Situation Overview:

A. Why did the farm need a business plan? The business plan process started for the farm in 2007 after evaluating if there was a future in the dairy industry for our family during a Profit Team meeting. A Dairy Alliance Business Plan workshop led by Brad Hilty was the spring board for completing a business plan. This was necessary to address the question – Is there a future in the dairy industry for Kurtland Farms? Our first business plan was for three years that gave us a better long term picture of our business. The plan analyzed three options to consider for future growth and profitability.

A SWOT analysis, helped us evaluate some of the business dynamics. Results are listed below:

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Opportunities</th>
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<tbody>
<tr>
<td>Equity growth from farm income</td>
<td>Retail sales</td>
</tr>
<tr>
<td>Purchased feed + crop $</td>
<td>Improved production</td>
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<tr>
<td>Supplies/cow</td>
<td>Increase sales of dairy cattle</td>
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<tr>
<td>EBIT/cow</td>
<td>Increase use of custom machine sub contracting</td>
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<tr>
<td>Operating expense ratio</td>
<td></td>
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<tr>
<td>Debt service/cwt</td>
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<td>Replacements</td>
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<table>
<thead>
<tr>
<th>Weaknesses</th>
<th>Threats</th>
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<tr>
<td>Production - 1000 lb. under</td>
<td>Environmental restrictions</td>
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<tr>
<td>Lbs. milk shipped/worker</td>
<td>Urban sprawl</td>
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<td>Vet expense/cow</td>
<td>Loss of rented land</td>
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<td>Repairs/cow</td>
<td>Loss of rBST milk marketability</td>
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<td>Machine $/cow</td>
<td>High labor costs</td>
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<td>Cost of production</td>
<td>Fluctuating milk prices</td>
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<td></td>
<td>High interest rates</td>
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<td></td>
<td>High traffic road/Difficulty moving equipment</td>
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As a family, we wanted to be on the same page. We wanted to grow, but we didn't know how growth would impact us. We picked three options which could potentially grow the business and provide a future for the next generation.


Objectives of the Plan: This option focused on herd health and facility improvements giving us plenty to work on from 2007 – 2009. Herd performance improved significantly. Higher milk production, better internal herd growth, and improved reproductive efficiency proved that we could make progress. The growth opportunity with this plan was to market an average of 85 pounds of milk per cow per day and market surplus dairy cattle.
Some management strategies adopted were:

- 3 x milking
- Sexed semen
- More aggressive use of reproductive hormones in a timed protocol
- Employee hiring, training and management protocols
- Written standard operating procedures
- Improve replacement housing (converted equipment barn into calf barn)
- Use of custom harvesting
- Increase no-till farming
- Convert to high corn silage ration with more double cropping

Business Plan Option B: This plan involved a cash flow and a feasibility study for a four robot milking parlor with a bedded pack barn. This was a very preliminary plan which only gave us an option of pursuing more in depth at a later date.

Business Plan Option C: This plan was to investigate the opportunities for other “side enterprises” to add value to the dairy. A retail business involving dairy, produce and or a garden center was considered but tabled. The feeling was that it would require an entirely different set of management skills which would compromise the dairy production enterprise.

Results of Business Plan A:

Despite the improvements that were made through 2009, we still were not labor efficient. Our cost of production was not viable, long term, and there was not a cushion in a bad year. There did not seem to be a future economic return. We were not competitive enough and the facilities weren’t economically efficient, compromising animal health. Essentially, we were up against the ceiling. Our cull rate was still too high as cow comfort was inadequate in the tie stall facility. This meant we could not capture the premiums from marketing the higher value replacements as we needed them to keep the barn full.

With the current facilities, we felt our family’s next generation could not continue to farm, even if they wanted to stay in the dairy business.

In August of 2009, we decided to look seriously at Option B. We decided to build at a different site on the farm which was more strategically located and in regards to manure storage and run-off.
B. *What resource people did the team use to re-build the plan?* Jeff Ainslie from Red Barn Consulting was instrumental in giving us insights into site/environmental hurdles we might encounter as well as grant opportunities. Dean Weidman was our go-to person for barn construction design and costs. We used Tim Beck, Penn State Cooperative Extension, for the business plan and feasibility study updates. In our estimation, Tim Beck's services were valued between $15,000 and $20,000. Across the dairy industry, extension personnel, such as Tim, are extremely helpful in providing valuable insights and assistance. Gary Heim, our attorney, played a major role in the real estate transaction to purchase the remainder of the farm from Tim's parents. He also played a key role in the mortgage process with Fulton Bank and our relationship manager, Lamar King.

