



Next Generation Forest Data

Technology taking spatial
data and land management
into the future



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The modern forestry industry is standing at a crossroads. On one side lies unprecedented financial opportunity with the global forestry and logging market reaching a staggering \$980 billion in 2024 and charging forward with an anticipated 7.83% compound annual growth rate.

On the other side, however, the industry is battling a perfect storm of environmental and labor pressures as it struggles to meet the world's demand for sustainable products.

The reality is that the familiar "business as usual" models that built this industry are no longer enough to guarantee its future. Operations are now undergoing an unavoidable transformation.

To protect their bottom line and their resources, forestry businesses must rapidly evolve to navigate a complex new landscape defined by unpredictable climate volatility, growing cybersecurity threats, and increasingly strict international regulations.

The global forestry and logging market is anticipated to soar to

\$1.42

trillion by 2029

Business Research Company, November 2025



The path to productivity - Solving the industry issues

This industry isn't just about harvesting wood; it's about managing data and environmental integrity.

Despite relatively stable employment numbers over the last five years, employment in the industry is expected to decline by **7%** over the next five years.



With nearly all sub-industries expected to see a decline in employment through 2027, which will leave a massive operational gap that only technology can fill.

Camoin Associates, October 2023



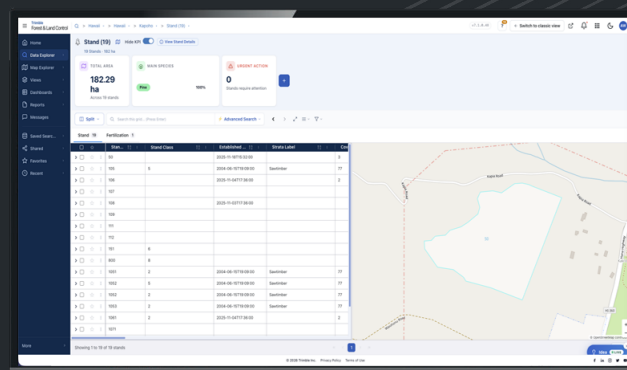
SOLUTION

Software is the “central nervous system” of modern forestry.

You need a solution that empowers your business along the supply chain to operate as smooth, seamless, and sustainable as possible. The answer lies in making software the “central nervous system” of modern forestry. By acting as the adaptive and flexible technical backbone, technology connects people, products, and processes.

Leveraging digital workflows to connect and optimize, you can turn raw noise into actionable profit, address workforce shortages, and ensure environmental sustainability. Modern solutions enable you to connect to your forest operations through real-time data, better coordination, and smarter decision-making, ensuring your business is set up for performance, every connection is seamless, and sustainability is embedded every step of the way. From democratizing access to information for data-driven decisions to digitizing the entire process from forest-to-mill, the right technology ensures your day-to-day operations are aligned with the big picture.

In this eBook we'll explore how digitizing your workflows can help you solve the industry's biggest logistical and financial challenges, reducing human error, maximizing productivity, and providing unparalleled transparency from forest to finish.





CHAPTER

01

Inefficient
supply chains
& the visibility
voids



PROBLEM

Fragmented data and operational silos

Forestry is a complex business with countless roles and relationships keeping the industry running, but it only runs smoothly if all parties are working together. Traditionally, the supply chain has been plagued by fragmented data and operational silos.

