



  
slingshot

**2021 RAVEN SLINGSHOT®  
PLATFORM GUIDE**

**A PATH TO BETTER EFFICIENCY**

**RAVEN**



Efficiency is doing  
better, what is already  
being done.

- Peter Drucker, business strategist

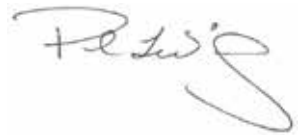
## What would more efficiency indicate for the profitability of your business?

**Application isn't getting easier, and the margin for error isn't getting wider, but Raven is here to help. Our focus is creating solutions that increase efficiency and improve accuracy to maximize your bottom line. The advancements in our logistics suite provide ag retailers with a clear picture of their operations so they can make more profitable decisions.**

The Slingshot platform is the backbone of our efficiency-enhancing portfolio. Combining our software capabilities and high-quality hardware allows us to create a *Connected Workflow™* that syncs operations from the office to the field. And, that gives you the ability to see your business differently and find new ways to run it even better than before.

In this guide, you'll find more information about the Raven logistics portfolio and see how it works together to integrate activities across your operation. We'd welcome the opportunity to talk further about how our products and services may help you increase your bottom line.

We appreciate your interest and consideration.

A handwritten signature in black ink, appearing to read "Paul Welbig". The signature is fluid and cursive, with a large, sweeping "y" at the end.

Paul Welbig, Director of Strategic Accounts

## IT'S TIME TO FIND YOUR 20.

### **Ag retailers are finding 20% efficiencies gained when they use the Slingshot platform with Raven's solutions in the cab.**

The ability to connect the office to the field while monitoring the support equipment required to bring that system together is paying dividends. Everything across the operation runs more smoothly by using technology to increase effectiveness and reduce variability across day-to-day activities.

No longer do you have to wonder about the key variables impacting your performance such as work time, idle time and transit time. With Raven's integrated system, you can quickly analyze and address these figures and manage your fleet and business in real-time.





## ALWAYS KNOW YOUR NUMBERS

**Keep your machines on the ground running and get real-time updates when your systems need attention, even before the operator knows.**

This system will allow you to quickly analyze your information so you can make quicker decisions and more efficiently manage your operation.



➤ **WORK TIME**

➤ **IDLE TIME**

➤ **TRANSIT TIME**

# YOUR CONNECTED ECOSYSTEM

Complete control of your ag retail operations. Unbeatable performance in the field and the office. One simple tech platform that fits you (not the other way around).



## CONNECTIVITY

- High speed wireless connectivity in the cab for fast delivery of VRA maps, work orders, as-applied files and other important information in real-time
- Proven performance, in even the most challenging rural areas
- Compatible on most major cell carrier networks worldwide
- API connects your software partners of choice for agronomy mapping, accounting, ERP, blending, orders and prescription creation

## LOGISTICS

- Transfer work orders to the cab quickly
- Get completed jobs back from the field in real-time
- Know where your equipment and assets are and what they're doing to maximize efficiency
- Viper® 4+ automatically ensures jobs are in the field computer correctly, the operator is in the right field and product is applied correctly
  - The Operator Pro App is available for those that do not have a Viper 4

## REPORTING

- Summarizes productivity across operators and assets
- When the application is complete a report is generated and synced automatically

## SLINGSHOT WEB & MOBILE APPS

- Web and mobile apps offer flexible connectivity 24/7 to customers, employees, and partners when away from the operation
- Promotes easy collaboration and data sharing for all levels of the operation and their customers

## ANALYTICS

- Real-time fleet monitoring, machine metrics and system performance stats
- Machine work, idle, and down time accessible 24/7

## LOGISTICS

**Complete jobs efficiently and consistently with confidence knowing your customer data is readily available to you via a simple, easy-to-use platform.**

**JOB SYNC** - Easily share your coverage and guidance information between multiple machines in the same job, including section control to avoid skips or overlaps. Job Sync Live View allows you to see live progress of the work being done on the web in real-time so you can stay up to date on how close a job is to completion.