C. *Does the farm have a mission statement?* Yes. The values of the Kurtland Farm are the following:

- **Profit** - As in any business, profitability is the key. The dairy must generate an acceptable return for its owners to remain viable and competitive. Business profit needs to be a primary concern for each and every member of the Kurtland Farm team. A profitable business not only benefits the owners, but also the employees, agri-business, and the community in general.

- **People** - Our employees are our greatest asset. It’s our goal to provide employees with a pleasant working environment and a compensation package that provides a standard of living that is comparable with other local businesses. We desire to be considerate of family, social, religious, and other off-farm interests. While operating in a team structure, we want everyone to be challenged so they can grow as individuals.

- **Leadership** - We will strive to be a leader in the local, state, and national dairy industry. Our definition of success is maintaining financial efficiency and production performance within the top 10% of the Northeast dairy industry. We will strive for a good business image and reputation by maintaining good relations with neighbors, providing our cattle with a clean, comfortable environment and keeping our dairy farm neat and attractive.

- **Having fun** - We feel that it is very important for the owners and staff to have fun doing what we do. The goal is to have every person involved on the dairy look forward to going to work. We will maintain a relaxed atmosphere and communication between everyone will be encouraged and enhanced. Undue stress will be avoided as much as possible.

- **Honor God** - Most important of all we want to honor our heavenly Father in what we think, say and do. This principle applies not only to our personal lives but to this business as well. Everything we have belongs to God, and we are his caretakers. It is our desire to follow biblical principles when dealing with our staff, our neighbors and our industry.
Challenges and Opportunities:

D. What challenges, if any, developed during the business plan process? The biggest challenge in developing the business plan was lack of voluntary milking systems (robotics) in Pennsylvania, and subsequently, lack of benchmark data to satisfy lenders. There also was a communication challenge, as we wanted information in a timely fashion.

E. How did the team overcome those challenges? The team left no stone unturned, in the quest to find relevant robotic milker data, attending conferences, calling manufacturers and meeting with farmers. Ultimately, the best sources of information were Tim Anderson, MN Community College, and Paul Berdell, an independent robotic start-up consultant. Contact information for both individuals is noted in this case study resource list.

   Side note: It is advisable to continue researching a technology, until you find the right people. For me, attending the 2010 Precision Dairy Management and Robotic Milking Technology Conference in Toronto, Canada was very important to this project. I was the only U.S. dairy farmer at that global conference, with dealers and manufacturers. The financial data from other robotic dairies, supported our financial projections, and was helpful in convincing the bank that our plan was valid. The information I discovered significantly influenced the design of the barn and the comfort level with technologies.

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Actions:

F. What are the key components to the final plan?

   • SWOT Analysis
   • 5-year Goals
   • Organization Chart
   • Budgets
   • Strategic Plan Tactics

   • Estimates/Bids
   • Historical Data Analysis
   • Balance Sheet/Cash Flow
   • DHIA Records
   • Risk Management

G. Approximately how much did the business plan cost? The initial plan was done through a workshop, keeping the cost under $500. The revised plan was free as we utilized the services of Penn State Cooperative Extension. As noted in Letter B, we estimate the market value was between $15,000 and $20,000.
H. **Approximately how long did it take to develop the plan?** The initial plan was done over a two month period. During this process, we experienced a paradigm shift – a business plan is never done. If you plan on staying in business, the business planning process never ends. The revised plan was done over a one year period.

Results:

I. **What benefits, if any, has your farm dairy operation derived from engaging in a business planning process?** The planning process allowed us to make objective decisions. Since the business is a sole proprietorship, we were fortunate because we could deal with questions or issues right away. The process also helped us recognize the business’ strengths and weaknesses, rather than spin our wheels.

J. **How did the business planning process help the family make better decisions?** It provided the answers to the following questions:

   - What are our long term goals and objectives?
   - What are our values?
   - Is this financially feasible?
   - Do we have an adequate labor force to handle this expansion?
   - Do we have enough land to provide feed and handle manure (Nutrient Management Plan)?
   - Will this expansion be compatible with our community?

K. **How often will the farm update the business plan, in the future?** For our family, the business plan is never done. It's a continuous process, with new information constantly documented.

L. **As a result of engaging in developing a business plan, what has your family learned that is unique to your dairy operation?** The SWOT analysis helped us realize we had challenges, including quality of life issues. Family is important, recreation is important, and for our family, the social center is not the farm. This process also revealed neighbor tensions.

M. **Was there anything uncovered during the business planning process that helped family members to better understand other members of the family?** Not initially, however, as time went on it helped to keep us all focused on why we were moving in this