify compliance with the new regulations. Producers, veterinarians, and feed distributors are all required to keep a copy of VFDs for 2 years. Additionally, producers need to keep record of antibiotics administered via the drinking water or injection for 1 year. The FDA requires that the following information be recorded for water and injectable medications:

- Date of administration
- Animal ID or group designation (i.e., barn 2, room 1)
- Product administered
- Dose
- Route of administration
- Initials of person administering
- Withdrawal time

It is also advised that producers have a good working relationship in place with the feed mill(s) they work with. Ensure mill personnel understand and are prepared for the new VFD regulations. Create a list of diets fed and designate the diets that contain antibiotics to help facilitate preparedness and communication between all parties involved.

WHAT DOES THIS MEAN FOR VETERINARIANS?

As previously mentioned, veterinarians must establish a VCPR with the producer prior to issuing a VFD or prescribing a water soluble antibiotic. VCPRs provide the basic framework for interactions between clients, veterinarians, and animals. The following criteria make up the Federal definition for VCPRs:
1) The veterinarian assumes responsibility for making clinical judgments regarding the health of the patients.
2) The veterinarian has sufficient knowledge of the patients by virtue of examination and/or visits to the facility where the patients are managed.
3) The veterinarian provides any necessary follow-up evaluation or care.

CONTINUED ON PAGE 11

VETERINARY FEED DIRECTIVE (VFD) STATUS OF FEED GRADE ANTIBIOTICS AND ADDITIVES

Antibiotics that currently require a VFD will require a VFD beginning Jan. 1, 2017
Antibiotics/additives that will not require a VFD

Antibiotics that currently require a VFD
- Trimethon (Pumostil)
- Florfenicol (NuFlor)
- Azolemycin (Kavaauto)
- Oxytetracycline (Oxytac)
- Tilmicosin (Pulmotil)
- Chlorotetracycline (CTC)
- Florfenicol (NuFlor)
- Azolemycin (Kavaauto)
- Oxytetracycline (Oxytac)
- Tylosin (Tylan)
- Virginiamycin (Stafac)

Antibiotics/additives that will not require a VFD
- Tiamulin (Denagard)
- Bacitracin (BMD)
- Lincomycin (Lincom)
- Carbadox (Mecadox)
- Neomycin (Neo-Teramycin)
- Narasin (Skylica)
- Ractopamine (Paylean)
- Virginiamycin (Stafac)

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It is also advised that producers have a good working relationship in place with the feed mill(s) they work with. Ensure mill personnel understand and are prepared for the new VFD regulations. Create a list of diets fed and designate the diets that contain antibiotics to help facilitate preparedness and communication between all parties involved.

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3) The veterinarian provides any necessary follow-up evaluation or care.

CONTINUED ON PAGE 11
Some individual States’ also have VCPR definitions written in their veterinary practice acts which take precedence over the Federal definition. Specific requirements can vary from state to state; therefore, it is prudent for veterinarians to know and understand the requirements in the state(s) in which they practice.

The requirements for establishing a VCPR are rather straightforward with the exception of what defines “sufficient knowledge” of the patients.

It is generally accepted that an initial visit to the site where pigs are kept is required to establish a VCPR when interacting with a producer for the first time; however, the question of whether routine visits are required to maintain a VCPR after one has been established is less clear. Some State VCPRs explicitly give the frequency in which veterinarians must conduct site visits while others have no specific visitation requirements.

Ideally, veterinarians would be able to conduct routine visits to all sites where they offer veterinary services to monitor herd health. Unfortunately, routine visits to all sites in large systems or companies can become impractical due to the sheer number of sites alone. Factor in sites in multiple states, multiple health statuses and biosecurity requirements, and veterinarians that work with multiple clients and the impracticality of routinely visiting every site is evident. However, these logistical restrictions should not inhibit veterinarians from having adequate knowledge of the health of the pigs in their care. Diagnostic testing, access to production records, and communication with caretakers or field staff along with medically appropriate site visits can provide veterinarians with the information they need to make informed decisions regarding pig health. While there are no legal requirements for diagnostic testing or documented communication with caretakers, these procedures can be used to help veterinarians maintain sufficient knowledge and veterinary oversight when routine visits are not practical.

The amount of time required for veterinarians to issue the amplified number of VFDs will increase significantly. It is very likely that some veterinarians could go from issuing less than 10 VFDs per year to issuing several hundred per year. With each VFD taking approximately 10 minutes to complete, the added time required will be substantial. Additional time will also be needed to track and update information on sites, feed mills, and clients.

Changes to VFD requirements will allow for multiple sites to be included on a single VFD, as long as all sites listed are supplied by the same feed mill. This may potentially reduce the time needed, but veterinarians will need to be able to justify and ensure that veterinary oversight is maintained.

SUMMARY
January 1, 2017, is quickly approaching and preparing for the changes ahead of time will prevent a potential delay or gap in antibiotic treatment. Communication between producers, veterinarians, and feed distributors will be vital to implementing required changes as seamlessly as possible to ensure appropriate care for pigs is maintained. Additional challenges are likely to present themselves and how those involved in the swine industry handle these challenges will likely shape antibiotic use in the future.
PREPARE FOR NEW ANTIBIOTIC REGULATIONS NOW

JENNIFER KOEMAN, DVM

If ever the old adage “There’s no time like the present” carried meaning, it is today. Pork producers need to start preparing for the Jan. 1, 2017, deadline, when the U.S. Food and Drug Administration (FDA) will implement new regulations for antibiotic use on the farm.

VFDS AND PRESCRIPTIONS REQUIRED

Under the new rules, medically important (to human health) antibiotics will no longer be available for growth promotion purposes in food-animal production. They will be able to be used only to treat, control or prevent specific disease purposes in food-animal production. They will be able to be used only to treat, control or prevent specific disease

Most antibiotics labeled for use in swine production will be covered by the VFD rule. The compounds that will not be affected include bacitracin, tiamulin, carbadox, ionophores and bambermycin. As always, it’s a good idea for producers to talk with their veterinarians to discuss how to apply the new VFD and prescription requirements, as well as other herd health strategies.

RECORD KEEPING IS ESSENTIAL

The other big change will be record-keeping requirements, which will affect not only pork producers, but veterinarians and feed mills as well. Here’s a snapshot of key compliance steps:

- The veterinarian issuing a VFD is required to keep the original VFD form; the feed mill/distributor and the producer (client) must keep a copy. These records can be in print or electronic formats.
- All parties must keep the VFD records for two years, one year for water prescriptions.
- Each VFD includes a specific expiration date for a specific group of animals. Any leftover feed cannot be fed to any animals without obtaining a new VFD.
- Any of these records must be accessible to FDA upon request.

To gain access to feed-grade antibiotics, producers will need to work with a veterinarian to obtain a veterinary feed directive (VFD), which will be required for a feed mill to produce any diet with antibiotics for which a VFD is required. This holds true even if feed is made by producers themselves on their farms. For water medications, producers must get a prescription from their veterinarian before treatment may be allowed. Only therapeutic use (treatment, control, prevention) for specific animal health conditions will be allowed under a veterinarian’s direction.

The Pork Quality Assurance® Plus (PQA Plus®) program provides guidance on antibiotic use records. Specifically, the “Pen or Individual Pig Treatment Record” within PQA Plus provides guidance in recording the number of animals, reason for treatment, product name and who administered the treatment. An updated version of PQA Plus will be launched in June, including a section on responsible antibiotic use and a reference booklet describing how to be ready for the upcoming regulatory changes. For more information about PQA Plus, go to pork.org and click the certification tab.

YOU NEED TO BE PREPARED FOR THESE MAJOR CHANGES.

Take Action Now

Now is the best time for producers to visit with their veterinarians, feed mills and distributors to ensure that they are prepared or soon will be regarding FDA’s new requirements. To stay informed about the VFD and FDA’s new antibiotic requirements, bookmark Pork Checkoff’s Antibiotics Resource Center—pork.org/antibiotics. It will provide the latest information and resources that you need to be prepared for these major changes.

To ensure producers are staying ahead of the changes, the Pork Checkoff’s science and technology team has prepared a checklist. The USCARE acronym is an easy way to remember the six key steps that producers need to complete before January 2017. Taking this action is critical to ensure successful compliance with the upcoming changes. So, don’t wait… be ready!

