

VaxPro

EFFICIENCY AT ITS FINEST



National Agri-Marketing Association
at Iowa State University

INTRODUCTION

In the past 30 years, the United States swine industry has expanded operation size and production capacity to meet a rising global demand.^{1,10} Swine operations require a significant amount of time and labor as well as face volatile commodity prices which can lower profit margins. With current time consuming delivery methods, producers seek technological innovations to increase vaccination efficiency.

Simplex Health, a company based out of Ames, Iowa, focuses on cutting-edge veterinary medical techniques while specializing in advanced vaccination products. Along with veterinarians and engineers, Simplex Health’s founder created VaxPro to offer swine farrowing operations an opportunity to decrease labor costs, increase vaccination rates and keep detailed records within their facilities.

VaxPro is a battery-powered syringe gun with recordkeeping software and bluetooth technology. When vaccinating, producers have the option of pre-calibrating the dose or scanning RFID tags to automatically gauge dosages on each hog’s weight. Additionally, producers can choose to use either a bottle-mount or line-fed attachment to supply the medication. VaxPro offers flexibility for pre-existing routines by being compatible with all needles and bottles. Operations using VaxPro are able to cut vaccination time by 50% and save up to 10% from wasted doses.³

MARKET ANALYSIS

INDUSTRY TRENDS

Swine operations typically specialize in one of the following growing phases: farrow-to-wean, farrow-to-feeder, finishing, breeding stock and farrow-to-finish.² Of these phases, those involved in farrowing require the most vaccinations. Farrow-to-wean operations breed sows, then raise their piglets until they are weaned at 10-15 pounds, or 3 weeks old.² Similarly, farrow-to-feeder operations specialize in breeding sows and raising their piglets to feeder size of roughly 50 pounds. Farrow-to-finish operations involve breeding sows and raising the hogs to 240-270 pounds.² An increase in operation size and decrease in the number of hog farms in the United States has led swine producers to contract with larger companies to achieve higher yields and greater efficiency.²

Farrowing operations are labor-intensive due to vaccination processes, however, immunizations ensure the health of sows and piglets. Vaccinations are given to piglets, gilts and sows multiple times throughout the farrowing process to strengthen herd immunity (Figure 1).^{4,5} Injection failure from improper administration which can ultimately injure pigs, waste product and decrease profitability.⁸

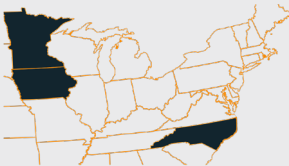
Another driver for improved health practices in swine production is the demand for better health records and traceability. Over the last 35 years, the swine industry has become the most technologically advanced livestock sector, resulting in higher productivity and profitability.⁹ Specifically in farrowing operations, 83% of producers would likely or more than likely invest in new technology.⁴ Producers look for information and new innovations through industry associations, trade shows, media outlets, industry professionals and other sources.⁴

FIGURE 1

PRODUCTION SIZE	VACCINATIONS	WHEN TO VACCINATE
Gilts/Sows Prebreed	Leptospirosis Parvovirus Erysipelas PRRS	1-2 times before breeding
Gilts/Sows Prefarrow	E. coli Atrophic rhinitis	1-2 times before farrowing
Piglets	Atrophic rhinitis Iron PLE	Once or twice before weaning
Grower (40-100 lbs)	PLE Circo/Mico	When purchased as feeder pigs

MARKET POTENTIAL

VaxPro’s market potential lies in farrowing operations of 1,000 sows or more. There are 2,562 operations of this size and type in the United States with a total of 28 million sows.⁷ Combined, Iowa, North Carolina and Minnesota have 1,163 (45%) of these operations which produce 40% of United States total sows. The total potential sales is 5,575 units with \$19.5 million in gross sales.



TARGET MARKET

VaxPro will target independent contracted producers and vertically integrated companies in the top three swine-producing states: Iowa, North Carolina and Minnesota. Roll out will begin in Iowa and expand to North Carolina in year 2. Minnesota will be added in year 3.