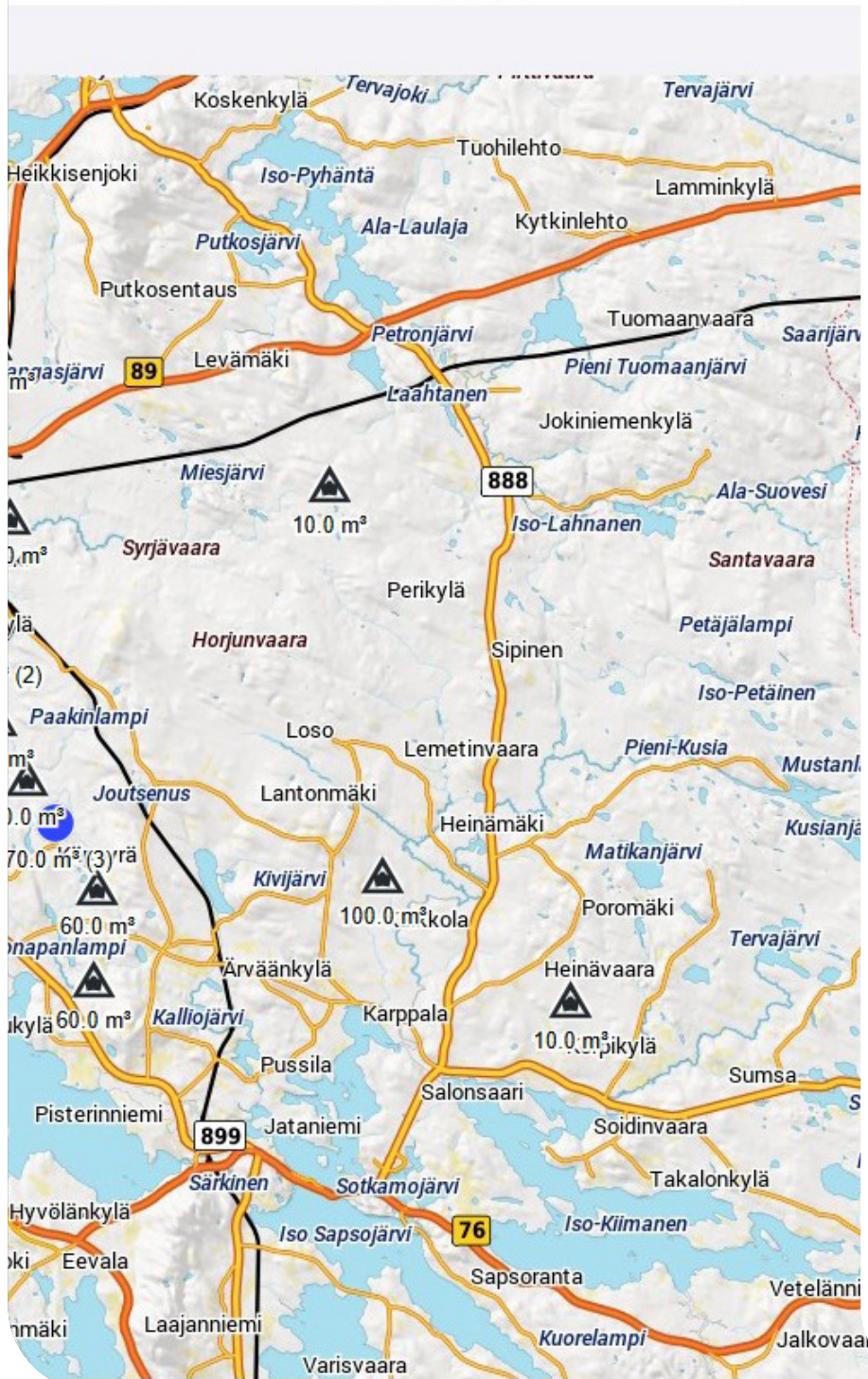
Forest managers, harvesters, and mill operators frequently work in isolation, unable to see each other's real-time progress or adapt to sudden changes in the field. Additionally, users are having to piece together data from several systems into single spreadsheets or databases in order to have one true comprehensive report.

This lack of visibility creates a massive disconnect and when teams cannot communicate effectively or share critical intel, it leads to bottlenecks, costly downtime, and frustrated customers.

Furthermore, operating in the dark is no longer just a logistical headache—it is a compliance risk.

As global environmental standards evolve, stricter chain-of-custody and traceability measures are being required. Relying on fragmented, disconnected data makes it nearly impossible to confidently track wood to its final destination.