- Understand the new feed (VFD) and water (prescription) rules. As of Jan. 1, 2017, growth promotion use of medically important (to human health) antibiotics will not be allowed. Only therapeutic use (treatment, control, prevention) for a specific animal health condition will be allowed under a veterinarian’s direction.
- Strengthen the Veterinary-Client-Patient Relationship (VCPR): Schedule periodic herd visits with your veterinarian and review health monitoring, treatment and biosecurity protocols.
- Communicate with feed suppliers: Ensure the mill personnel understand and are prepared to implement new VFD record-keeping procedures and that stringent feed delivery protocols are in place.
- Assess herd health and welfare strategies: Sit down with your veterinarian to outline production and management changes to maximize animal health and minimize antibiotic use.
- Renew a commitment to responsible antibiotic use: Stay up to date with PQA Plus certification and make it part of the farm’s worker education program.
- Ensure record-keeping compliance: For producers, this means keeping copies (print or electronic) of VFD for two years and prescription records for one year.

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**OVERCOMING UNIQUE CHALLENGES**

**EDITOR’S NOTE:** To get a completely different point of view of what factors are critical to the success of pork operations in parts of the world with very different challenges from what is seen in North America, Benchmark spoke to Kiddivong Sombuntham, Head of the Swine Division for Japa Comfeed with swine operations in Vietnam and Natasha Ferguson, PigCHAMP technical consultant for South Africa.

**BACKGROUND:** Japa started operations with government assistance in northern Vietnam, but now is independent and has a presence south of Ho Chi Minh City. The company has swine and poultry operations, a slaughter plant and milking equipment. Many of the raw feed materials are sourced locally, although corn, soybean meal and distillers’ dried grains with solubles are imported from the United States. Kiddivong is working in Vietnam to bring Western methods and efficiency to an area of the world that is facing some interesting challenges when it comes to profitable pork production.

Natalia works for PIC South Africa (PICRSA), the franchise holder for PIC genetics in South Africa as well as the PigCHAMP distributor for Africa. PICRSA owns their own production operations which include Parent Nucleus, Sire Line Nucleus and multiplication farms. They also have a world class Gene Transfer Centre which is key for the support of their breeding programs and genetic dissemination. They started using PigCHAMP in 2010 to give their customers better reporting and help managers to make better production decisions.

**BENCHMARK:** What are the areas of production you feel you can improve upon the most over the next five years for your sow operation?

**KIDDIVONG:** The first issue is to just understand the environment. The areas we are looking to grow in have not had a very high density of pork production. So we need to make sure there is a good water supply and understand the local climate conditions that will impact production. We also need to understand our supply chain for raw materials, what can be sourced locally and what can’t.

**KIDDIVONG:** First is the high cost of feed. Most of our feed needs to be imported which puts us at a disadvantage. We also have a higher death loss and lower pigs per litter than other areas which makes it difficult to be profitable. Because most of our market is made up of small operations, we do not have good uniformity and consistency in quality. Between 60 and 70% of our production still comes from the back yards of small farms. Vietnam has the third largest breeding herd in the world (behind China and the United States), but we only rank 7th in total tons of pork produced. That shows how far behind we are other countries in terms of efficiency.

**BENCHMARK:** What needs to happen for Vietnam (South Africa) to become more competitive over the next 3-5 years?

**KIDDIVONG:** We definitely need to improve our biosecurity and meat quality. We need to move to larger, professionally run farms and use better genetics. The Japa Group has excellent skills in producing feed if we can source ingredients at a reasonable cost. Vietnam has a good climate for pork production and pork is a preferred protein source for the population. For the market we is growing… we just need to make sure we can provide a good quality product at a good price.

**NATALIA:** Genetic connectivity to global GN herds need to improve. Biosecurity is one area where a lot of farms can improve upon, as this will lower the risk of different diseases being spread. PICRSA has the highest standards when it comes to biosecurity, and this contributes to the reason we are still continuing to deliver the best genetically enhanced gilts and boars. Our industry is in a period of change. We will see more consolidation in the near future as small piggeries close down and larger producers become even larger. These larger producers own economy of scale and invest in new housing and technology, which increases competitiveness. We will soon have a number of producers reaching and exceeding 30PSY.

**BENCHMARK:** What needs to happen for Vietnam (South Africa) to become more competitive over the next 3-5 years?

**NATALIA:** Currently South Africa is experiencing the worst drought in years, and this contributes to many aspects, such as feed shortages with the consequential rise in feed prices. With this obstacle it just emphasizes the importance of using genetics with the best possible feed conversion ratio (FCR). Pork consumption in RSA is a very low 4kg to 5kg per capita. This is basically because of cultural differences and religious beliefs. Our industry organizations are working very hard on consumer education and promotions to increase consumption and production of pork.

**PHOTO:** Frans Lo, from Japa Comfeed in a Vietnamese finishing facility.
Pork production today is ever-changing and has many stakeholders throughout the value chain. We can get so caught up sometimes with taking care of our direct duties that we may not do a good job of keeping abreast of those other segments that impact the pork industry. I take pride in having some key resources to increase my awareness of performance issues and opportunities in these segments. That’s one reason why I’ve been following PigCHAMP’s Benchmark data since 2000.

Industry leaders need to be well rounded with information from every spoke on the wheel. I work to enhance my professional knowledge base. I look at this data base from three different angles: integrity of data, updates on this segment of the industry leaders need to be well rounded with information from every spoke on the wheel. I work to enhance my professional knowledge base. I look at this data base from three different angles: integrity of data, updates on this segment of the industry, and other production practices, it’s critical tracking impact of biosecurity enhancements, and improved production practices supporting the gains we’ve seen through these KPIs. We’ve also seen health issues that can diminish production just as fast. So seeing the improvements as well as the downturns shows the industry how fast production can turn. The quarterly and annual benchmarks help those of us not directly involved in production follow these KPIs.

In reviewing the 2015 vs. 2014 data you can make the assumption that some of the KPIs critical to production have come back on line. We’ve seen a lot of areas that have impacted production and might again in the future, so watching these trends is helpful for everyone.

The suppliers I meet with expect me to discuss KPIs important for packer relationships such as in carcass weight vs. matrix, sort premium/discount, delivery schedules, non-ambulatory dead on arrivals vs. plant averages to help better understand areas to enhance net dollars. Suppliers also expect me to be abreast of their KPIs critical to the business and productivity is one of those critical areas. With the discussions around group housing, batch farrowing, new A.I. techniques and other production practices, it’s critical tracking impact of KPIs in the production arena as we move forward.

The USDA puts out a quarterly Hogs & Pigs report which I track because it’s critical to our business. More than anything I’ll review trends in data in the H&P report vs. PigCHAMP.

It is important to use sources of accurate and unbiased data. I’ve had the opportunity to visit Jayne Jackson and Susan Olson at PigCHAMP to better understand the scrutiny all data is put through before it’s recorded or put out to the web for suppliers and industry to read and review. This is why I feel confident when referencing in presentations or discussing with suppliers. The scrutiny of these key performance indicators (KPI) just enhances the value of the data in my opinion. I’ve realized this data is put together using a high level of analysis before it hits publication and I really appreciate it.

I focus on the mean (average) data, not only the top 10%.
I focus on the following KPIs, Farrowing Rate, Total Born, Born Alive, Total Pigs Weaned, Pre Weaning Mortality %, and Pigs Weaned /Mated Sow /Year. These indicators help me understand today’s trends that support the bottom line of our suppliers and the pigs that will be marketed to our plants. Everyone using the data has their own set of key indicators, my goal is to keep abreast of happenings in other segments today and these KPIs are critical!

I also appreciate the analytics of these KPIs. Some might call me a spreadsheet nerd, but I want to understand trends of data as well as the underlying health and production influencers to make sense of what’s happening in a trend and why it happened. One example is the PEDV issues we saw in 2014. You can easily look at some of these KPIs and see that fewer sows farrowed and pigs weaned, then you start looking at quarterly numbers from 2015 to see that we’ve put the ship back on course. I like to review trend lines and where we might be in 5 and 10 years down the road and the impact this could make on supply, and hope demand will support it. I also like to benchmark PigCHAMP’s KPIs against other databases.

The suppliers I meet with expect me to discuss KPIs important for packer relationships such as in carcass weight vs. matrix, sort premium/discount, delivery schedules, non-ambulatory dead on arrivals vs. plant averages to help better understand areas to enhance net dollars. Suppliers also expect me to be abreast of their KPIs critical to the business and productivity is one of those critical areas. With the discussions around group housing, batch farrowing, new A.I. techniques and other production practices, it’s critical tracking impact of KPIs in the production arena as we move forward.