YEAR	TARGET STATES	OPERATIONS	ESTIMATED SOWS	UNITS SOLD	PROJECTED GROSS SALES	MARKET SHARE
1	Iowa	152	457,250	229	\$800,187.50	5%
2	Iowa & North Carolina	368	1,192,000	596	\$2,086,000.00	13%
3	Iowa, North Carolina & Minnesota	659	2,110,750	1,055	\$3,693,812.50	24%

CUSTOMER PROFILE



VERTICALLY INTEGRATED COMPANY

Reicks View Farms, established in 1979, is located in northeast Iowa.

- Farrow-to-finish operation with 50,000 sows
- 300 employees across all production stages with a pay rate of \$15 an hour
- Uses bottle-mounted or line-fed syringes
- Strives to reduce production costs while increasing efficiency
- With VaxPro, could save \$650,000 and benefit from weight-based dosing and recordkeeping



INDEPENDENT CONTRACTED PRODUCER

Penelope, third-generation independent pork producer, has contracts with Christensen Farms and is located in southwest Minnesota.

- Farrow-to-wean operation with 2,000 sows
- Small team of part-time employees with a pay rate of \$10 an hour
- Currently uses simple syringes and paper records
- Seeks better recordkeeping and a streamline vaccination process
- Could save \$18,000 using VaxPro while benefiting from pre-calibrated doses and improved records

COMPETITOR PROFILE

	PRICE	LIFESPAN	FEATURES			
			BLUETOOTH	BOTTLE-MOUNT/ LINE-FED	ACCURATE	AUTOMATED RECORDS
VaxPro	\$3,500	144,000+ shots (8 years)	X	X	X	X
DRAW-OFF/ BOTTLE MOUNTED	\$25-80	1,000 shots (150 minutes)		X		
TRADITIONAL SYRINGES	\$5-70	1,000 shots (150 minutes)				

SWOT ANALYSIS

S

- Only bluetooth-enabled syringe with accurate recordkeeping on the market
- Easy to adapt to existing operations
- Calibrated dosing options save between 10-21% on medication

O

- Swine industry is open to adopting new technological advancements
- Global pork demand continues to rise
- Increased importance on traceability and health records

W

- Limited brand awareness
- Producer hesitation to invest due to high initial cost
- Multiple supply attachments may cause technical malfunctions

T

- Commodity price volatility
- Disruptors in swine production, including COVID-19 and global trade
- Competitors offer cheaper, short-term substitutes

BUSINESS PROPOSITION

STRATEGY STATEMENT

VaxPro provides swine operations involved in farrowing with cost-effective vaccination technology to enhance efficiency through decreased labor, time and costs.

PRODUCT DESCRIPTION

VaxPro offers producers the ability to precisely vaccinate swine with pre-calibrated or weight-based doses while using RFID tags and bluetooth software to accurately document injections.

KEY PLANNING ASSUMPTIONS

1. Swine producers will continue to expand operations to meet increasing global demand.
2. The swine industry will continue to adopt new technology aimed to boost efficiency.
3. Vaccinations will remain essential to herd health.
4. Swine operations will continue to require high cost, manual labor.
5. VaxPro will keep up with industry trends and demands.

GOALS & OBJECTIVES

1. Gain 20% market share by the end of year 3.
2. By year 3, sell over 1,000 units and reach \$3.5 million in gross sales.
3. Maintain 95% customer satisfaction while still striving for 100%.

ACTION PLAN

MARKETING STRATEGY

VaxPro will use a mix of traditional business-to-business marketing strategies to build brand awareness, generate sales and maintain customer satisfaction. Additionally, a set of high ROMI, account-based marketing tactics will be used to nurture corporate relationships with great sales potential.

PRODUCT & POSITIONING

VaxPro offers a syringe gun that automatically measures vaccines for large swine producers involved in farrowing operations searching to reduce labor and increase vaccination efficiency.

PRICE

VaxPro will cost \$3,500 per unit which includes a case to carry the syringe gun, two vaccine supply attachments, two batteries with a charging station and credentials for the software app.



