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UNIVERSITY OF WISCONSIN-MADISON

Ag Technology - Are You Ready?

Adopting new technology can be a major investment—profitable if done well, costly if not.

Purpose: Assess readiness strengths and weaknesses.

Why it matters: Many factors impact success—understanding them is critical.

How it works: Read each item and enter a score in the shaded cell based on the key below. When completed, review the 'Technology Readiness Wheel' tab to see your readiness map. Any score of 3 or less is a potential area for further study.

How aware and ready am I? Rate how much you agree with each statement from 1 (Not at all) to 5 (Completely).	NOT AT ALL	MINIMALLY	MODERATELY	SUFFICENTLY	COMPLETELY
Enter a Score Of:	**1**	**2**	**3**	**4**	**5**

Business Goals	**Score: 1 - 5**
a. I have written business and family goals.	
b. I can describe how this technology fits into my long-term strategy.	
c. I identified the primary purpose for making this change.	
d. I recognize the tasks or bottlenecks this technology could improve.	
e. I considered how future technology advancements may impact this investment.	
f. I understand the expected useful life of the technology before replacement.	
g. I forecasted a plan for updates and managing obsolescence.	
Average Score	

Cost-Benefit	**Score: 1 - 5**
a. I understand how the technology will affect production.	
b. I calculated the total cost of purchasing and setting up the equipment and infrastructure.	
c. I evaluated the impact on operating costs (feed, labor, maintenance, veterinary, utilities, insurance, etc.).	
d. I developed a cost projection for keeping the equipment running and maintained.	
e. I conducted a sensitivity analysis.	
f. I examined how quickly I will see a return on investment (ROI).	
g. I have strategies in place to manage unexpected costs.	
h. I analyzed how ROI changes with improvements in productivity, cost reductions, and better resource management.	
Average Score	

Infrastructure & Logistics	**Score: 1 - 5**
a. I assessed how the technology is compatible with my current infrastructure or if changes are needed.	
b. I sketched out how product and input needs (e.g., chemicals, feed, seed) will change.	
c. I discovered the impact on infrastructure (e.g., ventilation, plumbing, electrical systems).	

d. I estimated how much energy the technology uses and have discussed energy needs with my supplier.	
e. I have a plan for backups in case of hardware failures or data breaches.	
Average Score	
Connectivity	**Score: 1 - 5**
a. I confirmed my farm's internet connection meets the technology's requirements and how it performs with unstable connectivity.	
b. I feel comfortable with round-the-clock connectivity through device notifications and alarms.	
c. I can explain how the technology will handle and secure sensitive farm data.	
d. I explored how the technology integrates with my current farm management systems.	
e. I know what new software or subscriptions are required.	
f. I have a plan for managing and using the data, or I know if I need extra help.	
Average Score	
Labor & Training	**Score: 1 - 5**
a. I considered how much training my staff will need to use and maintain the equipment.	
b. I understand what additional safety training is required.	
c. I estimated the impact on my total payroll costs.	
d. I realistically considered how much time and labor the technology will save.	
e. I looked into and joined user groups for support.	
f. I have people on my team that enjoy problem-solving.	
Average Score	
Support	**Score: 1 - 5**
a. I researched how well-known and trusted the supplier or manufacturer is.	
b. I checked reviews or sought testimonials from other users.	
c. I understand the frequency of maintenance and support services needed.	
d. I explored how long maintenance may take and its impact on daily operations.	
e. I understand the likelihood of reliable and timely support for technical issues.	
f. I determined who will take the lead on learning how to maintain this equipment.	
Average Score	
Adaptability	**Score: 1 - 5**
a. I can describe the short-term effects of switching to the new technology and how long they will last.	
b. I assessed how the technology will adapt if my business size or structure changes.	
c. I explored how the technology adjusts to changes in cropping systems or livestock management.	
d. I evaluated how the technology performs in different weather conditions.	
e. I have a contingency plan if weather impacts the technology's performance.	
Average Score	
Stakeholder Management	**Score: 1 - 5**

a. I developed a strategy for communicating changes and integrating feedback from employees and stakeholders.	
b. I determined the environmental impact of the technology.	
c. I discussed the technology with other farmers, consultants, and researchers.	
d. I know what approvals or inspections are needed from regulatory bodies.	
e. I know if the technology complies with state and federal laws and regulations.	
f. I have considered the impact on any licenses or certifications.	
g. I understand the impact of the supplier's contract obligations on my use of the technology and my data.	
h. I found suppliers and contractors that understand and align with my goals.	
i. I know how the technology will impact my insurance coverage, including types, levels, and premiums.	
Average Score	
Production I explored the changes in management practices, protocols, processes, and procedures that will be necessary with the implementation related to:	**Score: 1 - 5**
a. Feeding and nutrition (feed cost, PMR, nutritionist skills and adaptability)	
b. Milk production and components (butterfat, protein)	
c. Milk quality and SCC levels (testing SCC)	
d. Reproduction (activity monitoring, breeding protocols)	
e. Hoof health (footbaths)	
f. Bedding management (bedding type, protocols)	
g. Herd health (hoof health, identification, monitoring, administration of medications)	
h. Data management (alerts, decision making)	
i. Animal wellbeing, behavior, and welfare	
j. Pen management and grouping strategies	
k. Milk disposal (non-saleable milk, feeding calves)	
Average Score	