It is important to use sources of accurate and unbiased data. I’ve had the opportunity to visit Jayne Jackson and Susan Olson at PigCHAMP to better understand the scrutiny all data is put through before it’s recorded or put out to the web for suppliers and industry to read and review. This is why I feel confident when referencing in presentations or discussing with suppliers. The scrutiny of these key performance indicators (KPI) just enhances the value of the data in my opinion. I’ve realized this data is put together using a high level of analysis before it hits publication and I really appreciate it.

I focus on the mean (average) data, not only the top 10%.
I focus on the following KPIs, Farrowing Rate, Total Born, Born Alive, Total Pigs Weaned, Pre Weaning Mortality %, and Pigs Weaned /Mated Sow /Year. These indicators help me understand today’s trends that support the bottom line of our suppliers and the pigs that will be marketed to our plants. Everyone using the data has their own set of key indicators, my goal is to keep abreast of happenings in other segments today and these KPIs are critical!

I also appreciate the analytics of these KPIs. Some might call me a spreadsheet nerd, but I want to understand trends of data as well as the underlying health and production influencers to make sense of what’s happening in a trend and why it happened. One example is the PEDV issues we saw in 2014. You can easily look at some of these KPIs and see that fewer sows farrowed and pigs weaned, then you start looking at quarterly numbers from 2015 to see that we’ve put the ship back on course. I like to review trend lines and where we might be in 5 and 10 years down the road and the impact this could make on supply, and hope demand will support it. I also like to benchmark PigCHAMP’s KPIs against other databases.

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I am looking forward to working with PigChamp as they focus on the other parts of the production cycle with the same integrity and scrutiny as they have with the sow production data and KPIs involved with it. Over-all this should enhance their business model and it becomes a one stop shop for over-all production data.

I appreciate a resource like this to help add depth to supplier discussions.
<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>MEAN</th>
<th>SD</th>
<th>MEDIAN</th>
<th>UPPER 10 PERCENTILE</th>
<th>LOWER 10 PERCENTILE</th>
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<tr>
<td>Total number of services</td>
<td>5457.10</td>
<td>4189.360</td>
<td>4356.00</td>
<td>12228.00</td>
<td>1256.00</td>
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<td>Number repeat services</td>
<td>359.36</td>
<td>375.356</td>
<td>244.00</td>
<td>821.00</td>
<td>39.00</td>
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<tr>
<td>Percent repeat services</td>
<td>6.68</td>
<td>4.109</td>
<td>6.06</td>
<td>12.26</td>
<td>1.85</td>
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<tr>
<td>Number of sows farrowed</td>
<td>4755.70</td>
<td>3701.880</td>
<td>3850.00</td>
<td>10472.00</td>
<td>1055.00</td>
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<tr>
<td>Total pigs born</td>
<td>66021.66</td>
<td>51940.710</td>
<td>52491.00</td>
<td>139780.00</td>
<td>13378.00</td>
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<tr>
<td>Average total pigs per litter</td>
<td>13.64</td>
<td>1.068</td>
<td>13.66</td>
<td>14.91</td>
<td>12.30</td>
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<tr>
<td>Total pigs born alive</td>
<td>59937.87</td>
<td>47241.670</td>
<td>46712.00</td>
<td>126741.00</td>
<td>12383.00</td>
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<tr>
<td>Average pigs born alive/litter</td>
<td>12.39</td>
<td>0.893</td>
<td>12.45</td>
<td>13.46</td>
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<tr>
<td>Liveborn/female/yr</td>
<td>27.79</td>
<td>4.181</td>
<td>27.72</td>
<td>31.83</td>
<td>23.10</td>
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<tr>
<td>Total stillborn pigs</td>
<td>4300.40</td>
<td>3658.240</td>
<td>3434.00</td>
<td>8982.00</td>
<td>734.00</td>
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<tr>
<td>Average stillborn pigs</td>
<td>0.92</td>
<td>0.338</td>
<td>0.90</td>
<td>1.34</td>
<td>0.54</td>
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<tr>
<td>Total mummified pigs born</td>
<td>1783.38</td>
<td>1900.020</td>
<td>1333.00</td>
<td>4132.00</td>
<td>95.00</td>
</tr>
<tr>
<td>Average mummies per litter</td>
<td>0.33</td>
<td>0.218</td>
<td>0.31</td>
<td>0.56</td>
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</tr>
<tr>
<td>Farrowing rate</td>
<td>84.53</td>
<td>6.119</td>
<td>85.20</td>
<td>91.74</td>
<td>77.14</td>
</tr>
<tr>
<td>Pre-weaning mortality</td>
<td>13.72</td>
<td>4.297</td>
<td>13.23</td>
<td>18.24</td>
<td>9.52</td>
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<tr>
<td>Sows farrowed and weaned</td>
<td>4711.44</td>
<td>3599.640</td>
<td>3689.00</td>
<td>10265.00</td>
<td>1074.00</td>
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<tr>
<td>Average age at weaning</td>
<td>20.42</td>
<td>1.727</td>
<td>20.37</td>
<td>22.08</td>
<td>18.63</td>
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<tr>
<td>Total pigs weaned</td>
<td>5086.59</td>
<td>39040.330</td>
<td>39285.00</td>
<td>108731.00</td>
<td>10815.00</td>
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<tr>
<td>Average litter weaning weight (n=99)</td>
<td>133.28</td>
<td>40.473</td>
<td>141.29</td>
<td>166.65</td>
<td>99.39</td>
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<tr>
<td>Pigs weaned per litter weaned</td>
<td>10.92</td>
<td>0.743</td>
<td>10.95</td>
<td>11.75</td>
<td>10.00</td>
</tr>
<tr>
<td>Pigs wnd / mated female / yr</td>
<td>24.91</td>
<td>3.331</td>
<td>25.12</td>
<td>28.87</td>
<td>21.00</td>
</tr>
<tr>
<td>Pigs wnd / female / year</td>
<td>23.84</td>
<td>3.343</td>
<td>24.10</td>
<td>28.07</td>
<td>19.96</td>
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<tr>
<td>Females entered</td>
<td>8.77</td>
<td>58.636</td>
<td>0.00</td>
<td>2.00</td>
<td>0.00</td>
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<tr>
<td>Sow and gilt deaths</td>
<td>199.03</td>
<td>183.237</td>
<td>140.00</td>
<td>442.00</td>
<td>32.00</td>
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<tr>
<td>Death rate</td>
<td>8.94</td>
<td>3.503</td>
<td>8.52</td>
<td>13.64</td>
<td>4.97</td>
</tr>
<tr>
<td>Sows and gilts culled</td>
<td>1026.73</td>
<td>878.888</td>
<td>762.00</td>
<td>2219.00</td>
<td>197.00</td>
</tr>
<tr>
<td>Culling rate (n=404)</td>
<td>48.81</td>
<td>15.926</td>
<td>47.36</td>
<td>69.28</td>
<td>30.81</td>
</tr>
<tr>
<td>Total sows</td>
<td>2022.15</td>
<td>1545.710</td>
<td>1581.00</td>
<td>4596.00</td>
<td>460.00</td>
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<tr>
<td>Ending boar inventory</td>
<td>6.70</td>
<td>19.782</td>
<td>4.00</td>
<td>12.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>
THE NEW VFD RULE: Impacts on Producers, Feed Mills, and Swine Veterinarians

PAUL D. RUEN, DVM

In June 2015 the Food and Drug Administration (FDA), due to increased concerns and pressures surrounding the use of antimicrobials in livestock, implemented a new Veterinary Feed Directive (VFD). The result is that all use of antibiotics and antimicrobials in livestock, beginning on January 1, 2017. Additionally, through Guidance 213, the FDA is transitioning food animals away from all growth promoter use of medicinally important antibiotics, and establishing veterinary oversight via prescription for use of therapeutic antibiotics in water.

What do these changing regulations mean for those of us working out on farms? In most cases, veterinarians are already working closely with pork producers to make appropriate decisions related to the use of antibiotics. The Pork Quality Assurance® program, initiated by the National Pork Producers Association in 1989 and later updated to the PQA Plus® program, has relied on a close partnership between producers and their veterinarians and is widely accepted in the U.S. swine industry. Together with distributors (feed mills and others that distribute medicated feeds containing VFD drugs), producers and their veterinarians must learn to navigate the new VFD and make it work for the pig.

