



# PAUL

## Precision Agriculture Utility Leaders

### **NAMA Student Marketing Competition 2021** **UNIVERSITY OF MISSOURI – COLUMBIA**

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# Introduction

The survival of a lasting rural community and thriving agriculture economy lies in the hands of one group: the American farmer. It is no secret that the average age of the American farmer continues to increase each year. This is making it harder for farmers to implement the new and growing technologies of the agriculture industry. Specifically, the potential for use of on-farm data collection has not been fully reaped. A 2019 Purdue University study found that 51% of farmers did not use data software because they were unfamiliar with the technology and how to correctly implement it<sup>1</sup>. Shocked by this statistic, the CoreAg Trainers, Inc. team knew there was a real need for education and training for on-farm data analytics. There are many different on-farm data softwares in the agriculture industry. We chose to focus on the most popular, Climate FieldView. Owned by Bayer Crop Science US, Climate FieldView is the pinnacle of on-farm data software in regards to the row-crop industry. After honing in on Climate FieldView, our company, PAUL, was created to ensure farmers can and will continue to reap the full benefits of on-farm data software.

## Market Analysis

### MARKET TRENDS

The adoption of analytics in agriculture has been increasing consistently; its market size is expected to grow from USD \$585 million in 2018 to USD \$1236 million by 2023, at a Compound Annual Growth Rate (CAGR) of 16.2%.<sup>2</sup> According to researchers at McKinsey Global Institute, agriculture could see \$164.2 billion impact in added value with the implementation of AI and data analytic practices.<sup>3</sup> Only 21% of the same surveyed farmers labeled their reasoning for not having data software as "didn't see the value". This shows us that the majority of farmers know there is value to be gained by the technologies, they just need to better understand it before they commit.<sup>1</sup> According to statistics from the USDA, soybean yields increased at an average rate of 3.6% per year from the years 1999-2019.<sup>4,5</sup> According to Climate FieldView data, in the state of Minnesota there are about 10 million acres mapped using the Climate FieldView Application. Of these 10 million acres, the average farmer owns and maps between 2,619 acres and 7,512 acres.<sup>6</sup>

### MARKET POTENTIAL

Efficiency is the name of the game for row-crop farmers. Due to expected global food demand doubling in 2050, farmers are being pressured to produce more bushels per acre than ever. The amount of efficiency that can be gained through data analytic softwares such as Climate FieldView is exponential. With technologies such as Climate FieldView being a relatively new idea in the agriculture industry, we at PAUL feel that we are on the forefront of the endless opportunities that will continue to be available in the on-data farm software world. PAUL will provide the training and individualized service needed for enhanced market adoption and company growth.



## Business Proposition

### SERVICE DESCRIPTION

PAUL, Precision Agriculture Utility Leaders, is an educational training program designed to complement Climate FieldView technologies. Our customizable educational experience provides individual customers three options to pursue thorough training in the Climate FieldView application. These training levels offer a personalized experience for each PAUL customer to learn and grow their technical knowledge of Climate FieldView. This will, in turn, result in higher farm profitability. When Climate FieldView is updated, PAUL will be one of the first to receive access to the new features, allowing us to create training programs before the update is released, to provide customers with the most up-to-date training possible. Here at PAUL, our customer will break the technological barrier by speaking to a real person, whether face-to-face or video-to-video. PAUL is not a generalized video, a phone call, or a thick manual. PAUL is a training technician that will be right by the customer's side to help them become an expert at Climate FieldView.



### STRATEGY STATEMENT

PAUL will increase the number of effective Climate FieldView users through a customizable training experience. In turn, the American farmer will be able to continue to profitably and sustainably feed the world.

### GOAL

Our goal is to remove the barriers to enhancing farm performance through the application of on-farm data. PAUL will provide a hands-on service for Climate FieldView in an in-person, virtual and group environment.

# OBJECTIVES

- Achieve 93% customer satisfaction by year 3
- Survey an increase in over 100 individuals with knowledge of how to use on-farm data applications after year 1
- See a 10% increase in all on-farm data application purchases by year 3

# KEY ASSUMPTIONS

- PAUL has a memorandum of understanding with Climate FieldView and serves as a partner in their Friends with FieldView program.
- PAUL has a fully functional and accessible website equipped with member login, training program registration, and a service chat.
- Farmers will continue to see a need for technological training in data applications.



## PAUL In-Person™ - Meet Matt

Matt is one of our PAUL In-Person Certified Training Technicians. PAUL In-Person, is an intensive one-day training hosted by PAUL training technicians like Matt. Each training lasts eight hours and is intended for individuals who would prefer an in-person experience that navigates issues that occur in the field with personalized feedback from technicians.



