University of Wyoming Extension

BARNYARDS & BACKYARDS

UW Extension | Agriculture & Horticulture | USDA | NIFA

Canvas tool helps plan your agribusiness future

Now is a great time to take a look at the past year and consider what is working well in your operation.

You can also examine areas of opportunity where you might be able to reduce risk, improve production, streamline efficiencies, and enter potential untapped markets. Consider changes in existing markets, commodity pricing changes, and changes in customer needs and desires.

Maybe this is the time to alter your business plan or begin formalizing one if you haven't yet taken that step.

Often, business owners prepare a business plan prior to visiting a lender or investor, but the plan is really for you and creates a roadmap for your specific business model. It is a living document that can be changed and revised as you test the feasibility of a market idea, secure funding, and provide a strategy for success.

Before digging into a formal business plan, consider a concept called the Business Model Canvas, a visual tool with nine informational blocks to help with visualizing and structuring that business plan. It's a brainstorming tool developed by Alex Osterwalder and Yves Pigneur. The canvas can be found at www.strategyzer.com/canvas/business-model-canvas.

Begin by drawing the canvas on a whiteboard or a big sheet of craft paper and then bring out the sticky notes and markers for recording ideas. Use the canvas to reflect and identify key components of your idea, both for startups and expansions—or a change in market.

The Wyoming Small Business Development Center Network (SBDC Network) has found this planning tool also helps your existing business as an ongoing strategic planning tool. You will also be able to see all of the components of the model at once making it easier to create a more formal business plan.

So, how does it work, and how can it be tailored to your operation?

Think of this canvas as a right brain/left brain concept, to develop the relationships with your creative mind (right brain) and then move to the analytical side (left brain) to accomplish the details.

Some of the key concepts found in the right brain realm of this canvas are:

- **Customer Segments**—Define the different groups of people or organizations you aim to reach and serve.
- **Value Propositions**—The value proposition solves a customer problem or satisfies a customer need.
- **Relationships**—This is how the customer meets a unique value proposition and what connects them to your value proposition over competition.
- **Sales, Communication, and Distribution Channels**—Identify how each one interacts with customers as they are an important piece of the customer experience.

On the more left brain side of the tool you'll work through and identify these key business concepts:

- **Resources**—Key resources can be physical (building and equipment), intellectual (knowledge and databases), human (the right people for your organization), and financial (make sure you have enough capital, especially at the beginning).
- **Activities**— This describes the most important things a company must do to make its business model work.
- **Partnerships**—We can distinguish between four different types of partnerships:
  - Strategic alliances (between non-competitors)
  - Competition (strategic partnerships between competitors)
  - Joint ventures (to develop new businesses)
  - Buyer and Supplier Partnerships (partnership between yourself and those who buy from you or those whose products or services you purchase)
- **Cost Structures**—As a business, you should be able to identify how much money you need, how much money you really spend, and how much money it takes to run your business. Plan ahead to stay ahead of your competition!

Once you complete the blocks in the canvas, you're ready to assemble your business plan. Put your ideas in writing to create a clear, concise, and accurate roadmap for your future.

When you're ready for this step, download a business plan outline from the Wyoming SBDC Network's website (WyomingSBDC.org) and contact your local Wyoming SBDC Network business adviser who is always eager to help walk you through the process.

Susan Jerke is the regional director for Campbell, Crook, Johnson, Sheridan, and Weston counties, and can be reached at (307) 682-5232 or at sjerke@uwyo.edu.

ABOUT THE WYOMING SBDC NETWORK

The Wyoming SBDC Network offers no-cost advising and technical assistance to help Wyoming entrepreneurs think about, launch, grow, reinvent, or exit their businesses. In 2019, the Wyoming SBDC Network:

- Helped Wyoming entrepreneurs start 108 new businesses,
- Created or saved 3,402 jobs, and
- Brought a capital impact of more than $24 million to the state.

The Wyoming SBDC Network is hosted by the University of Wyoming with state funds from the Wyoming Business Council and is funded in part through a cooperative agreement with the U.S. Small Business Administration.

Drought conditions make mother cow nutrition level critical

A livestock herd's profitability depends on the ability of a mother animal, cows in this case, to breed up, carry a calf to term, successfully provide for the calf, and breed back up again the next year.

Long-term research at Oklahoma State University and Texas A&M AgriLife over 15 years declared that, for your investment in a cow, most will successfully deliver 5.7 to 6 calves in their lifetime. We hope ours is a bit better than that in Wyoming, but drought conditions do not help at all.

Two crucial nutritional periods

Effective nutrition for a cow is essential to maximizing lifetime and annual production. Research at the University of Nebraska, University of Wyoming and Colorado State University analyzing numerous range cattle herds over 10-12 years shows two crucial periods exist in the nutritional plane.