While a few feed medications are unaffected by the rule change - bacitracin, carbadox, bambermycin, tiamulin, and ionophores – all others will require a VFD for their use. Practical implementation of VFDs on the farm will require us to meet 4 objectives: legal, accurate, efficient, and on-time.

LEGAL:
The following are legal responsibilities of veterinarians writing VFDs1:

- **License** to practice veterinary medicine in the state where pigs are to be fed
- **Valid veterinary client patient relationship (VCPR)**
- Use of written and signed VFD in compliance with laws
- **Provide client and distributor a copy of VFD**
- Retain VFD records for 2 years and provide for inspection by FDA upon request

VCPR is intended to create consistency in oversight for use of antibiotics regardless of the route of administration – injection, water, or feed. The key elements of the federally-defined VCPR2 include: (1) engage with the client to assume responsibility for making clinical judgments about patient health, (2) have sufficient knowledge of the patient by virtue of examination and/or visits to the facility where patient is managed, and (3) provide for any necessary follow-up evaluation or care. While site visits are important to a working VCPR, quality diagnostics, accurate production reports, and a valuable team of skilled swine technicians and managers are now part of the new models of swine health care. By bringing all antibiotic medication use under the oversight of veterinarians, the FDA expects a close working relationship between producers and their veterinarians to promote animal care, better health, and food safety.

ACCURATE:
There will be two categories of VFDs - one targeted to a farm’s typical disease challenges and a second that addresses disease outbreaks or emergency. We need to ensure in all cases that VFDs help get the right feed medication to the right pig at the right time. Plans will need to be easy to understand and follow. Additional information may be included or attached to the VFD to improve accuracy, such as a more specific description of animal location(s), approximate age or weight range, diet(s) that should include the listed medication, etc...

The key components necessary for completing a VFD include3:

- **Veterinarian’s and client’s name, address, and phone number**
- **Premise(s) where the animals are located and will be eating the medicated feed**
- **VFD issuance date and VFD expiration date (maximum 6 months) based on calendar date**
- **Name of drug, level of drug in the feed, and duration of use to the animals**
- Instructions if intended to be fed in combination with other VFD or OTC drug
- Species and production class of animals receiving medication
- **Withdrawal time, and special instructions and/or precautions**
- **Number of refills (refills) that are authorized (if permitted by drug approval)**
- Statement declaring that extra label use is not permitted

EFFICIENT: The time required to comply with the new rule will be significant. People will need training to fully understand the rule and time to develop the databases to house the inputs of sites, flows, products, usage information, and producer and feed mill names and contacts. Once a system is in place, executing the ongoing VFDs for groups of pigs will take an estimated 7 to 10 minutes per VFD, based on personal experience.

The new rule extended the maximum allowable expiration time for a VFD to 6 months instead of the old rule’s 90 days, and will better fit a feeding cycle for the wean-to-finish herd. In some situations it may be helpful for VFDs to be connected to specific diets or feed batches in order to best target times of disease risk for the group of pigs. Veterinarians will have the flexibility to include multiple sites under one VFD in situations of a shared flow health status, common ownership, and feed from the same mill.

ON-TIME:
Extra paperwork should not hinder animals from getting the medication they need when they need it. Paper or electronic VFD forms are acceptable and can be custom made or used from a commercial template. GlobalVetLINK® is a company that provides a web-based service called FeedLink® for completing, sending, and storing electronic VFDs. Others may also develop electronic VFD services, including drug sponsors and information management companies. Electronic VFDs will be used in a high percentage of cases in order to maximize the efficiency of veterinary time and resources, and to reduce the time lag between pig need and pig feed in the bin. Consideration for using a commercial service versus an internally developed system will hinge on costs, staffing, and privacy of data.

The key responsibilities of the producer include4:

- **Only the intended animals covered under the VFD receive the feed**
- **All VFD feed is completely fed up before the expiration date on the VFD**
- **Keep a copy of the VFD for 2 years and make it available if requested by FDA**

CONTINUED ON PAGE 22
The joint efforts of veterinarians, producers, and distributors will be important if we are to accomplish the best care for the pig and build upon the successes our industry has achieved in producing safe, quality, and affordable pork protein for the consumer. Regulated use of antibiotics in livestock will now include veterinary oversight for all routes of administration, including feed drugs via the VFD. Our efforts will be measured by how well we meet the legal requirements, ensure accuracy in the documentation, are efficient with our time, and still ensure that medications are targeted and on-time. How we meet the challenges and opportunities in the new VFD rule will have a bearing on the future availability of antibiotics for food animals.

REFERENCES

INDUSTRY IMPACTS:
Implementation of New and Revised FDA Regulations
LIZ WAGSTROM, DVM

The implementation of the Food and Drug Administration’s (FDA) Guidance 213 will signal one of the most significant changes ever in the regulation of antibiotics in food animal production. These impacts are likely to vary depending on the type of producer or veterinary practice. However, the overall impact on public perception of food animal production will be dependent on the industry’s commitment to successfully implementing the changes outlined in the FDA guidance.

• Integrated producers with staff veterinarians and company-owned feed mills have infrastructure in place that will likely allow them to implement these changes with minimal impact. Anecdotally, many of these producers have already made changes in the use of antibiotics in their production systems consistent with the FDA guidance.

• Independent producers and veterinarians will need to put systems in place to address the requirements of the veterinary feed directive (VFD) modifications. These producers will need to address their veterinary-client-patient-relationship (VCPR), communications with their feed supplier, record-keeping and other potential regulatory requirements. However, the result of addressing these requirements may not be merely compliance with the FDA requirements, but also an enhanced producer-veterinary communication and relationship.

• Small producers who mix feed on farm or who buy floor stock, may be disproportionately affected by the new changes. Due to the requirements for distributors, some retail outlets may no longer choose to stock medicated feed or water medications. Additionally, the costs of veterinary visits that would contribute to a valid VCPR and allow a veterinarian to legally write a VFD may be spread across a smaller number of animals. This would make the per-animal cost of implementation larger for these producers.

When the antibiotic changes go into effect next January, it is uncertain if there will be demonstrable impacts to animal health or performance. The FDA has clearly signaled that it is committed to allowing therapeutic uses of antibiotics that are important to protecting animal health. It is also uncertain if any measurable effect to antibiotic resistance in either animal or human disease will be observed. However, despite those uncertainties, successful implementation of Guidance 213 will continue to demonstrate the pork industry’s commitment to the responsible use of antibiotics.

THESE IMPACTS ARE LIKELY TO VARY DEPENDING ON THE TYPE OF PRODUCER OR VETERINARY PRACTICE.

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HOGS IN DEMAND AS A SAFE HAVEN INVESTMENT!

MOE AGOSTINO

Most commodities have plummeted in 2016, responding to a weaker macro-economic picture, but the one exception, oddly, seems to be hog futures, which have rung in a healthy 6% rise thus far making it the best performing commodity in the first quarter of 2016. There are 4 key forces or trends that remain a tailwind for hog futures in 2016, and are brewing up a perfect storm:

1) Cheaper gasoline prices, which are leading to increased spending at restaurants.
2) Better than expected domestic and export demand.
3) Modest supply growth of 1% in 2016 vs. 2015.
4) Reduced production due to PEDV, PRRS and AI Extender Issues.

U.S. CONSUMERS SAVING AS MUCH AS $200 BILLION ON CHEAPER GASOLINE PRICES

The fall in crude oil prices to a 13-year low in 2016, from a high of $108 to $30/barrel in the last 2 years, has given U.S. consumers a big tax break and saved them as much as $200 billion in spending at restaurants.

ON CHEAPER GASOLINE PRICES

U.S. CONSUMERS SAVING AS MUCH AS $200 BILLION

Since the 2008 financial crisis, the U.S. savings rate has gone from a low of 1.5% to over 5.5%. However, credit card data shows that 1 out of every 5 dollars in extra savings, or 20%, is spent on eating out more at full service restaurants and another 8% went to buying fast food. $20 more each month in spending at restaurants means an extra $240 per person on an annual basis. If we multiply this by the approximate 170 million people in the U.S. with credit cards, it equals almost $41 billion in spending a year at eating outlets. That’s a significant shift in consumer spending!