## PAUL Paced™ - aka Virtual Matt

Our second option for individual customers is PAUL Paced, an online platform that allows customers to complete training around their own schedule through accessible online modules with content totaling 10 hours and featuring an interactive Q&A chat with someone from our team.

## PAUL Pro™ - best of both Matts

For companies looking to expand their services portfolio, we have PAUL Pro. This training is geared towards large groups at the corporate level, who will receive special customer service training and bulk discounts. **Companies have the option of utilizing group training sessions or the online modules to build a robust service team.**

All of these training levels offer a personalized experience for each PAUL customer, to learn and grow their technical knowledge of Climate FieldView and in turn, farm profitability, with the most up-to-date training possible.

# Customer Segment

## CUSTOMER PROFILE

Although PAUL is able to be marketed toward various consumers in different professions, we believe it will be most beneficial to set row-crop farmers, specifically farmers of corn and soybeans, as our primary target. Furthermore, we will focus on those who farm in or around the range of 2000-7000 acres. After researching possible consumers both online and in our local communities, we found that farmers of that acreage are most apt to use Climate FieldView and could therefore benefit most from what we offer at PAUL.<sup>6</sup> Our target age of farmers is 36-65 years of age. These are the farmers who, depending on the data type, will have a high representation in numbers and be the most likely to want more understanding in their on-farm data.

## CUSTOMER TESTIMONY

"About a year ago I purchased Climate FieldView. After hearing about the efficiency, the sustainability and the cost savings, I was all in. However, I didn't really have the technological knowledge to install it or understand how to work it. I heard about PAUL and knew I had to check it out. I need any advantage I can get to make sure my own son is able to take over the farm if he chooses."



- Dave Wilson, 51  
Wilmont, MN Row Crop Farmer

**S** There is strong market opportunity in data application knowledge due to the nature of technological advancements. Face-to-face interaction allows a more personable experience for customers. Row crop farmers are eager to learn how to create more profit on their operation.

**W** PAUL will need to update trainings when new updates to Climate FieldView are released. Customers must have Climate FieldView to necessitate our service. PAUL relies on farmer changing their behavior in relation to technology use.

**O** The data application industry is known for its rapid growth. Climate FieldView is one of the only data applications that doesn't have a training component. That is where PAUL can add value. Climate claims their users can gain \$6 more per acre with use of their technology.

**T** The ability to replicate content on free platforms such as YouTube might take away market share. Competitors have low barriers to entry. Farmers may not have reliable access to internet or broadband. Farmers have a natural distrust of technology and ethical concerns about data security.

# Competitive Analysis

PAUL penetrates the technology service provider market in agriculture by being the first to incorporate in-person trainings. Being a fairly new market, the competition is scarce. However, technology within agriculture is growing at a rapid pace and so is the market for data software training.

## OUR SERVICE



\$250 In-person  
\$50/month online  
In-person and on-demand  
Ease of access  
Consolidated content

## DIRECT COMPETITORS



Registration Required  
Live online  
Must meet credentials  
Consolidated content  
In-house



Registration Required  
Live online and on-demand  
Must meet credentials  
Consolidated content  
In-house

## INDIRECT COMPETITORS



Free  
User generated content  
Confusing content  
Reviews

# Action Plan

PAUL enters the on-farm data application service industry as the first of its kind to have an in-person and virtual option for customers. Our customizable educational experience will give our customers the know-how and comfort to use the popular application, Climate FieldView. Headquartered out of Sioux Falls, South Dakota, PAUL is in the heart of one of the most concentrated territories for Climate FieldView: southwest Minnesota.

## PAUL In-Person™ & PAUL Pro™

### POSITIONING

To interact with and learn from our PAUL Certified Training Technicians, our customers will have two options: PAUL In-Person and PAUL Pro. For PAUL In-Person, two PAUL certified technicians will host trainings in rural communities, where the heart of our customer base lives. PAUL Pro will come to agriculture businesses across the territory to host larger, business-wide trainings on Climate FieldView. Overall, PAUL In-Person and PAUL Pro will come to our customers to ensure an immersive, accessible, and enjoyable experience.

### PRICE

PAUL In-Person and PAUL Paced will be priced separately to offer incentives for both options. PAUL In-Person, our training hosted in-person for customers to attend, will cost \$250 for one, six-hour session. PAUL Pro, our training for professional groups of individuals, will be \$125 per person in groups of more than five customers.

