

Farm History and Executive Summary

Jeff and Jesslyn Balmer, and their four children, operate 140-acre Stoney Path Farm, located in Lititz, Lancaster County. Prior to their Transformation Team project, the couple milked approximately 50 cows in a tie-stall barn. The 10 year lease agreement with Jeff's mother was expiring, and an option to purchase the farm was presented. It was an ideal time to consider their future in dairy. In a quest to improve cow comfort, business profitability and quality of life, the Balmers began researching parlor and robotic milking systems.

Led by their nutritionist, the Transformation Team helped the Balmers analyze their expansion plans, comparing the feasibility of both milking systems and the appropriate benchmarks for their business. Ultimately, the family decided on two robotic milking units and doubling their herd size to 100 cows. They also executed a succession plan, purchasing the farm from Jeff's mother.

In August of 2011, the Balmers broke ground on their new facility and purchased an additional herd of cows from another Lancaster County farm. Once again, the Transformation Team was instrumental in helping Jeff manage the herd health issues associated with incorporating new animals into an existing herd. They also remodeled their existing tie-stall barn to accommodate young stock.

Today, herd management relies more on data collected from robots and observation, instead of previous hands on/clinical observations. The Balmers adjust dairy cow rations to help cow flow to the robot and achieve optimal production. They see more standing heats in the herd and have an activity monitor in the identification collars that alert them to possible heats.

Thanks to this robotic technology, the Balmers also actively participate in their children's school and extracurricular activities, as milking schedules no longer dictate family life.



Business Plan

Situation Overview:

- A. *Why did the farm need a business plan?* The need for a business plan was spurred by the downturn in the dairy economy in 2009. We recognized that to sustain the farm, changes would need to occur for us to remain profitable. Past financial information and records were utilized to create the business plan to accommodate future business planning.
- B. *Does the farm have a mission statement?* Yes. Stoney Path strives to produce quality milk at a profit by:
- Raising our family to understand the value of working together to achieve our goals while caring for animals and crops, both on the farm and with the public.
 - Utilizing our God given talents and resources to care for the animals and land in a sustainable and environmentally conscious manner.
 - Breeding our cows for longevity with functional type traits that will be both appealing and marketable.
 - Providing an educational opportunity for other producers and the community to see technological advancements in dairy farming.

Actions:

- C. *What are the key components to the final plan?* Cash flow, balance sheet, loan amortizations, production goals and mission statement were all components of the final plan.

Results:

- D. *What benefits, if any, has your farm dairy operation derived from engaging in a business planning process?* We placed more concrete numbers on the business of dairy farming and the need to evaluate and think forward in the planning process.
- E. *How did the business planning process help the family make better decisions?* We had the information needed when applying for a loan(s). All the information was in one place.
- F. *How often will the farm update the business plan, in the future?* It's a continuous process, but we plan to take a hard look every five years.
- G. *Was there anything uncovered during the business planning process that helped family members to better understand other members of the family?* The process helped us to clearly express our personal and business goals. This is sometimes difficult to do, and this process forced us to become more comfortable with doing it.

Modernization and Technology

Situation Overview:

- A. *Detail the farm's reasoning behind the decision to pursue a modernization plan.*
1. Our tie stall barn needed updated and was causing cow comfort issues.
 2. A 10 year rental lease was about to expire, with an option to purchase the farm. We could house animals, but then how do we milk them? There was a robot versus parlor discussion. We wanted the daily schedule freedom that robots offered. There is less labor with robots, as compared to a parlor system.
- B. *List the key variables that impacted the decision to move ahead with the plan.* We compared the financial feasibility of robots versus parlor milking systems. We liked that robots also allowed a flexible schedule for our family that includes four young children. It's a family farm, with family members managing the day-to-day work; neighbors help in a pinch.
- C. *The following modernization areas apply to our farm and describe the incorporation of technology.*
- Young stock facilities – Remodeling old tie stall for young stock.
 - Milking cow facilities – Two robotic milking units.
 - Manure management and storage – No additional storage. Tank holds 4 – 5 months.
 - Manure handling – Chain link, not cable, scraper systems with tube gutter keeps alleys drier, pump through transfer line.
 - Feed Storage – In March 2013, we started pasteurizing waste milk for our calves. Low quality milk is separated and collected by the robot to be pasteurized.
 - Ventilation – Built a three row barn. Natural prevailing winds for cross ventilation. AutoVent system controls curtains and fans and has a detector that reads wind and indoor/outdoor temperatures. Humidity and precipitation sensors change curtains based on weather conditions; curtains are opened and closed more often with sensors, as compared to manual operation.

Challenges and Opportunities:

- D. *What were the different options the Transformation Team considered as they worked together to pursue this plan? Please describe.* The Transformation Team helped us consider one robot, versus two, and also keeping the same herd size, versus doubling our herd size. Ultimately, we decided on two robots, doubling the herd size. This decision also changed our cropping and manure handling systems. Our break-even price dropped by \$1.

Modernization and Technology...continued

E. *Did any barriers, or bottlenecks, occur during the project, and if yes, how did the team overcome those issues?* Yes. Tropical Storm Lee was the biggest construction obstacle. For project financing, all three loans were contingent on the other. We needed one lender to go first.

Actions:

F. *How did the work done on a business plan or feasibility study impact the farm's final decisions?* Once we gathered our estimates and our financial numbers matched, we moved forward with our plan.

G. *How long did the project take, start to finish?* Two years.

Timeline:

- Late winter/early spring 2010: Rental agreement for the farm was coming to a close
- July 2010: First meeting of the Transformation Team
- January 2011: Financed with the bank
- April 2011: Bank approved
- August 2011: Construction began
- December 14, 2011: Cows moved into the new barn

Results:

H. *How did the modernization and new technology change the business as it relates to profitability?* We would not have purchased the farm and remained in dairy without the modernization plan.

I. *Can the farm quantify labor savings, energy savings or environmental impact?* Our herd is a little more than double the original size, and we can finish our chores in equal or less time without additional hired labor. Chores no longer revolve around the strict 2x per day milking schedule.

J. *Did the modernization and new technology change management practices on the farm?* Herd management relies more on data collected from the robot and observation, instead of all hands on / clinical observations. Rations for the dairy cows have been fine tuned to help cow flow to the robot, and achieve optimal production. We now see more standing heats in the herd and have an activity monitor in the identification collars that alert us to possible heats.