AVERAGE AMERICAN CONSUMES 90 KGs OF MEAT

What’s on the menu? According to OECD data, the average American adult consumes 90 kg's of meat, which is almost 3 times the global average at 34 kg. The U.S. economy grew by a slight 0.7% during the 4th quarter of 2015 and by 2.4% for all of 2015. A growing economy usually translates into growing meat demand. (Please see chart A)

BETTER PORK DEMAND KEY TO HIGHER PRICES

The good news for domestic meat demand is that the U.S. Commerce Department says consumer spending increased by 0.5% in January, the most for any month since May of 2015. Last year was the 3rd consecutive year with stronger domestic demand for pork. Measured at the retail level, pork demand was up by 4.2%. According to AHDB Pork, global pork prices have rung in a healthy 6% rise for all of 2015. A growing economy usually translates into growing meat demand. (Please see chart A)

2016 HOG SUPPLY GROWTH UP A MODEST 1% VS. 2015

Lean hog futures have been in an impressively uptrend since the middle of last November despite record large production last year and projections for record production again in 2016. However, an anticipated reduction in hog numbers, resulting from production problems caused by inferior boar semen extender and increased cases of PEDV and PRRS outbreaks could result in a counter-seasonal window of higher live hog prices during the pre-Easter period which usually is a weak period.

This potential production problem usually is a weak period.

Lower priced pork has attracted renewed demand in the U.S. and abroad despite a stronger U.S. $ Index. Pork remains much cheaper than beef which remains historically high. With U.S. hog slaughter up marginally (+1%) vs. last year and better demand, futures have performed better than most expected thus far. A break out above old highs set in July 2016 for the 2016 June hog futures contract now leaves upside targets open at $86.37 and then a rare 4th price count at $102.975/cwt! (Please see chart B)

MOE AGOSTINO

Moe Agostino is a Chief Commodity Strategist with Farms.com Risk Management Inc. For more information on managing risk in your grain and/or livestock operation, contact Moe at moe.agostino@farms.com or go to: www.riskmanagement.farms.com.
“Prime cost is the most important thing for us,” according to Andrew Chikishev, pig farm manager for Systema LLC. “For our company the economy and business profitability are determinant factors. So we tend to look for ways to decrease cost. Moreover, we closely manage the amount of live weight produced per square meter of production space per year. Like other pork producers, we strive to maintain a production system that provides strong economic performance.”

Another Systema technician notes: “As for KPI we regard proper Repeat rate (15%) and Farrowing rate and number of Liveborn piglets. Also we monitor percentage of mortality. Average daily gain targets are: farrow-wean – 250 g, grow – 550 g, finish – 750 g.”

Helen Bekker, Technician and Chief Breeder at Omsk Bacon JSC adds, “We are eager to use PigCHAMP to the fullest so as to observe the aggregate picture of our pork production; keep abreast and follow closely areas needed to be improved.”

We take into account all of the following indicators:

- Farrowing number per sow per year
- Farrowing rate
- Total born per sow
- Liveborn per sow
- Stillborn per sow
- Mummified per sow
- Weaned per sow
- Repeat rate
- Pigs reared per sow per year – a number of Liveborn piglets at the time of Weaning
- Lactation period
- Average female cycle number
- Breed herd culling and death
- Non-productive days number
- Average gain in weight for different groups
- Feed conversion
- Breed herd rotation rate

To get a perspective of what Key Performance Indicators are important to pork producers in Russia, PigCHAMP representative Olga Miroshnikova asked several leading producers for their thoughts. Here are some of the responses.

“Needless to say there are a lot of generally accepted KPIs that we try to reach. However most of the focus is on piglets rate of growth and final outcome by way of kill out,” observed Nadezhda Glazkova, Chief Husbandry Technician, Altaymysaprom LLC. The Key Performance Indicators for our company which we use for assessment of performance are the following:

- Fertility – the total number of Liveborn piglets in the litter. The boars’/semen’s quality influence this indicator
- Gain in weight
- Mortality – different at Farrowing, Grow and Finish
- Age at 100kg live weight - is calculated for breeding animals
- Kill out – meat yield
- Pigs reared per sow per year – a number of Liveborn piglets at the time of Weaning

“The fact of the matter is, high sow productivity turns out to be crucial when it comes to operating efficiency. That’s why we work in particular on this indicator,” according to Helen Kulikowa, Husbandry Technician, KFH Luft. “The most significant factor we monitor is conception rate (target is 97%). We also look for and monitor the number of liveborn, heavy piglets and the sow’s milking capacity (a sow ideally should nurse 14 piglets). For Grow-Finish animals we take into account both mortality and weight. The Key Performance Indicator is Live Weight 140kg at 180 days.”

Anton Miroshnikov, PigCHAMP representative in Russia, summarizes: “Although there are a lot of different points of view on the KPIs, all of them point to the same theme – rise in profitability of pork production. In contrast to Russian treatment of KPIs, other countries regard Pigs reared per sow per year as of paramount importance. Generally we try to reach this indicator as well at the level 28.5 piglets. In addition, total litter weight per sow per year and amount of meat per sow per year (KPI is 3 tons) show overall performance.”
A Rugged Mobile Swine-Management Solution Keeps the Pork Industry Moving Forward

BRYNNA KING

Business owners today are becoming increasingly tech-savvy, using computers not only for deskwork, but also for complex field tasks and mobile data collection — and pork producers are no exception.

Farm owners who use advanced technology in their operations expect to hire workers who are prepared to use these tools in their daily tasks, without the need for extensive training. Fortunately, most of today’s agriculture students have used computers daily for their entire lives, and they expect to use productivity-enhancing technology in their jobs to simplify tasks and improve their work performance.

Students at Iowa Lakes Community College’s Swine Training Center in Emmetsburg, as well as professionals at Newton Pork in Coggon, Iowa, are using PigCHAMP swine-management software with ultra-rugged Nautiz PDA units from Handheld Group to save time and improve productivity — and by doing so, they’re helping Iowa’s pork industry stay innovative and competitive.

HIGH-TECH HOG FARMS

Newton Pork is a 600-sow breed-to-wean farm that produces early-wean pigs, which it sells to a local finishing barn. Owner and manager Sean Dolan began using PigCHAMP’s sow management software in 1997.

“We wrote data down on diary cards and eventually entered the data into PigCHAMP on the farm office computer, when time allowed,” Dolan says. “In 2007, we switched from handwriting to a line of powerful, compact PDAs and smartphones — are IP65-rated and meet stringent MIL-STD-810G U.S. military testing standards for durability. They can handle repeated drops and are sealed against dust and water sprays, giving farmers an extra measure of reliability and data protection.

“These are hog barns, so there is feed dust and skin dander floating around,” Dolan says. “The conditions can sometimes be humid and unpleasant — and we’ve dropped our computers in fecal material more than once. The handheld gives me the durability I need.”

TRAINING FUTURE FARMERS

While Dolan raises his hogs, just 200 miles west students operate the very same swine-management technology in a state-of-the-art farming education program at Iowa Lakes Community College. ILCC’s Swine Training Center was established in 2003 for the purpose of preparing students for jobs at places like Newton Pork and more than 6,000 other Iowa operations that employ over 40,000 workers in day-to-day hog-raising tasks.

The center consists of a 7,500-square-foot facility with space to accommodate up to 12 sows every five weeks, plus up to 120 grower pigs — a small-scale model of what students might encounter at a typical farm. Up to 25 students per semester are learning how to use PigCHAMP Mobile along with PigCHAMP Reproductive and Grow-Finish desktop software for real-time record keeping and herd management.

“I felt that it was important for the students to be familiar with PigCHAMP and to learn the value of keeping accurate records,” says Kelly Dodge, Agriculture Technology instructor at ILCC, who spent more than 14 years working in the industry before returning to her alma mater to teach. “The handheld system fits into our program and is a good teaching tool.”

Before switching to PigCHAMP Mobile, Dodge’s students hand-recorded data onto paper.

“We had a mountain of paper records that contained information needing to be filed,” Dodge says. “We hung clipboards in the office, one for each event: breeding, farrowing, weaning and so on.”

Now the college uses the Nautiz X4 — another of Handheld Group’s powerful, ultra-rugged PDAs.

“Our swine unit is climate-controlled, but we still have a significant amount of dust,” Dodge notes. “And we’re working with livestock, so some situations may cause the handheld to get hit or be dropped on the floor. The Nautiz X4 lets me keep working and teaching without interruption.”

NEW TOOLS FOR AN AGE OLD INDUSTRY

Livestock farming is one of the world’s oldest occupations. So on the one hand it’s no surprise that pork-production technology has come a long way since the hog farms of centuries and millennia ago. But even when compared to more recent farming implements, today’s tools are very advanced.

