



# TECHNOLOGY CONSIDERATIONS WORKBOOK

6-2026

## TABLE OF CONTENTS

## PAGE NUMBER

|                                                 |    |
|-------------------------------------------------|----|
| Instructions                                    | 1  |
| Section 1: The Why                              | 2  |
| Section 2: Scalability & Fit                    | 4  |
| Section 3: Data, Compatibility & Infrastructure | 6  |
| Section 4: Financial Planning                   | 8  |
| Section 5: Staff Training and Support           | 11 |
| Confidence Check                                | 13 |
| Section 6: Decision and Implementation          | 14 |

## INSTRUCTIONS

This workbook is designed to help you evaluate technology options for your operation. As you work through each section, you will encounter rating scales, yes/no questions, and reflection prompts. There are no right or wrong answers. Be as honest and realistic as possible to ensure the results accurately reflect your operation's needs, readiness and goals. Use the workbook and sections as they make sense for your operation and the technology you are evaluating.

## Rating Scales

### Challenge Severity (1-5)

Used to measure how significant an issue or problem is within your operation.

- 1 = Not an issue
- 2 = Minor issue
- 3 = Moderate issue
- 4 = Significant issue
- 5 = Critical issue

### Confidence (1-5)

Used to measure how confident you feel about a technology, decision or outcome.

- 1 = Not confident at all
- 2 = Slightly confident
- 3 = Moderately confident
- 4 = Confident
- 5 = Very confident

### Readiness (1-5)

Used to assess how prepared your operation, team, or resources are for implementation.

- 1 = Not ready
- 2 = Minimally ready
- 3 = Somewhat ready
- 4 = Mostly ready
- 5 = Fully ready

### Yes/No (Y/N)

Used for simple decision and qualification questions.

- Y = Yes
- N = No

## Confidence Scales

At the end of each section, you will complete a set of confidence questions. Add the ratings within each section and record the total in the table on page 13. Once all section totals have been entered, compare your overall score to the confidence rating scale provided below the table.

Your overall confidence rating will help you assess your readiness to adopt and use the technology and will place you in one of three categories:

- Strong Candidate – Ready to move forward with implementation.
- Proceed with Caution – Additional planning or support may be needed.
- Gather More Information – Further evaluation is recommended before proceeding.

## Tips for Success

- Complete the workbook in order.
- Use real operational and financial data whenever possible.
- Include key employees, advisors or family members in the discussion.
- Record questions or concerns as they arise.
- Review your responses at the end to identify strengths, risks and next steps before making a technology investment decision.

Remember: The goal is not to find the "perfect" technology, but to make a well-informed decision that supports your operation's long-term success.

### IMPORTANT NOTICE AND DISCLAIMER

The materials contained within this knowledge center are provided for educational and informational purposes only and do not constitute legal, financial, tax, or investment advice on any matter. We do not warrant that the materials provided are current and up-to-date with applicable laws and practices. You should not act or refrain from acting based on these materials or the information they contain without seeking legal advice from an attorney licensed in your jurisdiction or other appropriate professionals. To the fullest extent provided by law, Farm Credit of the Virginias, ACA, will not be liable for any loss or damage caused by your reliance on these materials or any information contained in this knowledge center. Your use of the materials and information is at your own risk, and by accessing the knowledge center, you hereby waive and hold harmless Farm Credit of the Virginias from any claims resulting therefrom.

Copyright© 2026 by Farm Credit of the Virginias ACA. All Rights Reserved. No portion of these materials may be copied, modified, distributed, transmitted, or publicly displayed without prior written permission of Farm Credit of the Virginias, ACA.

## SECTION 1: The Why

Use this section to establish a strong foundation by evaluating your current operation, identifying challenges and exploring how technology can address gaps and create value. It will also help build your confidence in taking the next steps toward adoption.

Goal: Identify key considerations for technology implementation and lay the groundwork for making an informed decision.