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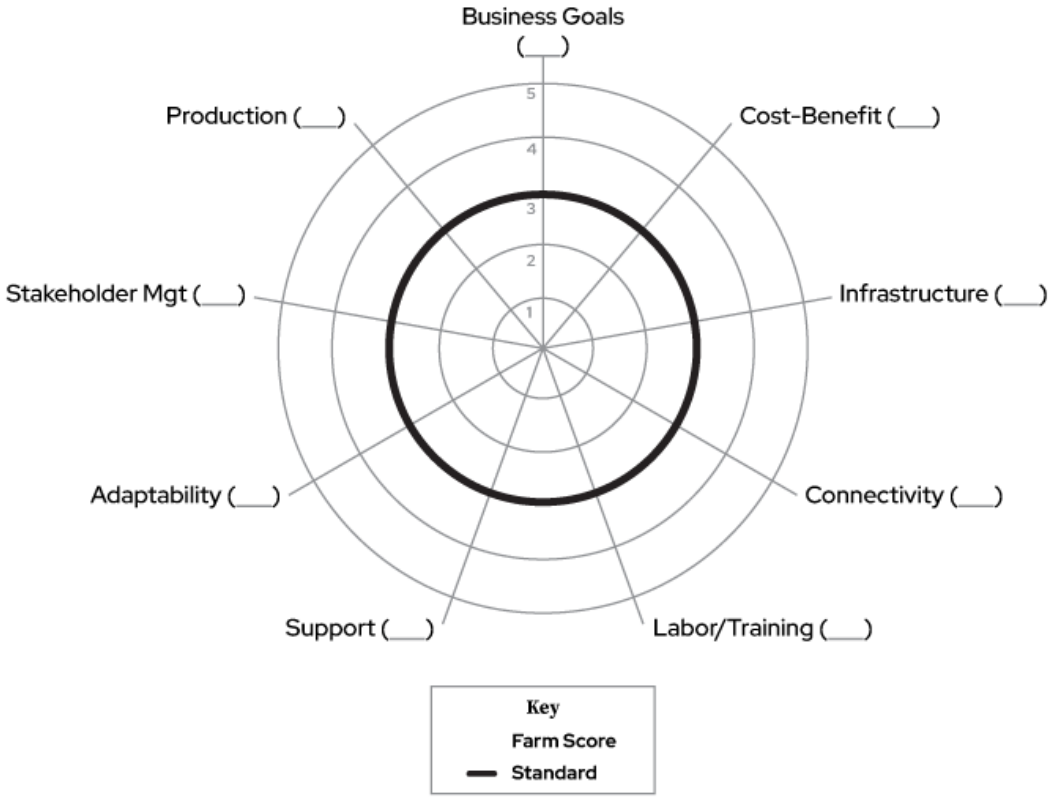
Technology Readiness Wheel

Instructions

1. Write down the average score for each section below on the corresponding line (___).
2. On the wheel, mark the averages to see which areas need more attention and which areas you are well-prepared for. Put a dot under each section that matches the average score.
3. After marking all your scores on the map, connect the dots to see the shape of your preparation wheel. Any dots on or inside the bold line show areas that might need more attention.



NOTE: Scores less than 3 need attention

Tool created by Kevin Bernhardt, Farm Management Specialist with the UW-Madison Division of Extension. Survey questionnaire created by the UW-Madison Division of Extension team (Stephanie Plaster, John Shutske, Angie Ulness, Jackie McCarville, Carolina Pinzon, Leonard Polzin, Kelly Wilfert, Nesli Akdeniz Onuki, and Kevin Bernhardt).

Explore more tools and learn more about Ag Technology and Automatic Milking Systems at https://farms.extension.wisc.edu/technology

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Ag Technology—Are You Ready?
Reflection Worksheet

This tool, based on real farm interviews, helps you assess how confident you are that you have the information needed to make a good decision about new technology for your operation. Use the following questions to find out what more information you need and what steps to take next.

1. Which areas were rated a 3 or lower? Which one was the lowest?

2. What's stopping you from having all the information you need?

3. List up to ten pieces of information you need or questions you have.

1.	6.
2.	7.
3.	8.
4.	9.
5.	10.

4. What resources or people could help you get more information?

Ready to move forward? Answering these two questions can set your plan in action.

5. What are the one or two most important things you should explore first?

6. When will you get the information by and who is responsible for getting it?