Technology has improved exponentially in the last few decades, introducing tools such as real-time ultrasound and artificial insemination that have become common for modern pork farms.

Mobile record-keeping software paired with fast, durable hardware complements these technologies by protecting, organizing and analyzing herd data so it can be used in meaningful ways.

Dolan says he uses his Nautiz X3 with PigCHAMP “all day, every day of the year,” recording life events for each sow — including arrival, treatments, vaccinations, matings, farrowings, weanings and removal — directly into the device.

Before entering event details, he identifies a sow using an RFID wand reader that scans a chip inside the sow’s ear tag. This data is submitted instantly to his Nautiz PDA via Bluetooth.

PigCHAMP software automatically validates data during the entry process, allowing users to edit discrepancies as they happen and avoid costly and time-consuming errors. And this feature doesn’t just create neat and clean records — it also facilitates timely, data-driven strategy.

*The program gives workers accurate and up-to-date information to allow them to make quick management decisions, improving the productivity of the herd,” Dolan says.

For example, if a sow shows signs of being in heat, workers can easily pull up her history on the spot to determine whether she should be culled or re-inseminated.

Similarly, Dodge adds, “Students at the training center can look up a sow’s identification number on the handheld and immediately know how many days she is into a gestation or lactation phase.”

CONTINUED ON PAGE 31
And when data entry is complete, the software churns out valuable production reports. At Newton Pork, that means Dolan can make sure his weekly mating and weaning targets are being met. And for Dodge, these reports become a valuable teaching tool.

“The handheld unit downloads data via wi-fi directly to my PC. I can analyze the information and print out reports that I use for review and instruction in the classroom setting,” she says.

THE FUTURE OF PORK PRODUCTION

Using the cutting-edge PigCHAMP Mobile solution, pork farmers are pushing their industry toward greater innovation and increased success.

“Running PigCHAMP Mobile on the Nautiz X3 has streamlined our data-entry process, and up-to-date data has allowed us to identify and manage production problems in a more effective manner,” Dolan explains.

Dolan says he’s working with his genetic supplier to add barcodes to semen dose labels used for insemination, so he can start using the Nautiz X3’s built-in barcode scanner to save even more time.

“Scanning barcodes will allow us to more easily track individual boars used. That way, if we come upon a genetic defect, we can alert the supplier and they can remove that boar from their herd,” he says.

The PigCHAMP Mobile solution has also served as a valuable training tool at a time when the need for highly qualified pork-production workers keeps increasing.

“This solution provides ILCC students the opportunity to use industry-leading record-keeping systems they’ll see when they join the workforce,” Dodge says.

“In the past,” Dolan adds, “new employees had to memorize event codes and removal reasons for the small diary cards we used. Training young workers on the Nautiz PDA is much faster and more intuitive.”

Together, PigCHAMP and Handheld are providing unprecedented access to a wide range of data-management tools that support farmers as their operations grow larger and as on-farm technology advances.

And these tools are empowering both new and seasoned farmers to seek out more effective farming methods, in a technological ripple effect that’s producing higher-quality products while dramatically minimizing unprofitable downtime.

Brynna King

Brynna King is a staff writer for Handheld, a manufacturer of rugged mobile computers. Handheld and its partners deliver complete mobility solutions and offer a broad product line of rugged computers including rugged handhelds, tablets and notebooks.
Identifying Measurement Targets to Improve Production Efficiency

MATT CULBERTSON, PhD

Commercial swine production operates in an increasingly competitive global industry with a wide range of regional challenges, each with their unique characteristics and underlying competitive positioning. However, the primary driving factors of sustainable, cost efficient pork production remain highly consistent across the globe. Identifying appropriate KPI (Key Performance Indicators) that allow monitoring of success and identification of opportunities in a real-time and efficient manner is a critical component to building a culture of continual improvement and high performance. These KPI can take on many forms, from leading to lagging indicators to those that help visualize input, output, and financial results.

A successful organization may choose to highlight multiple layers of KPI that allow meaningful measurement at slat-level production facilities and then ultimately roll-up to system-wide business performance. For example, the industry has long utilized sow herd recording systems, such as PigCHAMP, to collect information and evaluate performance metrics for breeding herds such as pigs weaned per mated female year. However, for opportunity review and specific intervention at the farm level, routine KPI must be more detailed and include the driving components such as breed numbers, conception rates, total born and total born conversion rates. In addition, the post-weaning phase of production, driven by the large impact it has on system profitability, has become increasingly well measured in multiple production systems globally. This tracking typically allows for producers to understand performance on distinct groups of growing animals for relatively crude measures such as growth rate, feed efficiency and livability.

In many of the more mature markets the between and within system variation in some of the historically most prevalent KPIs has tightened, not surprising in a competitive environment. This has driven the continued evolution of KPIs towards new opportunity areas and an increased understanding of drivers that influence commercial financial success versus some that may simply target maximum biological performance. Some examples of these new KPIs by production phase might include:

**BREEDING HERD**
- % of gilts farrowed that enter the breeding facility
- Retention of breeding females by parity and/or through Parity 3
- Lbs/Kg of feed per weaned pig (including gilt development / gilt pool)
- Weaned pigs / employee / year
- Lifetime pigs weaned / gilt introduced

**POST-WEANING PERFORMANCE**
- Carcass weight per day of age
- Caloric feed efficiency on carcass weight basis
- Medication use and cost by phase
- Lbs/kg of carcass per pig space (or sq ft, etc.) per year

**INTEGRATED CARCASS VALUE**
- Lbs/kg per shackle per year
- Carcass weight target and carcass weight variation
- Realized saleable primal value %
- % of product into target higher margin categories

A common quote in this area is "If you can’t measure it, you can’t improve it." The combination of performance recording systems and access to good sources of objective benchmark data have increasingly allowed motivated managers and systems to identify opportunities to drive performance improvement. A desire to link biological performance to financial results in new and innovative ways will continue to allow early movers to be the first to capture those potential benefits and help demonstrate the path to future success to our increasingly global industry.

MATT CULBERTSON, PhD
Matt Culbertson, PhD, serves as Global Director for Product Development and Technical Services for PIC.
THE IMPACT OF VFDS ON SWINE PRODUCTION

Feed Mill Perspective

MATT FREDERKING

Veterinary Feed Directives (VFDS) will fundamentally shift and change how food is produced and will impact every level of production including feed mills, producers and the veterinarians that serve them. There are and will continue to be unknown costs associated with VFDS. Also, feed mills will more than likely be required to police the system.

In 1996 the Animal Drug Availability Act was passed by Congress. This rule set out a pathway for veterinarians to approve and signoff on antibiotics that are fed to livestock animals around the country. To date three swine drug are VFDS: Pulmotil® was approved in 1996, Florfenicol was approved in 2005 and Avilamycin was approved in 2015. In 2012 the Federal Drug Administration (FDA) began to rewrite the VFD regulations. During that rewrite, all medically important antimicrobial drugs used in food-producing animals will require VFDS beginning in January 2017. Common animal drugs not impacted are wormers, ionophores, bacitracin methylene disalicylate (BMD), bambermycin, carbadox, and tiamulin.

POSITIONED FOR CHANGED

The swine industry has a great starting point due to the fact that Pulmotil®, which is widely used in the industry, is currently classified as a VFD. Producers that use that drug are already aware of the relationship that needs to exist between them and their veterinarian to generate a VFD and then transfer it to the feed mill. An additional advantage for the swine industry is that a vast majority of producers already have a veterinarian/ client relationship due to group housing because of the integrated systems that we have in today’s production environment.

THOSE ACTIVITIES PUT THE FEED MILL INTO THE POLICING POSITION WHETHER THEY WANT TO BE OR NOT.

That being said, currently, swine producers only have a few drugs designated as a VFD that a veterinarian needs to sign off on in order to utilize it in their systems. Also, today’s producers have an array of antibiotics that can be implemented for the prevention and treatment of disease that do not need veterinarian intervention. After January 2017 the entire prevention thought process with these drugs will be reduced and everything will revolve around treatment.

MILLS ARE THE WHEELOWHSE

There are many steps that must be completed for VFDS to be implemented effectively. An original copy of the VFD is kept by the veterinarian. The veterinarian will then provide a copy to the producer or directly to the feed mill depending on the veterinarian. Once the feed mill receives the VFD from the veterinarian or producer they must crosscheck and verify that the VFD has been filled out correctly and that it is accurate. If any of those parameters are not met the VFD is null and void and the mill should not fill the order.