**DISPATCH PRO™** -™ the scheduling program, which integrates easily into the Raven Connected Workflow™, is designed to manage multiple people and machines across all your locations. Orders can be placed using the streamlined AgSync interface or through one of our API partners. The program shows users in-route, idle and active equipment statuses. Orders can be sorted easily within the platform and removing or reassigning an order from a certain machine is as simple as clicking a checkbox. Dispatchers can also match specific workers to various machines and track the

equipment on the interactive field map. Applicators will immediately see their assigned work via their Viper 4+ or the Raven Field Ops app, adding another level of efficiency.

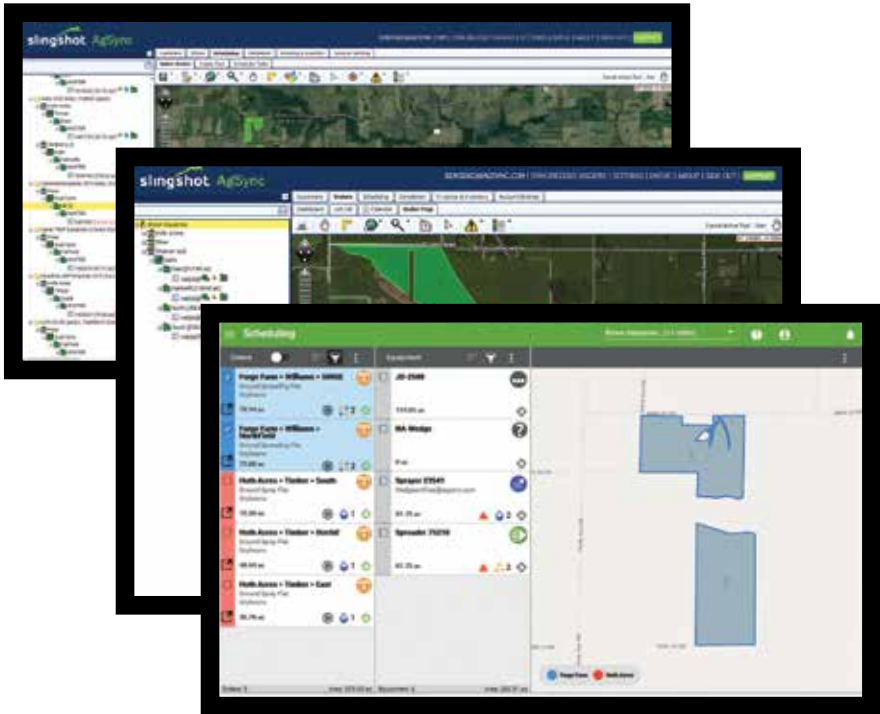
**AGRISITE** - This iOS app allows field scouts to log geo-referenced field observations, field notes, and pictures. Users can create grower and field profiles, generate work orders from the field, visually see active REI's, and alert other users of their presence in the field. Additionally, users can create new fields, orders, and annotations in the field on a phone or tablet, without the need of an internet connection.

**OPERATOR PRO** - The user of this app can see all their work orders in the field, in an easy-to-use interface. There are multiple filter and sorting options available to organize the work as desired.

**FLEET TRACKING** - Monitor the location of your entire fleet of machines, trucks, vehicles, and unpowered assets like trailers, tanks and implements.

**FIELD OPS™** - Created exclusively to connect Dispatch Pro assigned work to the applicator. The jobs are immediately synced into the app for easy retrieval and efficiency.





With Slingshot, aerial applicators gain the same flexible, scalable, connected toolset that ground applicators enjoy. This tech platform can reduce costs, improve efficiency, and maximize the utilization of every type of asset, whether it is in the air or on the ground.

## CONNECTIVITY

**Reliable wireless connectivity has been the foundation of Slingshot's success for over 10 years. Although there are many options to choose from, we recommend the following solutions for you to get connected:**



RAVEN RS1



FIELD HUB 2.1

**FIELD HUB 2.1** - Modem that connects your Raven field computer to the Internet and includes WiFi that allows other devices in the cab to enjoy high speeds on one data plan.

**RAVEN RS1™** - A fully scalable solution that combines autosteer, GNSS, and Slingshot into one easy-to-use unit.

**WIFI** - Although the Field Hubs and RS1 are the most reliable way to connect your Raven field computer to Slingshot, you can also use WiFi or a third-party modem.