SOLUTION

A connected, real-time technical system

Software that breaks down these silos - connecting people, products, and processes - empowers a smooth and seamless supply chain. Adopting specialized forestry software to serve as an enhanced and capable base to your operations can bring together all of your data into a single source of analytics.

Technology can provide real-time tracking of harvested volumes, pick-up point inventory, and visibility into wood movement.



OUTCOME

Unparalleled transparency

Integrating real-time software solutions enables you to compile every piece of valuable data so that your operations are optimized for performance and eliminates the guesswork.

The result is an operation that provides end consumers and regulatory bodies with a clear line of sight into each load's journey, delivering unmatched transparency, every step of the way.

Instead of guessing when raw materials will arrive, mill managers know exactly how much fiber is available and precisely when it will hit the yard.



CHAPTER

02

Manual
paperwork &
the cost of
human errors





PROBLEM

The bottleneck of paper-based systems

Relying on traditional paper-based systems for load tickets, contracts, and scaling is a liability. These manual processes are notoriously slow, highly prone to human error, and incredibly difficult to audit. When your operation depends on physical load books traveling from the forest to the mill, critical data is often delayed, resulting in miscommunication, inaccurate records, law and regulation violations, and workflow bottlenecks.

The financial impact of these outdated administrative processes is steep.

Research shows that software users spend approximately

\$8,000 USD

less annually on employee time devoted strictly to conveying harvest-specific information to foresters, compared to operations still burdened by non-software methods.

Journal of Forest Business Research, April 2024

SOLUTION

Digitizing for speed and accuracy

By adopting specialized software, you can entirely replace outdated paper load books with streamlined digital tickets and eliminate the lag and inaccuracy of manual data entry.

This digital transformation reduces data entry errors and accelerates reconciliation, turning a process that once took days into minutes.

Additionally, modern platforms can automatically reconcile digital ticket data with live feeds from key checkpoints such as weighbridges and ports.