From a regulatory perspective, veterinarians should be the group monitoring, policing and ensuring that legitimate VFDS are being executed in the field. From a realistic perspective, the feed mill is going to become the wheelhouse that is going to monitor the process. Not because the feed mill wants to, but because the feed mill must. The mill is required to keep every VFD for two years. The new VFD rule did eliminate the need for veterinarians to specify the volume of VFD feed associated with the order. However, the expiration date for the VFD cannot exceed six months if the drug approval process does not specify a required VFD expiration date. In practice, new VFD drugs likely have a specified expiration date. For example, Pulmotil® for swine feed currently has a specified VFD expiration date of 90 days. Those activities put the feed mill into the policing position whether they want to be or not.

There is an economic cost to the rule. Preparation and execution of VFD implementation will require additional investment from the feed industry prior to January 2017. After implementation record keeping will be critical and people must monitor the records which is a cost. Some mills manufacture hundreds of thousands of tons of feed. Can that be monitored by people and paper? Possibly, but some are going to require a computer software package which is a cost.

When an operation chooses to utilize electronic software the program needs to be 21 CFR Part 11 Compliant. Some mills are well positioned and others must bring additional resources to the table.

SOME MILLS ARE WELL POSITIONED AND OTHERS MUST BRING ADDITIONAL RESOURCES TO THE TABLE.

Also, veterinarians are not going to issue VFDS for free. There is no set cost for issuing VFDS; however, more onsite calls will be required, and some veterinarians have stated that they will charge the cost of an onsite visit, which can vary widely. This could have ramifications for feed mills or integrators that have contract growers under them because someone must absorb the cost.

THE FUTURE

I envision during the next four to five years, some consolidation in the swine industry from a feed mill and producer standpoint. U.S. consumers will continue to drive for more natural, organic and antibiotic-free products. As they make that drive, the use of antibiotics at the producer level and feed mill level will more than likely decrease. Alternatives to antibiotics will continue to grab hold and push agricultural systems in the U.S. to meet that consumer demand. Organizations that have science-based highly effective alternatives like Ralco will continue to be very well positioned in the agriculture industry.
“YOU CAN HAVE THE BEST GENETICS, THE BEST BUILDINGS OR ENVIRONMENT, YOU CAN HAVE GOOD HEALTH, BUT WITHOUT THE RIGHT PEOPLE, YOU WON’T ACHIEVE OPTIMUM SUCCESS.”

Schoettmer says the software “helps us get the right sows back into the herd. This is a closed herd. So it’s important that with all the tools offered, we can identify our most productive lines. We can identify the top-producing sows and breed them to maternally semen to produce replacement gifts.”

“This is important because we are not just talking about culling decisions, but we are talking about internal genetic multiplication for the next generation sow herd.”

“It allows us to dig into the next layer of data. Not just the total pigs born, but we can also see the correlation between all the different pieces of the puzzle. For example, how weaning age can affect return to estrus time and how that affects subsequent litter size in a genetic line.”

“It helps us see the intercorrelation (I might have just made up a new word there). But it takes us to the next level. We can even identify our best AI technicians, what days are our strongest, and that goes back to getting the right people in the right seat on the bus.”

Schoettmer was announced by the National Pork Board as the Pig Farmer of the Year last October, and he is the first-ever recipient of the award. The program identifies a top producer who excels at raising pigs using the We Care ethical principles and connects with consumers about how pork is produced.

“We consider ourselves a very traditional farm,” he says. “Not old-fashioned. But traditional. I always like to draw that distinction. We are essentially a single-site farm, and a traditional farrow-to-finish operation, which includes a feed mill on-site.”

“We try to do the best we can do to portray the pig industry in the light that it deserves. It is a very noble industry. We need to tell people that.”

“We get to be on our soapbox here for a year. So we need to let people know what the pig industry is all about. We are throwing open our doors and letting people see what our story is, and how things really are in this industry.”

“I’m proud and happy to be doing that. IT’S WHAT THE INDUSTRY DESERVES.”

Paul Nolan is Senior Manager for Farms.com.
DEMYSTIFYING NEW VFD COMPLIANCE

TERES LAMBERT

If you’re a bit – or even a lot – confused about the new Veterinary Feed Directive (VFD) rule that took effect Oct. 1, 2015, and the new feed and water antibiotic labels that will be phased in by December 2016, you are not alone. That said, the confusion can be lessened.

Per Creighton Abrams: “When eating an elephant, take one bite at a time.”

The “elephant” in this case is the new VFD.

THE ‘ELEPHANT’

Pre-VFD, the U.S. Food and Drug Administration recognized two categories of animal drugs: over-the-counter and prescription. Because medicated feeds fell into the over-the-counter category, producers could purchase medicated feed at a feed store and give it to their animals.

In 1996, the FDA added a third category of animal drugs: VFD drugs. Drugs that fall into the VFD drug category are drugs intended for use in or on animal feed that is limited to use under the professional supervision of a licensed veterinarian.

With the government’s Second VFD Rule, published in June 2015, the swine industry and drug sponsors are required to rethink and change their way of conducting business.

Due to the Second VFD Rule, medicated feed additives designated as medically important are now classified as VFD drugs and are subject to several new rules, including but not limited to:

• Medicated feed additives that include VFD drugs, and other VFD drugs, require a producer to obtain a VFD, a written – nonverbal – statement, from the producer’s veterinarian that authorizes the use of a VFD drug or combination VFD drug in or on an animal feed.

A producer cannot just go out and purchase VFD drugs, including medicated feeds containing VFD drugs. The Second VFD Rule mandates that a producer consult his/her veterinarian with whom he/she has a veterinary-client-patient relationship. The veterinarian must have worked with the producer (the client), can make clinical judgments about patient (animal(s) health, has sufficient knowledge of the patient by examining the animal or facilities and can provide follow-up care. Plus, the veterinarian must be licensed in the producer’s state where the producer’s farm is located.

While the VFD statement that the producer must obtain from his/her veterinarian does not have a specific format, it must include 16 key pieces of information:

1) The specific medication to be obtained
2) Name and contact information for the veterinarian
3) Name and contact information for the producer
4) Location of the animals
5) Species of animals to receive the feed
6) Approximate number of animals to receive the feed
7) Indication for use of the drug
8) VFD issuance date
9) Expiration date of the VFD approval
10) Name of the allowed drug
11) Level of drug permitted in the feed
12) Duration of use
13) Number of refills
14) Withdrawal time
15) Special instructions and cautionary statements
16) The veterinarian’s electronic or written signature

After a producer has obtained a VFD order from his/her veterinarian, the written document must be sent – physically or electronically – to a feed manufacturer or supplier to get the VFD feed. Producers who manufacture their own feed must have a VFD from which the medicated VFD feed is manufactured.

A producer and the producer’s veterinarian must maintain all VFD records for two years. The same two-year requirement applies to feed distributors.

MORE BITE-SIZED PIECES

A veterinarian may not write a VFD for an extra-label use, and a distributor cannot dispense the drug for extra-label use.

The ruling affects only feed-grade antimicrobials, those that are medically important and administered in feed or water. A list of affected drugs is available online at the FDA website: http://www.fda.gov/AnimalVeterinary/SafetyHealth/AntimicrobialResistance/JudiciousUseofAntimicrobials

Antibiotics used exclusively in animals to treat illness and promote growth will not be affected by the VFD label. These drugs include Ionomophores, Polypeptides, Carbadox, Bambermycin and Pleuromutilin.

Per the Second VFD Rule, drug sponsors must modify labeling for certain products, removing any wording related to production such as increased rate of weight gain. Labeling can only address therapeutic uses.

While the procedure for transitioning from the old to the new labels is still being worked out, producers will need to have a VFD from a licensed veterinarian in place for feeding VFD antibiotics come Jan. 1, 2017.

Veterinarians and producers can use an electronic system to standardize and store VFD documents, helping avoid inaccuracies and minimize the time required to write and use a VFD.

Dr. Gerald Stokka, associate professor of animal stewardship, North Dakota State University, says going the electronic route with VFDs is a “great way of tackling the FDA’s requirements.”

“Electronic copies are very handy, functional and efficient,” Stokka states. “When I have the option of electronic or hard copy, I opt for electronic. While there is a learning curve at the beginning, people can be easily trained. Electronic copies are just so darn time efficient.