**SLINGSHOT API** (Application Programming Interface) - We pioneered this idea and have partnerships with dozens of software companies to provide integrated experiences for your unique operation.

**Your data is private and secure. We've created an open ecosystem of partners that makes it easy to share your data with only those you choose.**

## ANALYTICS

Have access to real-time information so you can make confident, data-driven decisions at all levels of the operation any time of the day.



**FLEET ANALYTICS MANAGER** – Analyze current and past Slingshot work order data.

- Acres Covered
- Work Time
- Idle Time
- Transit Time

## REPORTING + NOTIFICATIONS


Stay informed on your operators and assets from the beginning of a job through completion.

- Send live work order updates via text or email
- Spatially view work activity
- Work order notifications
- Traceability reporting
- Application record compliance
- Work order completion approval
- As-Applied maps are sent from your field computer at the completion of a job
- Fleet efficiencies track order edits and job status
- Basic machine data provides completion data and spray records

## WHAT TO BUY

**SOFTWARE:** The chart outlines the Slingshot subscription options, and capabilities within each respective level, to support your operation.

**HARDWARE:** To audit your existing hardware and better understand your potential needs, Raven can provide you with a Pre-Flight analysis and fleet migration plan.

 <b>SUBSCRIPTIONS</b>	1st year included with RS1 or Field Hub 2.1		
	<b>GOLD</b>	<b>SILVER</b>	<b>BRONZE</b>
API Basic	✓	✓	✓
Machine View	✓	✓	✓
As-Applied Transfer	✓	✓	✓
Rx Map Transfer	✓	✓	✓
Slingshot Link	✓	✓	✓
Remote Support	✓	✓	✓
Job Generator	✓	✓	
Correction Streaming (with Field Hub 2.1 or RS1)	✓	✓	
Virtual Thumb Drive (VTD)	✓	✓	
Job Sync Coverage Sharing	✓		
Job Sync Live Web View	✓		
Machine Events	✓		
Machine Event Notifications	✓		
Fleet Analytics	✓		
Machine Telematics (V4 3.8+)	✓		

	<b>SERVICE UNLOCK</b>	<b>CORRECTION UNLOCK</b>
Field Hub	✓	\$\$
RS1	✓	\$\$
Field Computer	✓	

**We create and integrate technology solutions that increase efficiency, improve accuracy, minimize variability, and maximize your bottom line.**