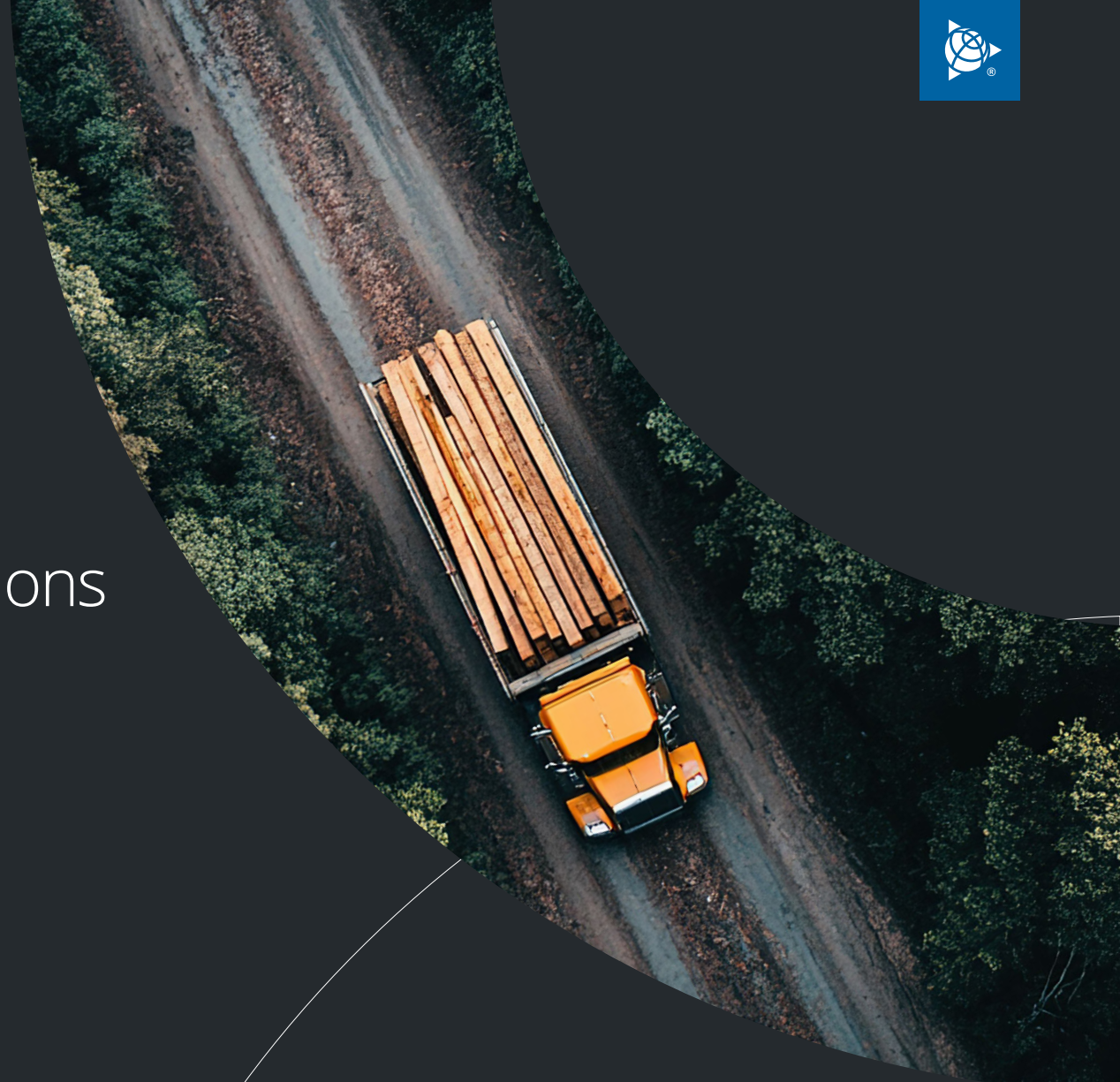


OUTCOME

Streamlined operations and profitability

Digitizing these workflows and automating data reconciliation removes the friction of manual paperwork and empowers your team to make informed, data-focused and error-free decisions in real time.

Upgrading to digital ticketing improves communication and reduces administrative waste, for a connected operation that runs smoothly, seamlessly, and profitably.





CHAPTER 05 Forest inventory inaccuracy



PROBLEM

The guesswork of outdated inventory

Forestry companies rely on precise data to maximize the utilization of their forest assets, but many operations constantly struggle with outdated or inaccurate records of their timber stock.

Relying on traditional manual tallies creates administrative backups that are highly vulnerable to human error.

When your inventory is managed through disconnected, manual tracking, you lack a real-time understanding of your available resources. This lack of transparency not only hinders efficient harvest planning but also frequently leads to frustrating and costly disputes between forest owners and buyers over delivered volumes and stock levels.