The first is the last trimester of gestation when a cow is providing huge amounts of energy to the developing fetus. Up to 75 percent of fetal growth occurs in the final trimester of gestation. During this period, research has shown effective nutrition that allows the cow to be on an increasing level of body condition provides programming to the unborn fetus (calf) to effectively use feed and gain weight more than calves from cows who were on a static or decreasing plane of nutrition.

This directly translates to calves yielding 45-55 more pounds on the same nutrition at weaning time.

The first trimester of lactation when demand on the cow is high is the second crucial nutritional period. The start of a calf and the readiness of a cow for rebreeding is based on body condition to a certain degree. Cows may miss the first breeding cycle or not take at all if in a low or decreasing nutritional plane. When thin cows fall out of the 365-day calving cycle, they are likely costing money instead of making money.

Amounts, nutrition types

Let's look at an average frame cow, say 1,323 pounds. She is going to need a minimum of 19.6 pounds of dry matter intake each day when she is in the last trimester of gestation. It should include 1.16 pounds of protein, 16.1 Metabolizable Energy (ME) megacalories (mcals) of energy (more about this), 9.8 pounds of Total Digestible Nutrient (TDN) and 0.33 pounds of both calcium and phosphorus as well as vitamins.

Once she delivers and starts producing milk, the same cow will need about 20.3 pounds of dry matter intake, 1.2 pounds of protein, 17.5 ME Mcals of energy, 10.6 pounds of TDN, 0.37 pounds of calcium and phosphorus as well as suitable vitamins. Cattle as ruminants take in nutrients via their own metabolism and by feeding bacteria which, if healthy, then also break down the less digestible dry matter consumed on rangelands.

Normally, the nutrient values available in spring pastures provide suitable energy and nutrients to allow few worries during the first three months of lactation. And it is well recognized supplements can help calves grow and cows breed up. So we normally worry about serious supplementation for needs during the fall and winter, including the last trimester of gestation.

Drought changes requirements

But during droughts, the landscape can change quickly. The amount of available dry matter can be reduced 30-60 percent. The protein levels of range grasses that normally hover at 9-14 percent during many springs have been documented to drop to 3-5 percent when over 40 sites were monitored in 2006, 2012, and 2014 across western Nebraska and eastern Wyoming. Energy levels, which are directly tied to fetal programming and reproduction physiology, can drop by as much as 81 percent, according to several studies.

On top of all of those issues, when grasshoppers and wildfire are competing for the sparse grass resources, cattle slow their dry matter Intake and metabolism, including their rate of passage when resources are low quality or low availability. Producers are faced with finding other good quality forage, providing expensive supplements, or considering thinning.

This is a time when many producers start looking for inexpensive alternative feeds, and the livestock begin to get less picky about forages. Animals tend to have more toxic plant poisonings during droughts due to reduced selectivity.

If facing drought conditions, monitor the body condition score of your herd (we can teach you how) and bounce creative feed sources past your extension educator or other knowledgeable resource. Some alternative feeds may have issues, and some supplements may provide more protein but not enough energy. Know your area so you do not pay for unneeded or harmful additives, like selenium.

Nutritional needs vary with individual cattle weights, production cycle, resource values, and operational guidelines. Remember, a slightly gaining cow drops a happy gaining calf and breeds back quicker.

Scott Cotton is an area extension educator for agriculture in central Wyoming, and **Chance Marshall** is an area extension educator for the northwest region. Cotton can be reached at Scotton1@uwyo.edu or (307)235-9400, and Marshall can be reached at cmarsha1@uwyo.edu or (307) 332-2363.

Use RightRisk.org to learn risk management skills

The year 2020 certainly demonstrated just how miserable uncertain events can be with a backward look to the spring and developing pandemic, natural disasters, unstable markets and prices, challenges to human resources, and other uncertainties that all contributed to the overall uncertain picture for production agriculture.

While most or all of these events are outside the control of most producers, how we prepare and subsequently deal with them is something we can manage. An individual has four choices when dealing with risk: avoid it, transfer it, control it, or accept the risk. In this sense, risk management is about creating and following strategies to increase the likelihood of positive outcomes, reduce the consequences of negative outcomes, or both.

Evaluating Risk Strategies (ERS) is a comprehensive online course covering how to identify and properly manage risk in agriculture. The only thing certain in life is uncertainty; the more we can plan for uncertainty the better our outcomes should be. The ERS course outlines the five main sources of risk: marketing, production, financial, institutional, and human resource. Marketing or price risk refers to the inherent uncertainty of prices for inputs and outputs. Production risk includes variables in the production process. Financial risk results from borrowing outside capital. Institutional risks come in the form of rules, regulations, and other policies, that affect profitability. Human risk comes from the people-aspect of the business.