### PLACE

The marketing for PAUL In-Person and PAUL Pro will begin in one of the most concentrated territories for users of Climate FieldView: southwest Minnesota. In year one, we will focus our marketing and advertising in southwest Minnesota where farmers talk in sections, not acres. In the second year, we will expand marketing into southeast Minnesota. By year three, we will be focusing our marketing and advertising efforts on the state of Iowa in addition to the southern half of Minnesota. By honing in on a territory that is small in acreage but high in users, we will be able to better serve our customers in the beginning of our journey.



## PAUL Paced™

### POSITIONING

We understand our customers don't always have the flexibility to go to an in-person training. That is why we created PAUL Paced. PAUL Paced will come to our customers in the form of a self-paced online training program via the PAUL website. Customers will have capabilities to attend video sessions hosted by our PAUL certified technicians. At their own pace, our customers will be able to gain an in-depth knowledge of how to use, analyze and enjoy Climate FieldView.

### PRICE

PAUL Paced, our online self-paced training platform, will be a monthly subscription costing \$50 per month. This will allow our customer to access all self-paced training modules whenever it is convenient for them.

### PLACE

Our PAUL Paced launch will be a nationwide effort due to its ease of access as a website. Our marketing and advertising efforts will be concentrated in the states with the highest number of Climate FieldView users. By focusing our marketing and advertising in the first three years on our target market location, we will be able to use our costs effectively.



# Promotion

The marketing and advertising of PAUL will be targeted and precise to our audience. Our promotions will be used to grow the three different sectors of PAUL: PAUL In-Person, PAUL Paced, and PAUL Pro. We plan to be strategic in planning our media to ensure maximum sales are achieved. By doing this, we hope to spend our marketing budget wisely and in the best interest of each PAUL venture.

## PAID MEDIA

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### print advertisements

PAUL will have paid print advertisements in Minnesota Corn Talk, Minnesota Soybean Business Magazine, Minnesota Agriculture, Iowa Corn Roots, Iowa Soybean Review, Farm Journal, The Progressive Farmer, and AgWeb. The utilization of each publication will vary by year and PAUL program.



### podcast advertisements

PAUL will secure paid podcast advertisements on the shows Farm Solutions Podcast and Minnesota Corn Podcast.



### radio advertisements

PAUL will have paid radio advertisements on Brownfield Ag News, AgriTalk, and local radio stations.



### social media advertisements

Using paid, mobile-friendly advertisements, PAUL will create an influential social media campaign targeting Facebook and Twitter.



### trade shows / outreach

PAUL will attend and promote at various trade shows: Commodity Classic, Farm Progress Show, World Ag Expo, Western Farm Show, Minnesota Farm Show, Minnesota Agriculture Expo, Minnesota Farmfest and other regional trade shows. The utilization of each trade show will vary by year and PAUL program.

## OWNED MEDIA



### web page

PAUL has a user-friendly and highly functional webpage. Our webpage will be the site of registration for PAUL trainings, host our membership within PAUL, have a list of upcoming training events and more.



### social media

PAUL will utilize various social media tactics to advertise our service. PAUL plans to use Facebook and Twitter as we believe these to be the most used by our target customer.

## EARNED MEDIA



### public relations and press releases

PAUL will gain attention from media outlets and will encourage positive media coverage of our service.

## CUSTOMER JOURNEY

### the buy-in

Our customer is a current owner of the application, Climate FieldView. After numerous attempts to set-up, utilize and understand the software, the customer recognizes the need to be more familiar with the software and technology. When considering to ditch Climate FieldView, our customer learns about PAUL through the Minnesota Agriculture Expo. They decide to register for a PAUL In-Person training experience to become an expert at Climate FieldView.

### how to register

Customers can access the PAUL web page and register as a member with an account where they will be prompted to determine which service they will be using: PAUL In-Person, PAUL Paced, or PAUL Pro. After enrolling as a member and determining the service they'd like to use, customers will be directed to an event sign-up page or online training module depending on the service they chose.

### frequently asked questions

#### WHAT RETURN DOES THIS SERVICE PROVIDE?

The return of this service comes in many different forms, the most important being ensuring the survival of sustainable on-farm data agriculture technologies. When it comes to the importance of PAUL, we see it as an integral solution to ensuring our American farmers continue to clothe and feed the world.