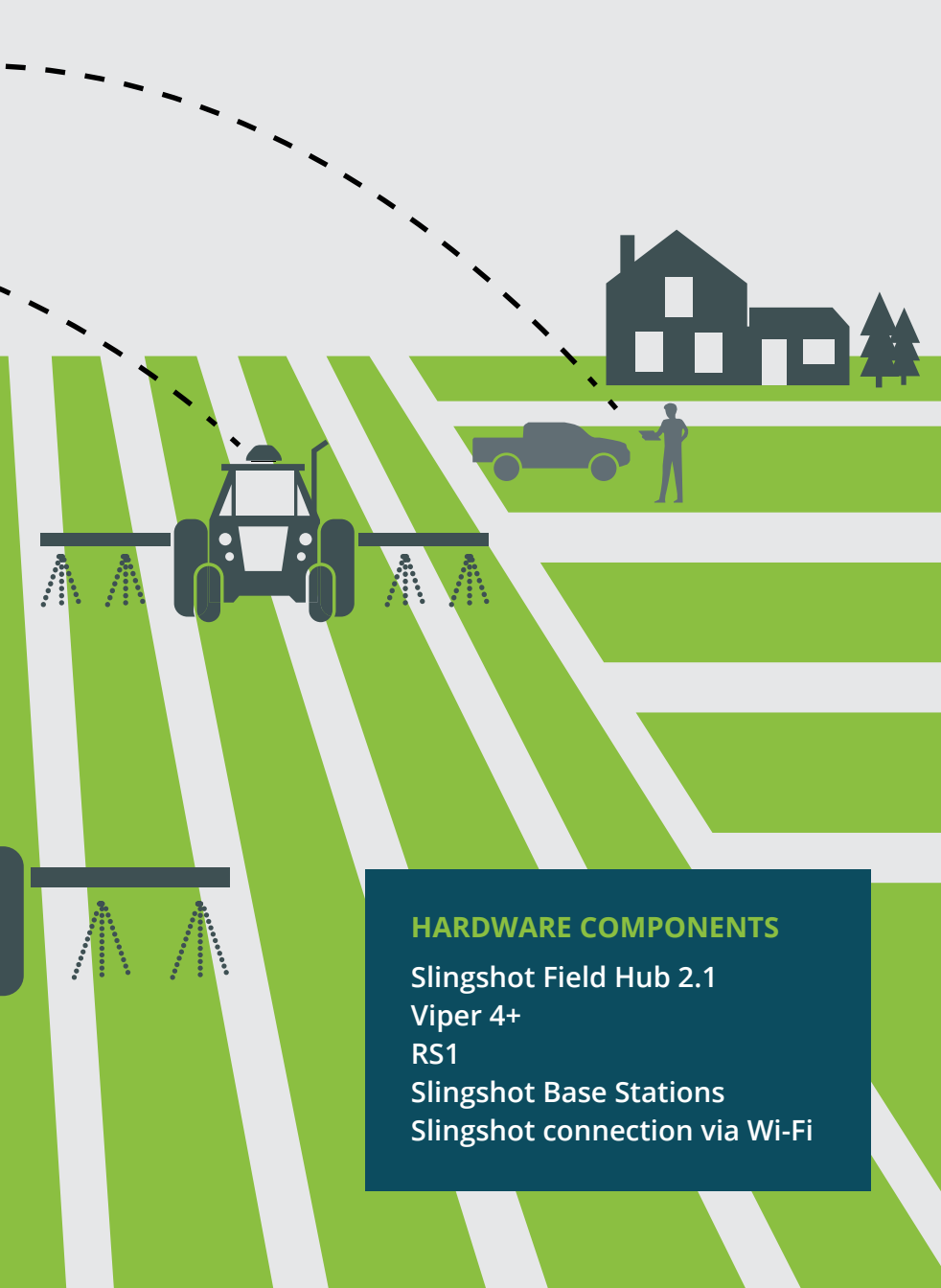
# A FULL-CIRCLE SOLUTION FOR YOUR OPERATION

Raven's ability to create and integrate a complete software and hardware solution gives you the opportunity to gain an average of 20% efficiencies. You'll get more out of your current assets and you'll gain invaluable information on the best way to make the most of them in the future. All from a partner focused on your success.

## SOFTWARE COMPONENTS

- Job Generator
- Job Sync
- Slingshot Online
- Slingshot Link
- Fleet View
- Fleet Analytics Manager
- Slingshot RTK
- Slingshot API
- AgSync
- Operator Pro
- Agrisite
- Dispatch Pro
- Field Ops





### HARDWARE COMPONENTS

Slingshot Field Hub 2.1

Viper 4+

RS1

Slingshot Base Stations

Slingshot connection via Wi-Fi

## RAVEN IS HERE FOR YOU THE WHOLE WAY

When you're ready to Find Your 20, Raven's suite of services can help you from start to finish and every step along the way. From pre-flight needs to training for your people and ongoing support, we help guide you and your business forward.

We proudly support groups that promote and drive consistent data security standards, sharing and compatibility across the industry, such as:

- ADC (Agricultural Data Coalition)
- AgGateway
- AEF (Agricultural Electronics Foundation)
- Agrirouter
- PrecisionAg Alliance

To learn more or to connect with a Raven specialist visit [ravenprecision.com/slingshot](https://ravenprecision.com/slingshot).



We provide technology solutions that enhance efficiency, increase accuracy, minimize variability, and maximize your bottom line.

Visit [RAVENPRECISION.COM/SLINGSHOT](https://RAVENPRECISION.COM/SLINGSHOT) to learn more about efficiency with *Connected Workflow™* or to request a demo.

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Website: [RAVENPRECISION.COM/SLINGSHOT](https://RAVENPRECISION.COM/SLINGSHOT)

The Raven logo, consisting of the word "RAVEN" in a white, uppercase, sans-serif font, set against a dark blue rectangular background. The logo is positioned in the bottom right corner of the image, which shows a vast field of green corn plants under a twilight sky with scattered clouds.

**RAVEN**