PLACE

VaxPro will be distributed from Simplex Health's headquarters in Ames, Iowa. It will be sold directly to producers in Iowa, North Carolina and Minnesota through the VaxPro website.

PROMOTIONS

SALES & SUPPORT TEAM

Account Manager: Account managers will showcase VaxPro to potential customers while fostering customer relationships for satisfaction and retention. In year 1, VaxPro will hire two account managers to cover Iowa. Two additional managers will be onboarded in year 2 to serve North Carolina. One additional manager will be brought on in year 3 to oversee Minnesota.

Customer Success Specialists: Over the three years, VaxPro will hire four customer success specialists to handle customer inquiries regarding product set-up, use and issues. These specialists will provide essential product support to customers while maintaining customer satisfaction.

Marketing Manager: VaxPro will cost-share one marketing manager with Simplex Health's other products to strategically create and implement marketing tactics for the product.

Customer Relationship Management (CRM) System: All employees will utilize a customer relationship management (CRM) system to determine strong leads, nurture current customers and maintain high customer satisfaction.

ACCOUNT-BASED MARKETING

Objective: Boost contracted producer sales by influencing vital corporate stakeholders and decision-makers.

Soft Launch Trials: Before the virtual Iowa Pork Congress in January 2021, targeted swine operations received VaxPro complimentary to implement and test. During the Congress, VaxPro sponsored a panel discussion with these producers about the convenience, efficiency and accuracy it brought to their operations during the Swine Product Spotlight event.

Corporate Teaser Gifts: Quarterly, VaxPro will send select executives, from strategically targeted swine companies, a personalized gift box to introduce the product. For the executive to receive their gift, they must arrange a meeting with an account manager.

Veterinarian Influencers: To strategically target staff veterinarians within swine operations and consulting veterinarians for the swine industry, VaxPro will be present at the American Association of Swine Veterinarians (AASV) annual meeting to engage and introduce VaxPro to these credible, trusted, and essential industry influencers.

Incentive Program: To encourage implementation of VaxPro across a swine company's contracted growers, corporate partners will receive a 10% return on sales from their growers as an incentive.

TRADITIONAL B2B MARKETING

Objective: Increase brand awareness and sales.

Advertising: In years 1 and 2, VaxPro will place print advertisements in the bi-monthly *Iowa Pork Producer* magazine. Ads will be added to the *NC Pork Report* and *Minnesota Pork Checkoff Report* in years 2 and 3, respectively. Digital advertisements will be placed in the *National Hog Farmer Daily* e-newsletter quarterly.

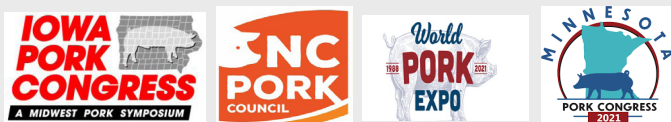


Direct Mail: VaxPro will send prospective and current customers direct mail to inform them of the product launch, tradeshow and educate them on VaxPro. Mailers will be sent before rolling out in each state, respectively, and six times per year.

Social Media: VaxPro will utilize Twitter and Facebook to share product information, event announcements and demo teasers. Monthly spotlights will be created featuring one customer and one corporate partner to recognize the VaxPro community. Lastly, a YouTube channel will share product demonstrations and highlight customer usage.

Product Website: VaxPro's product website will allow visitors to learn about the product, watch demo videos, review customer testimonials, sign up for the e-newsletter, connect with an account manager and login to their account. With search engine optimization, VaxPro customers will easily find the website to place an order.

Conferences & Expos: In year 2, VaxPro will have a booth at the Iowa Pork Congress and North Carolina Pork Council's Annual Conference (NCPAC). In year 3, the Minnesota Pork Congress and World Pork Expo will be added. VaxPro's booth will allow visitors to see, touch and test the product while educating account managers on features, benefits and how to buy.



Earned Media: VaxPro will send press releases and conduct radio interviews to highlight the launch, software updates, industry relations and company news with crucial industry news outlets.