#### WHAT CAN THIS ADD TO YOUR OPERATION?

PAUL adds a level of understanding, usability, and gives overall independence back to the customers we serve. The training, whether the choice is to utilize PAUL In-Person, PAUL Paced, and PAUL Pro, gives our customers an expert level of understanding for Climate FieldView. Overall, if our customer can utilize Climate FieldView to the full capability, at the end of the day they will be profiting more on the inputs they use for their farming operation.

### our next steps

After our three year start-up, PAUL plans to continue to expand and grow our PAUL In-Person, PAUL Paced and PAUL Pro options. As technology and Climate FieldView changes, PAUL will be at the epicenter of ensuring our customer base is updated. PAUL will continue to elevate our customer base by giving them the tools and skills to operate in the most effective way possible.

# PAUL

Precision Agriculture  
Utility Leaders

# Finances

PAUL starts out carrying four hundred thousand dollars in debt during year one. This is mostly due to heavy start-up costs including marketing investment in the southwest Minnesota region for PAUL In-Person and PAUL Pro, as well as regional investment from PAUL Paced. Following these investments, the company expects on-going investment into website maintenance and heavy investment into regional markets.

These investments combined with wages negate profit potential in years one and two, but provide extremely valuable market penetration and brand awareness. As market penetration and economies of scale for all three PAUL training services, PAUL is able to forecast a net income of five hundred thousand by year three. The PAUL forecast includes conservative market penetration, that is aided by our partnership with Climate FieldView. Through research and analysis, for all three training services combined, PAUL can estimate around three thousand customers in year one, followed by roughly six thousand in year two, and eleven thousand in year three.

Income Statement	Year 1	Year 2	Year 3
<b>Revenue</b>			
PAUL In-Person	\$ 73,304	\$ 250,254	\$ 590,712
PAUL Pro	\$ 35,351	\$ 700,081	\$ 201,252
PAUL Paced	\$ 1,951,860	\$ 3,289,952	\$ 5,214,236
<b>Total</b>	<b>\$ 2,060,515</b>	<b>\$ 4,240,287</b>	<b>\$ 6,006,200</b>
<b>Expenses</b>			
Wages	\$ 505,622	\$ 735,581	\$ 1,032,324
Training Space Rent	\$ 10,565	\$ 26,030	\$ 49,879
Training Supplies	\$ 8,929	\$ 23,560	\$ 50,477
Building Expense	\$ 375,320	-	-
Website Development and Maintenance	\$ 302,654	\$ 223,028	\$ 231,802
Insurance and Legal	\$ 312,115	\$ 689,227	\$ 1,002,349
Marketing Expenses	\$ 1,001,650	\$ 2,003,450	\$ 3,050,780
<b>Total</b>	<b>\$ 2,516,855.00</b>	<b>\$ 3,700,876.00</b>	<b>\$ 5,417,611.00</b>
<b>Net Income</b>	<b>\$ (456,340)</b>	<b>\$ 539,411</b>	<b>\$ 588,589</b>
<b>Percent Profit</b>	<b>-22%</b>	<b>13%</b>	<b>10%</b>

Below is a breakdown of PAUL's marketing budget. As our budget grows and we establish brand awareness, PAUL will still need to maintain growth in regional markets, as well as provide outreach to highlight our updates. Each year we will focus on four different categories: Paid Advertising, Radio and Podcast Advertisements, Social Media, and Trade Shows/Outreach. We will maintain allocations for regional events and field days we deem necessary.