“…I see the day when every veterinarian, producer and feed mill goes the electronic route. While a change right now may take some out of their comfort zone, once they make the change and see how simple business continuity can be, they’ll be glad they went electronic to meet the FDA’s VFD requirements.”

NEXT STEPS

A key step to prepare for Jan. 1, 2017 when compliance will be a must include contacting a veterinarian, having him/her visit your operation and forming a VCPR (veterinarian-client-patient relationship) far in advance of Jan. 1.

A second step is to investigate a digital solution that will allow you to seamlessly communicate with your veterinarian and other entities as well as digitally store all related documents for two years as mandated by the FDA’s new ruling.

Veterinarians and producers using the FeedLINK® electronic VFD System are quick to point out that the proven electronic system not only streamlines communication and animal treatment, but it also gives them a clear view of all labeled and approved drugs. The paperless route also means VFDs cannot go missing; eVFDs can be located quickly and more efficiently than hard copies and times of treatment communicated in real time.

TERES LAMBERT

Teres Lambert has over 40 years of experience in the animal agriculture industry. Now retired, she continues to write about livestock and issues relevant to animal ag. Lambert received her bachelor’s and master’s degrees from Kansas State University, and now resides in Windsor, Colorado.
In the swine industry, Key Performance Indicators (KPIs) are important to monitor from a human resources perspective as well. The people of your pork production operation are essential to its success. Hiring the right people, then providing the necessary training, guidance, compensation and rewards enable your organization to grow and prosper. Performance management systems help confirm you are meeting objectives and recognize employee accomplishments.

Data collected from agribusinesses indicates that more than 70% have a structured staff performance system in place and the majority noted this performance was linked to a reward such as a bonus, commission or profit sharing. These organizations said the main objectives for their performance rewards were to improve business performance, achieve business objectives, and enhance individual performance. Organizations said that performance rewards were based mainly on company and individual performance (2015-2016 AgCareers.com U.S. and Canadian AGRIBUSINESS HR REVIEW).

“Agribusiness companies providing performance rewards seek mutual benefits for both employee and employer, supporting growth and achievement within the industry while creating value for the workforce that supports it,” says Mary Barefoot, AgCareers.com Director of HR Services.

Performance management systems begin with planning work and setting expectations with your team members, then continually monitoring and periodically rating their performance. AgCareers.com has identified Key Performance Indicators to assist in developing your performance system:

### KEY PERFORMANCE INDICATORS

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<th>COMMUNICATION</th>
<th>INITIATIVE</th>
<th>QUALITY</th>
<th>TEAMWORK/COOPERATION/PROCESSES</th>
<th>INTEGRITY/RESPONSIBILITY</th>
<th>TIME MANAGEMENT/DEPENDABILITY</th>
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<td>Displays the ability to express ideas clearly, concisely, and effectively, across the organization. Listens well, shares work-related information and works well with others' work styles. Ability to work with others in a courteous and effective manner. Interacts and cooperates with others to ensure the organization's objectives and goals are met. Resolves conflicts effectively. Promotes departmental and inter-departmental teamwork. Interacts effectively with their supervisor.</td>
<td>Demonstrates a willingness to make significant contributions with little direction, to be involved in new initiatives, and to attempt non-routine tasks. Displays energy, enthusiasm, ingenuity, and versatility. Offers suggestions to solve problems and improve operations. Exercises independent actions within limits of authority.</td>
<td>The employee demonstrates a consistent high standard of work while maintaining daily workflow. Work produced by the employee is thorough, accurate and neat. Displays the ability to work under pressure and learns from previous mistakes.</td>
<td>Understands that all parts of the organization must work together, including the need for supervision and direction. Voluntarily gives and receives help. Values contributions made by others. Is able to function in a joint cooperative manner while supporting the plans, programs, policies, procedures and other team members.</td>
<td>Has a positive attitude toward his/her work. Demonstrates respect, honesty, integrity, and fairness.</td>
<td>Takes responsibility and holds oneself accountable. Follows through in a reliable, trustworthy and timely manner.</td>
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### KPIS IN THE PERFORMANCE REVIEW PROCESS

**Performance evaluations, or “reviews” are an opportunity for positive recognition and restatement of critical points. Typically, animal production operations implemented their performance system annually (62%), according to the HR REVIEW. However, to be effective, the review system requires year-round effort. Supervisors should be communicating both positive and negative feedback to employees regarding KPIS on a regular basis not limited to once a year.**

These communications are essential to a successful operation. Believe it or not, your employees want to hear how they are doing and it’s important they hear it from you! This provides further opportunity for feedback, which supports employee growth and development. It also allows a mechanism for planning, monitoring, and evaluating employee performance and development, and supports the organization’s reward, recognition, and other personnel decisions. If done well, reviews can effectively improve employee morale and retention by keeping job expectations clear and helping employees stay focused on goals directly aligned with your business.

To help you get started, consider the following steps to completing an effective performance evaluation:

1) PREPARATION

Preparation is the step that sometimes does not receive as much attention as managers should devote to it. The goal of this stage is to do everything possible to pave the way for a well-formed, productive discussion. Schedule a meeting time; provide plenty of advanced notice and ensure enough time is allotted to conduct the review.

Have the employee submit a self-assessment in advance of the meeting. This self-assessment consists of a summary of the results, outcomes and contributions related to the employee’s job expectations, development plan and goals.

Managers should review their organization’s performance evaluation documentation including KPIS, rating definitions, recent and prior performance reviews, employee’s self-assessment, notes from the supervisory file, along with employee’s goals and evaluation criteria.

Your notes should include a summary of the employee’s contributions, results, and any associated work behavior. You also want to elaborate on your comments with very specific examples. While you do not need to detail every contribution and result for the entire period, you should highlight how their contributions have helped meet their individual or the team goals.

In an AgCareers.com poll, employees said the most important thing a manager could do was to provide specific goals and objectives. The performance evaluation gives you the opportunity to reiterate or make modifications to their outlined goals.

2) DISCUSSION

A simple process includes allowing a two-way dialogue with your employee. Open the discussion by asking your team member to summarize their self-assessment. Be sure to listen and acknowledge areas of consensus. You will also want to highlight where you have a differing perspective from your employee’s self-assessment.

CONTINUED ON PAGE 42
Follow this with your assessment. Articulate your thoughts by considering “What are the most important points that need to be communicated to the employee about their performance during the review?” Share your assessment with the team member by providing both strengths and areas that you’ve previously discussed that need continued improvement. Try to anticipate questions from the employee, and most importantly, support your comments through the use of specific examples. Help the employee understand how KPIs impact the organization as a whole.

Does the employee need additional training to excel in their role? Looking specifically at animal production operations, training and development programs were the number one way they motivated employees in order to keep them productive and challenged by their role (2015-2016 AgCareers.com U.S. and Canadian AGRIBUSINESS HR REVIEW).

At the end of the discussion, allow the team member to ask questions and address other potential concerns. Be sure to review the core points and clarify the points of agreement as well as differences. Outline any changes or new goals for the next period and follow by assigning deadlines and next steps.

3) DOCUMENTATION
It is recommended that you have signatures and a date on your performance documentation before filing. If for some reason your employee does not agree with the evaluation and refuses to sign it, it is okay to note the date you presented it and then sign the copy you presented. Retain the signed document in the employee’s personnel file, and provide them a copy.

KEY TAKEAWAYS
When it comes down to it, performance reviews should not be used as a time to take out frustrations and criticisms on employees—this is how performance reviews got the negative connotation and do nothing for the organization or employee. Make sure you are communicating both praise and constructive criticism throughout the year and not saving it all for evaluation time. Performance reviews should be an opportunity for positive recognition and reinforcement of key performance indicators. There should be no surprises during a performance review!

By following a structured process and ensuring you have appropriate documentation and meaningful discussion with your employees, you will find that if done well, your performance management system will improve employee morale and strengthen your operation’s employee retention.
SUPERIOR GENETICS
PIC’s proprietary genetics platform focuses on delivering greater profit for you. With the most advanced utilization of genomic science, we strive to attain PIC’s promise to Never Stop Improving.

UNRIVALED SUPPORT

RELIABLE SUPPLY

ROBUST HEALTH

PIC INVESTS MORE INTO YOUR SUCCESS
We know we need to do more for you than deliver superior genetics. That’s why we offer technical service, supply and health solutions to help you create robust, productive animals. Only PIC can provide all the support you need to get the most value out of every pig. To learn more visit www.pic.com.