Establish a current baseline for your operation from last season/year:

- a. Yield (avg per acre or unit):
- b. Labor hours (per week or season):
- c. Input costs (\$/acre or total):
- d. Defect rate (Estimate how many mistakes happen with your current process):
- e. Rework time (Estimate how much time your team spends fixing mistakes):
- f. Biggest operational pain point:

Identify specific challenges. Rate the below items on a scale of 1-5 how big of an issue the challenge is on your operation, then how the implementation would help the challenge. Use rating scale on Page 1.

| Challenge      | How big is the issue? (1-5) | How much could this tech help? (1-5) |
|----------------|-----------------------------|--------------------------------------|
| Labor          |                             |                                      |
| Input Costs    |                             |                                      |
| Yield Tracking |                             |                                      |
| Weather        |                             |                                      |
| Pests          |                             |                                      |
| Disease        |                             |                                      |
| Regulatory     |                             |                                      |
| Other:         |                             |                                      |

Based on the ratings above, what is your #1 problem to solve?

## SECTION 1: The Why, continued...

What are your top three goals for implementing new technology? (Be as specific as possible)

Example: Reduce labor by 20%

Learn more about goal setting and download the SMART Goals worksheet [here](#).

How will you measure the success of your goals?

What happens if you do not implement new technology over the next 2-3 years?

Example: cost increases, labor shortages worsen, lost yield or revenue

What would improving this problem mean for your daily life or stress level?

What are similar operations doing?

What has worked and failed for others?

What technology are you considering?

What brands are you considering?

**Checkpoint:** Refer to the rating scales on page 1.

Does this feel like a must solve now issue? (Y/N)

How confident are you that this technology addresses real need? (1-5) \_\_\_\_ \*

How confident are you this technology solves your top problem? (1-5) \_\_\_\_ \*

\*Add your two numbers together and place the total in the confidence table on page 13.

### Action Item:

If confidence is below 3, identify information needed before advancing.

## SECTION 2: Scalability & Fit

Use this section to evaluate how well this technology fits your operation today and how it will perform as your operation grows. Be honest and realistic in your responses so you can make a decision that works long-term, not just in the short term.

Goal: Assess whether this technology can scale with your operation, support growth and be implemented in a way that manages risk and maintains financial, operational and workflow stability.

Consider the capability of your operation to handle technology implementation without sacrifice. How will implementation impact:

- a. Financial
- b. Performance
- c. Quality
- d. Efficiency

### Operational Capacity

Can your current operation handle growth? (Y/N)

- If yes, how? If no, what are the constraints?

Will this technology simplify or complicate your workflow?

Can your team manage this at peak times? (Y/N)

- Ex. planting, harvest, calving

Financial Impact – There will be specific financial planning information to work through in section five  
How will your cash flow change as volume increases?

Will this require additional capital as you scale? (Y/N)

- If yes, where will it come from?

What happens financially if technology underperforms?

### Scalability & Implementation Approach

Will you start with a pilot or full-scale rollout?

What would success look like in a small-scale test?

What portion of your operation will this apply to?

- Entire operation
- Specific area/units
- Trial area only

What is your exit strategy if the technology doesn't scale?

- Ex. stop using it, limit it to specific areas, replace with alternatives, etc.

## SECTION 2: Scalability & Fit, continued...

Long-term Fit

Will this still work if your operation grows?(Y/N)

- Ex. doubles in size

Will vendors support expansion?

How can this technology can take you to the next level?

What is most likely to be the biggest struggle while you scale?

- Ex. labor, data, equipment, cost

How can you manage risk during expansion?

**Checkpoint:** Refer to the rating scales on page 1.

Does this feel like a low-risk way to grow? (Y/N)

How confident are you that this technology can scale with your operation? (1-5) \_\_\_\_ \*

How confident are you the technology will help your operation grow? (1-5) \_\_\_\_ \*

\*Add your two numbers together and place the total in the confidence table on page 13.