Education in the Classroom: Annually, VaxPro will partner with local community colleges to provide educational lessons to swine management students. As part of the class, students will learn about vaccinations, how VaxPro works and best practices for recordkeeping. Following the demonstration, VaxPro will donate the product for continued educational use.

TRADITIONAL B2B MARKETING (CONT)

Objective: Customer satisfaction and retention.

Product Registration & Warranty: To better track and assist customers, each VaxPro syringe gun must be registered through the website to receive a 5-year warranty. Should users experience any issues, the customer success specialists are prepared to assist them and issue a replacement product if needed.

E-newsletter: Monthly, an e-newsletter will be distributed to current customers showcasing product updates, upcoming events, customer usage and new demos. VaxPro will send special newsletters to targeted customers before each tradeshow, inviting them to visit the VaxPro booth for a gift.

PQA Trainings: VaxPro will sponsor regional Pork Quality Assurance (PQA) trainings for current customers to help them stay up-to-date on their PQA certification.

Recognition Dinner: VaxPro will host a customer recognition dinner one night during a select conference or expo in each year. The event will highlight customers for implementing VaxPro, recognize corporate partners and engage targeted prospect companies

PROMOTIONS TIMELINE

Sales & Support Team:

- Cost-share one marketing manager
- Invest in CRM system

Account-Based Marketing:

- Corporate teaser gifts
- Target veterinarian influencers
- Contractor incentive program

Traditional B2B Marketing:

- Digital ads in *National Hog Farmer Daily*
- Direct mail distribution
- Social media, product website and e-newsletter
- Education in the classroom
- PQA trainings

Year 1 (Additions by Year)

- Hire two account managers for Iowa
- Hire two customer success specialists
- Soft launch at virtual Iowa Pork Congress
- Print ads in *Iowa Pork Producer*

Year 2

- Hire two account managers for North Carolina
- Hire one customer success specialist
- Print ads in *IA Pork Producer* and *NC Pork Report*
- Attend Iowa Pork Congress and NCPAC
- Host recognition dinner

Year 3

- Hire one account manager for Minnesota
- Hire one customer success specialist
- Print ads in *NC Pork Report* & *MN Pork Checkoff*
- Attend all 3 state conferences & World Pork Expo
- Host recognition dinner

FINANCIALS

<i>Income Statement</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>
Units Sold	229	596	1055
Price Per Unit	\$3,500.00	\$3,500.00	\$3,500.00
Gross Sales	\$800,187.50	\$2,086,000.00	\$3,693,812.50
Demos Models & Warranty Returns	\$25,204.50	\$34,459.50	\$40,987.50
Net Sales	\$774,983.00	\$2,051,540.50	\$3,652,825.00
Wholesale Unit Cost	\$1,200.00	\$1,200.00	\$1,200.00
Cost of Goods Sold	\$274,350.00	\$715,200.00	\$1,266,450.00
Operating Expenses	\$34,200.00	\$35,910.00	\$37,705.50
Gross Margin	\$466,433.00	\$1,300,430.50	\$2,348,669.50
<i>Marketing Expenses</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>
Sales & Support Team	\$444,500.00	\$735,037.50	\$903,052.13
Creative Development*	\$10,000.00	\$15,000.00	\$17,000.00
Soft Launch Trials	\$5,800.00	---	---
Corporate Teaser Gifts	\$9,800.00	\$19,600.00	\$24,500.00
Veterinarian Influencers	\$2,661.50	\$2,661.50	\$2,661.50
Incentive Program	\$16,003.75	\$25,716.25	\$32,156.25
Advertising	\$4,999.20	\$7,117.20	\$6,224.25
Direct Mail	\$3,777.20	\$8,605.20	\$15,069.75
Social Media	\$520.00	\$598.00	\$687.70
Product Website	\$35,000.00	\$10,000.00	\$10,000.00
Conference & Expos	\$60,000.00	\$1,975.00	\$5,980.00
Education in the Classroom	\$2,400.00	\$4,800.00	\$6,000.00
E-newsletter	\$840.00	\$882.00	\$926.10
PQA Trainings	\$2,502.00	\$4,504.00	\$5,505.00
Recognition Dinner	---	\$2,808.49	\$7,099.36
Monitoring & Measuring	\$24,005.63	\$62,580.00	\$110,814.38
Total Marketing Expenses	\$622,809.28	\$901,885.14	\$1,147,676.41
Net Profit	\$(156,376.28)	\$398,545.36	\$1,200,993.09
Profit Margin	-20%	19%	33%

*Creative Development - content generation and design for direct mail, e-newsletter, conferences, magazine advertising, etc.