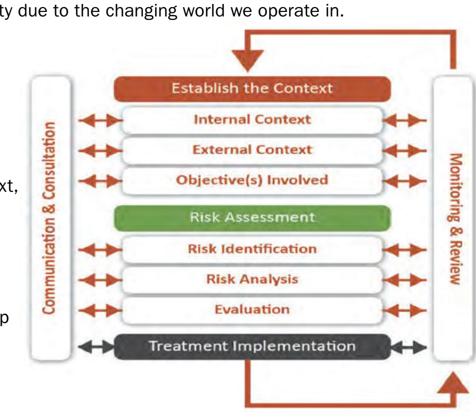
ERS opening screen

Learn how to estimate risk in your operation

The ERS course uses a broad range of strategies to help producers manage risk and estimate its impact. Often the best way to do this is to project the probability of an expected outcome and its potential impact. The problem with using any specific yield in budgeting or planning is that it is inherently uncertain. Using a "best guess" in estimating potential risk does not properly account for the uncertainty. The better approach, as outlined in the ERS course, is to consider a range of values and associated probabilities. Use those ranges to estimate the possible range in outcomes.

Risk management process

Risk management planning should be thought of as circular. It is not a once-and-done activity due to the changing world we operate in.



The ERS course outlines a three-step process to describe risk management: The first is to establish context, both internal and external status, along with objectives or risk criteria. The second step involves risk assessment, including risk identification, analysis, and evaluation. The third step is treatment/implementation.

FOR MORE INFORMATION

Visit RightRisk.org to access the Evaluating Risk Strategies course, including links to the course e-book, companion presentation, and webinar. Now is the perfect time to evaluate risk management strategies and current crop insurance policies; this course can help. RightRisk.org has many other useful and insightful risk management courses on topics such as crop insurance, estate planning, financial management, management/succession and legacy planning, and many other areas of risk management.

The most important aspect of this process is that it allows for evaluation and review of everything involved from the risk and the strategy employed to deal with it.

Risk management strategies

Forming risk management strategies should start from a set of concise goals and objectives. Goals describe the direction of your business, and they should help guide the process of determining what resources is needed to achieve them. Subsequent risk management planning should include specific steps and a timeline for reaching the set goals and objectives.

Avoiding risk typically involves not pursuing a strategy that includes risk a manager finds unacceptable. This approach might limit income potential and should be weighed against any potential benefits.

Transferring risk involves shifting risk to a third party for a premium or fee. For most producers this means insurance or contracting. The benefits are often lower downside risk in exchange for a premium or contract cost. Controlling risk involves taking action that makes negative consequences less likely or reduces the consequences if bad events occur.

Keep in mind the goal should be to manage risk to an acceptable level, not attempt to reduce risk to zero. Accepting risk is another option, particularly where the cost of managing it are too high or the frequency of occurrence is too low. This approach is often referred to as self-insuring.

Evaluating strategies

Evaluating risk management strategies and decisions to gauge their effectiveness is important, as well as make sure they align with business goals.

The ERS course discusses how to recognize strategic decisions—a choice that will guide future direction. Strategic decisions tend to be longer term in nature and larger impact in terms of scope. Different aspects of these decisions are considered, including the difference between a decision and strategy.

Measuring progress and accomplishments, accompanied by assessing variations in outcomes, is a key part of evaluating risk management strategies. The overall success, or failure of a strategy, can be judged once these areas have been considered. Along the way, account for all aspects of the strategy-resources, timing, goals met—when evaluating overall effectiveness. Re-evaluation should be completed periodically, proactively viewing the strategies, as well as assessing whether you are getting to where you want to go.

James Sedman is a consultant to the Department of Agricultural and Applied Economics in the University of Wyoming College of Agriculture and Natural Resources, and **John Hewlett** is a farm and ranch management specialist in the department. Hewlett may be reached at (307) 766-2166 or hewlett@uwyo.edu.

MORE THAN 40 PRESENTATIONS SET FOR UW EXTENSION'S ONLINE CONFERENCE THIS JANUARY

- UW Extension's Agriculture and Horticulture team is hosting an online convention Jan. 4–15.
- Pre-recorded presentations, live interaction with convention presenters via moderation sessions, and much more will be available.
- Topics span the range of agricultural and horticultural interests: from soils to pest management, native plants to backyard chickens, risk management analytics to managing cattle in drought conditions, toxic plants to minimizing livestock losses during wildfires and blizzards, water resource management, and a crop and livestock market outlook.
- Visit facebook.com/UWAGHORT for details on how to participate, a schedule of events, and more details for the more than 40 presentations scheduled.

AG/HORT CONFERENCE
JANUARY 4-15, 2021