### Action Item:

If confidence is below 3, identify information needed before advancing.

## SECTION 3: Data, Compatibility & Infrastructure

This section helps you evaluate how new technology will connect with your existing operation. You'll consider how data is collected, shared, and stored, along with the technical requirements needed to support the system. You'll also review important considerations around data privacy, security and any legal or regulatory factors that may impact implementation.

Goal: Identify the data, infrastructure and compliance requirements needed to successfully implement the technology and ensure it integrates smoothly, securely and effectively into your operation.

### Data & Compatibility

Will the new technology integrate with your current equipment/systems? (Y/N)

Can data be shared between new and current systems? (Y/N)

Can you centralize new and existing data? (Y/N)

How often is data backed up?

Is multi-factor authentication available? (Y/N)

Can you download all data in a usable format?

Can the system export your data if you switch platforms? (Y/N)

Does it use open connections (Application Programming Interface (API)) to work with other tools? (Y/N)

Is data transfer:

- Real-time
- Manual upload
- Not sure

Quick reflection: What concerns do you have about using or accessing your data?

### Data Ownership & Privacy

Who owns the data collected?

Who ensures data is secured properly?

Where is data stored?

Will your data be shared with third-party vendors? (Y/N/Not Sure)

Do you have to opt-in to data sharing? (Y/N)

Are you comfortable with this platform's privacy terms? (1-5)

What happens to data if the subscription ends?

Quick Check: Would you still be comfortable if this data left your operation? (Y/N)

## SECTION 3: Data, Compatibility & Infrastructure, continued...

### Legal & External Considerations

Will this technology impact your insurance needs? (Y/N)

Have you talked to your insurance provider? (Y/N)

Are there any environmental regulations you need to consider?

Are there regulatory considerations?

- Local
- State
- Federal

Quick Check: Are there any compliance concerns you need to research further?

### Reflection

Where are your biggest unknowns or concerns?

How can you address these?

**Checkpoint** Refer to the rating scales on page 1.

I understand how this technology will integrate with my operation. (1–5)

I am comfortable with the data/privacy terms. (1–5)

I have the infrastructure needed to support this. (Y/N)

How confident are you with how this technology will integrate with your operation? (1–5) \_\_\_\_ \*

How confident are you with the data/privacy terms? (1–5) \_\_\_\_ \*

\*Add your two numbers together and place the total in the confidence table on page 13.

### Action Item:

If confidence is below 3, identify information needed before advancing.

## SECTION 4: Financial Planning

Use the accompanying Technology Financial Planning Excel tool to evaluate your current budget and determine your investment readiness. Content marked with an asterisk (\*) must be transferred into the spreadsheet, which includes built-in calculators to help you estimate your future savings and return on investment.

Goal: Determine if you feel financially confident implementing new technology.

| Operation Overview             |                 |
|--------------------------------|-----------------|
| Farm Size                      | (acres or head) |
| Annual Gross Revenue           | (\$/year)       |
| Current Annual Operating Costs | (\$/year)       |
| Current Available Cash Flow    | (\$/year)       |

| Technology Costs                  |              |
|-----------------------------------|--------------|
| Equipment Purchase Cost *         | (\$)         |
| Installation Cost*                | (\$)         |
| Training/Setup Cost *             | (\$)         |
| Other One-Time Costs *            | (\$)         |
| Annual Subscription Fee*          | (\$/year)    |
| Annual Maintenance Cost *         | (\$/year)    |
| Annual Repair/Upgrade Allowance * | (\$/year)    |
| Expected Cost Increase *          | (% per year) |
| Expected Useful Life *            | (years)      |
| Estimated Replacement Cost        | (\$)         |