MONITORING & MEASURING

	Gain 20% market share	Reach \$3.5 million in gross sales	Maintain 95% customer satisfaction
Mean of Analysis	<ul style="list-style-type: none"> Quarterly sales & industry reports 	<ul style="list-style-type: none"> Analyze monthly sales reports Monitor incentive program 	<ul style="list-style-type: none"> Dialogue with customers Evaluate support calls, product issues & warranties
Exceeded	<ul style="list-style-type: none"> Expand the targeted area Invest in product R&D 	<ul style="list-style-type: none"> Invest back into the company Consider expansion to other industries/states 	<ul style="list-style-type: none"> Generate customer testimonials for marketing material Increase influencer outreach
Less than Exceeded	<ul style="list-style-type: none"> Analyze market, determine weaknesses & make adjustments 	<ul style="list-style-type: none"> Evaluate pricing, target market & distribution strategy 	<ul style="list-style-type: none"> Evaluate customer feedback to identify areas of discontent

CONCLUSION

As pork demand continues to rise, VaxPro will provide large, farrowing swine producers with the ability to decrease labor and increase vaccine efficiencies through the use of pre-calibrated and weight-based doses along with an accurate cloud recordkeeping system.

WORK CITED

1. Bang, Kent. (2018, August 7). The Swine Industry Evolution. Compeer Financial. <https://www.compeer.com/Home/Educational-Opportunities/Resources/August-2018/The-Pork-Industry-Evolution>
2. Economic Research Service. (2019, August 20). Hogs and Pork. Economic Research Service U.S. Department of Agriculture. <https://www.ers.usda.gov/topics/animal-products/hogs-pork/sector-at-a-glance/>
3. Edwards, D. 2021. Personal Communication.
4. Iowa State University. (2021). Simplex Health/VaxPro Primary Research.
5. Lawhorn, Bruce. (2010). Vaccines for Farrowing Operations. AgriLife Extension, Texas A&M University System. <https://agrilife.org/victoriacountyagrar/files/2010/07/Vaccines-for-Farrowing-Operations.pdf>
6. Ministry of Agriculture, Food and Rural Affairs. (2018). Notes for the 2018 Swine Budget. Ontario Ministry of Agriculture, Food and Rural Affairs. <http://www.omafr.gov.on.ca/english/livestock/swine/facts/notes-2018-budgets.htm>
7. National Agricultural Statistics Service. (2017) Quick Stats. United States Department of Agriculture: National Agricultural Statistics Service. <https://quickstats.nass.usda.gov/results/FB3E956F-6295-393F-82EC-53D0B4F18395>
8. Thacker, Eileen. (2003). Vaccines How They Work, Why They Fail. National Hog Farmer. https://www.nationalhogfarmer.com/mag/farming_vaccines_work_why
9. Tokach, Mike D., Goodband., Bob D., & O'Quinn, Travis G. Performance-enhancing technologies in swine production. Oxford Academic, Animal Frontiers. <https://academic.oup.com/af/article/6/4/15/4638807>
10. U.S. Meat Export Federation. 2020. Global demand for high-quality pork remains strong and resilient. National Hog Farmer. <https://www.nationalhogfarmer.com/marketing/global-demand-high-quality-pork-remains-strong-and-resilient>

***LIZ FLINT
BRITNEY FORD
AMANDA FORTMAN
MADDIE FUGATE
MITCHELL HALAT
KYLEE SHEROD
HANNAH SPIES***

***TEACHING ASSISTANT: SKYLAR BLOOM
ADVISOR: MARCIE FAHN***