Marketing Budget	Year 1	Year 2	Year 3
<b>Paid Advertising</b>	<b>\$400,000</b>	<b>\$750,000</b>	<b>\$1,000,000</b>
Minnesota Corn Talk	\$39,900	\$81,920	\$94,220
MN Soybean Magazine	\$41,110	\$84,550	\$95,750
Minnesota Agriculture	\$32,220	\$74,220	\$84,630
Minnesota Farm Guide	\$30,990	\$72,990	\$82,810
Iowa Corn Roots			\$65,970
Iowa Soybean Review			\$63,880
Farm Journal (PAUL Paced)	\$85,310	\$145,790	\$170,810
The Progressive Farmer (PAUL Paced)	\$91,910	\$151,960	\$177,960
AgWeb (PAUL Paced)	\$78,560	\$138,570	\$163,970
<b>Radio/Podcast Ads</b>	<b>\$120,697</b>	<b>\$351,798</b>	<b>\$635,310</b>
AgriTalk (PAUL Paced)	\$26,521	\$72,098	\$129,765
Farm Solutions Podcast (PAUL Paced)	\$32,344	\$71,893	\$134,836
Minnesota Corn Podcast	\$15,629	\$52,063	\$109,348
Brownfield Ag News (PAUL Paced)	\$23,686	\$79,382	\$147,492
Local Radio Stations	\$22,517	\$76,362	\$113,869
<b>Social Media</b>	<b>\$75,197</b>	<b>\$121,797</b>	<b>\$235,311</b>
Facebook	\$42,982	\$65,890	\$126,552
Twitter	\$32,215	\$55,907	\$108,759
<b>Trade Shows / Outreach</b>	<b>\$295,000</b>	<b>\$650,000</b>	<b>\$1,000,100</b>
Commodity Classic (PAUL Paced)	\$40,060	\$80,790	\$140,740
Farm Progress Show (PAUL Paced)	\$37,820	\$77,230	\$137,280
World Ag Expo (PAUL Paced)	\$39,000	\$79,020	\$139,010
Western Farm Show (PAUL Paced)	\$20,640	\$60,770	\$110,790
Minnesota Farm Show	\$38,240	\$78,390	\$128,380
Minnesota Agriculture Expo	\$34,600	\$74,920	\$84,960
Minnesota Farmfest	\$25,080	\$65,880	\$75,840
PAUL Farmer Ambassador Program	\$17,310	\$50,460	\$60,480
Other Regional Trade Shows (PAUL P.	\$42,250	\$82,540	\$122,620
<b>Field Days</b>	<b>\$65,000</b>	<b>\$75,400</b>	<b>\$90,200</b>
<b>Monitoring and Measuring</b>	<b>\$45,756</b>	<b>\$54,555</b>	<b>\$89,859</b>
<b>Total</b>	<b>1001650</b>	<b>2003550</b>	<b>3050780</b>

# Monitoring and Measuring

OBJECTIVES	MEASUREMENT	IF LESS THAN EXPECTED	IF MORE THAN EXPECTED
Achieve 93% customer satisfaction by year 3.	Keyhole analytics, qualitative and quantitative surveys via website	Evaluate common issues associated with PAUL In-Person, PAUL Paced, and PAUL Pro	Continue to gather feedback regarding service efficiency and satisfaction
Survey an increase in over 100 individuals in knowledge of how to use on-farm data applications after year 1.	On-farm data application year-end summary information and data	Continue to advertise and ensure PAUL services are being used	Analyze options for other market penetrations like auto-steer
See a 10% increase in all on-farm data application purchases by year 3.	Climate FieldView Partnership information and data	Examine service alternatives to improve training programs	Continue to invest in training programs as well as software updates

# Conclusion

PAUL training service is well equipped to add-value to the growing and ever-changing application of Climate FieldView. We are confident PAUL will be the solution to every farmer out there who has full drive to use Climate FieldView, but needs a true, hands-on training in this technology. PAUL training is the future of on-farm data application training, worldwide.

# References

- <sup>1</sup>Purdue University. (2019, May). Retrieved March 25, 2021, from <https://ag.purdue.edu/commercialag/Pages/Resources/Management-Strategy/Strategic-Management/Farmer-Use-of-Ag-Data-Software.aspx>.
- <sup>2</sup>Research and Markets. (2019, January 24). \$1.23 billion Agriculture analytics market - global forecast to 2023: Growing adoption of IoT and smart technologies to Enable precision agriculture. Retrieved from <https://www.globenewswire.com/news-release/2019/01/24/1704685/0/en/1-23-Billion-Agriculture-Analytics-Market-Global-Forecast-to-2023-Growing-Adoption-of-IoT-and-Smart-Technologies-to-Enable-Precision-Agriculture.html#:~:text=The%20global%20agriculture%20analytics%20market,16.2%25%20during%20the%20forecast%20period.>
- <sup>3</sup>Visualizing the uses and potential impact of ai and other analytics. (2018, April 17). Retrieved March 25, 2021, from <https://www.mckinsey.com/featured-insights/artificial-intelligence/visualizing-the-uses-and-potential-impact-of-ai-and-other-analytics#>
- <sup>4</sup>United States Department of Agriculture. (2020, February). Retrieved March 25, 2021, from [https://www.nass.usda.gov/Statistics\\_by\\_Subject/](https://www.nass.usda.gov/Statistics_by_Subject/).
- <sup>5</sup>United States Department of Agriculture. (2021, January 12). Retrieved March 25, 2021, from [https://www.nass.usda.gov/Charts\\_and\\_Maps/Field\\_Crops/soyyld.php](https://www.nass.usda.gov/Charts_and_Maps/Field_Crops/soyyld.php).
- <sup>6</sup>J. Raines. Personal Communication. (2021, March 17).