## SECTION 4: Financial Planning, continued...

| Savings & Revenue Impact                     |           |
|----------------------------------------------|-----------|
| Labor Savings *                              | (\$/year) |
| Fuel Savings *                               | (\$/year) |
| Input Savings (seed, fertilizer, chemical) * | (\$/year) |
| Other Cost Savings *                         | (\$/year) |
| Yield Increase                               | (%)       |
| Estimated Additional Revenue *               | (\$/year) |
| Quality Premiums *                           | (\$/year) |
| New Revenue Streams *                        | (\$/year) |

### Financial Details - Click [here](#) for loan calculators.

| Savings & Revenue Impact      |           |
|-------------------------------|-----------|
| Down Payment                  | (\$)      |
| Loan Amount                   | (\$)      |
| Interest Rate                 | (%)       |
| Loan Term                     | (years)   |
| Estimated Annual Loan Payment | (\$/year) |
| Leasing Option Payment        | (\$/year) |
| Grant or Cost Share Funding   | (\$)      |
| Prepayment Penalty            | (Yes/No)  |

## SECTION 4: Financial Planning, continued...

| Cash Flow Impact                            |           |
|---------------------------------------------|-----------|
| Current Annual Cash Flow                    | (\$/year) |
| Expected Annual Net Benefit from Technology | (\$/year) |
| Seasonal Cash Flow Concerns                 | (Yes/No)  |

| Risk & Scenario Planning                     |      |
|----------------------------------------------|------|
| Expected Revenue Decrease                    | (%)  |
| Expected Cost Increase                       | (%)  |
| Probability technology underperforms         | (%)  |
| Estimated financial impact if failure occurs | (\$) |

| Operational Impact                 |             |
|------------------------------------|-------------|
| Additional labor/training required | (\$/year)   |
| Estimated learning curve period    | (months)    |
| Estimated downtime risk            | (days/year) |

| Payback & Investment Expectations |         |
|-----------------------------------|---------|
| Target Payback Period             | (years) |
| Maximum Acceptable Payback        | (years) |
| Minimum Required ROI              | (%)     |

**Check Point** Refer to the rating scales on page 1.

Can you financially proceed with this investment? (Y/N/ Need More Information):

How confident are you with your estimates? (1-5) \_\_\_\_ \*

How confident are you with the financial risk? (1-5) \_\_\_\_ \*

\*Add your two numbers together and place the total in the confidence table on page 13.

## SECTION 5: Staff Training and Support

This section focuses on the people side of technology adoption. Even the best technology will fail without team buy-in, proper training and reliable support. Use this section to evaluate how your team will adopt the technology and whether the support system behind it meets your needs.

Goal: Ensure your team is prepared to adopt the technology and that you have the training and support needed for long-term success.

### Team Readiness & Adoption

Have you discussed this technology with your staff? (Y/N)

How open is your team to change? (1-5)

Who is resistant?

Who is your internal champion?

How does this technology benefit your staff?

- Ex. save time, reduce stress, improve accuracy, etc.

Will you involve your team in the decision? (Y/N)

- If yes, how?

Check Point: Will your team actually use this during busy seasons?

### Training & Workflow Impact

Do you have a training plan? (Y/N)

Does the vendor provide onboarding or training? (Y/N)

Can a seasonal employee operate the technology? (Y/N)

How will it change your workflow?

- ☐ Simplifies tasks
- ☐ Adds complexity
- ☐ Replaces steps
- ☐ Other:
- ☐ Not sure yet

### Identify

Key users:

Training needed:

Time to become proficient:

Workflow changes (Before vs. After):

### Checkpoint

How long will it take before your team is confident using this?

- Immediately, days, weeks or months

## SECTION 5: Staff Training and Support, continued...

### Service and Support

Is there technical support available? (Y/N)

Is support local (Y/N)? Is the support remote or both?

How quickly can you get help during peak season?

☐ Same day

☐ 1-2 days

☐ Longer

☐ Not Sure

Are repairs/services easily accessible? (Y/N)

What ongoing resources are offered? (Training, updates, help center, etc.)

### Team Readiness Score (1-5)

Rate the readiness of your team for new technology.

Leadership support \_\_\_\_

Employee support \_\_\_\_

Training availability \_\_\_\_

Available time \_\_\_\_

Vendor support \_\_\_\_

Total score: \_\_\_\_ /25

### Reflection

Would downtime or lack of support significantly impact your operation? (Y/N)

**Checkpoint** Refer to the rating scales on page 1.

Will your team realistically adopt and use this? (Y/N)

What is most likely to cause this technology to fail on your farm (people-related)?

How confident are you that your team will realistically adopt and use this? (1-5) \_\_\_\_ \*

How confident are you in the training and support available? (1-5) \_\_\_\_ \*

\*Add your two numbers together and place the total in the confidence table on page 13.

### Action Item:

If confidence is below 3, identify information needed before advancing.

# Confidence Summary

Transfer the total score from each section into the table below. Add the section totals to calculate your overall confidence score, then compare your score to the Confidence Rating Scale to determine your readiness for the technology.

| Section               | Confidence Score |
|-----------------------|------------------|
| The Why               | ___/10           |
| Scalability & Fit     | ___/10           |
| Data & Infrastructure | ___/10           |
| Financial Planning    | ___/10           |
| Training & Support    | ___/10           |
| <b>TOTAL</b>          | ___/50           |

## Confidence Rating Scale

2-50 = Strong Candidate

35-42 = Proceed with Caution

Under 35 = Gather More Information

## SECTION 6: Decision and Implementation

Use this section to bring together everything you've evaluated and make a clear, confident decision. The goal is not perfection, it's knowing enough to take the next step with confidence.

Goal: Select the best-fit technology and define a clear path forward, including risks, next steps and an initial implementation plan.

### Vendor Evaluation

| Vendor Name                                                               |               |               |               |
|---------------------------------------------------------------------------|---------------|---------------|---------------|
| Fits budget (Y/N)                                                         |               |               |               |
| Pilot Program available (Y/N)                                             |               |               |               |
| Clear terms (data, cancellation, fees)<br>(Y/N)                           |               |               |               |
| Training support available (Y/N)                                          |               |               |               |
| Reference from other producers?<br>(Y/N)                                  |               |               |               |
| Data Ownership Confidence (1-5)                                           |               |               |               |
| Integration Capability (1-5)                                              |               |               |               |
| Customer service (rank 1-5)                                               |               |               |               |
| Local Support Availability (1-5)                                          |               |               |               |
| Scalability (1-5)                                                         |               |               |               |
| Ease of Use (1-5)                                                         |               |               |               |
| Additional comments                                                       |               |               |               |
| Overall Scores (Add up the total # of Y's<br>and ratings for each column) | # of Y=       | # of Y=       | # of Y=       |
|                                                                           | Ratings = /30 | Ratings = /30 | Ratings = /30 |

Overall Score directions: Add up numbers in each column.

Which vendor/option is your top choice, and why?

## SECTION 6: Decision and Implementation, continued...

### Decision Summary:

Technology Selected:

Decision

☐ Go

☐ No go

☐ Test first

Why this decision? (Top three reasons)

1)

2)

3)

Biggest risk(s):

How will you avoid those risks?

### Final Confidence Check

How confident are you in this decision? (1–5)

What would increase your confidence?

### Next steps

What will you do in the next 30–60 days?

☐ Contact vendor

☐ Schedule demo

☐ Start pilot

☐ Secure financing

☐ Train team

☐ Other:

## SECTION 6: Decision and Implementation, continued...

**Implementation Timeline:** Use the space below to outline your timeline for implementation.

### Timeline Option 1

Month 1:

Month 2:

Month 3:

### Timeline Option 2

Pre-season:

Mid-season:

Post-season:

**Process Map:** Use the space below to write/draw your process map before and after the implementation.

Before implementation:

After implementation:

What steps are eliminated?

What steps are added?

### Reflection

If this technology works as expected, what will be different in one year?