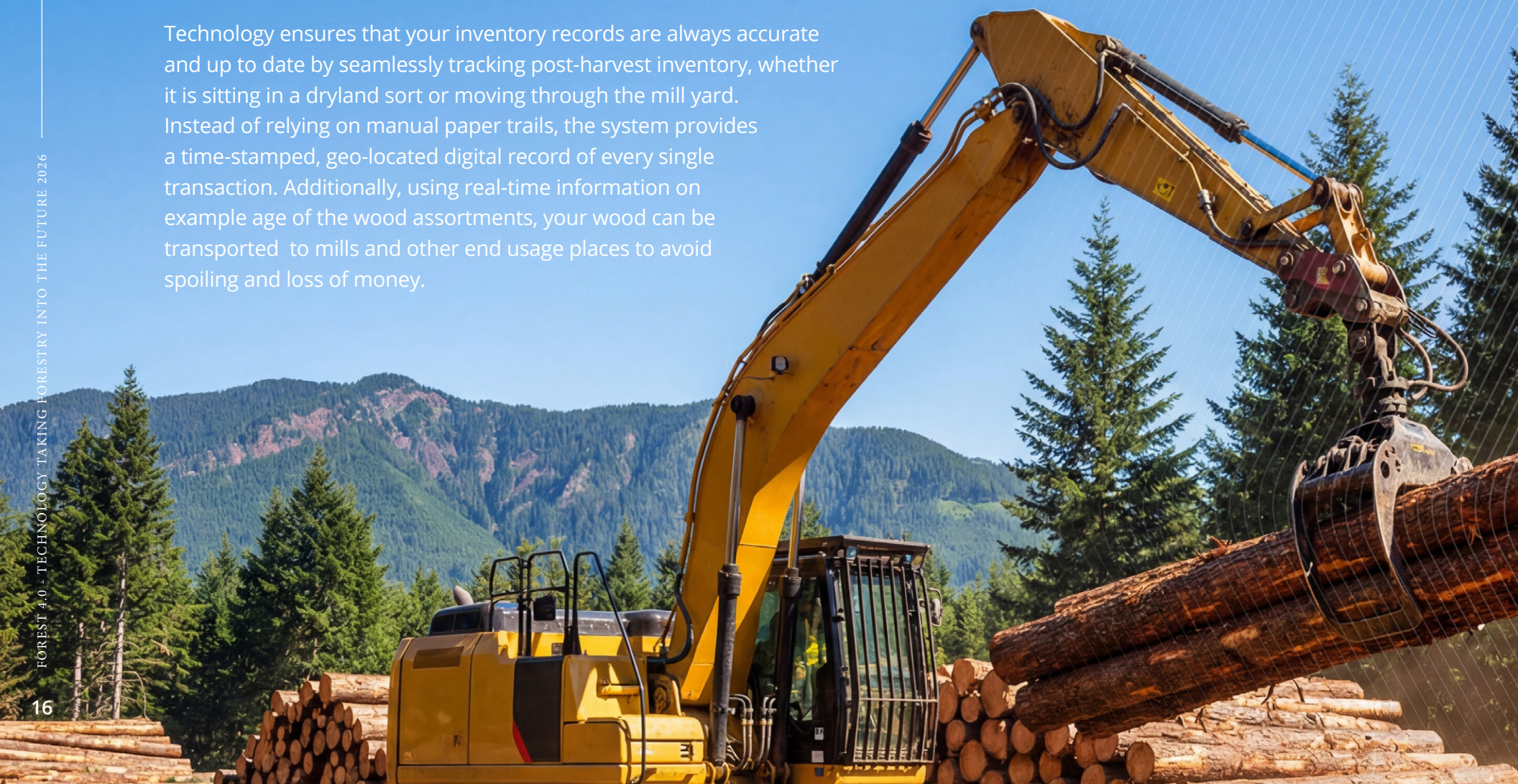


SOLUTION

A Digital, lifecycle management core

Effortlessly manage the full lifecycle of a forest with the right resource management software, from initial planting and growth all the way to planning the final harvest.

Technology ensures that your inventory records are always accurate and up to date by seamlessly tracking post-harvest inventory, whether it is sitting in a dryland sort or moving through the mill yard. Instead of relying on manual paper trails, the system provides a time-stamped, geo-located digital record of every single transaction. Additionally, using real-time information on example age of the wood assortments, your wood can be transported to mills and other end usage places to avoid spoiling and loss of money.





OUTCOME

Reclaimed time and unquestionable visibility

Digitizing your inventory tracking can remove the administrative burdens and empower your team with a single source of truth. The efficiency gains are transformative.

Furthermore, the creation of verifiable, geo-located digital records completely eliminates disputes between the forest owner and the buyer. The result is exceptional transparency and a connected operation.

The Journal of Forest Business Research reports that wood suppliers who utilize this software save on average

43 hours
per week on administrative tasks

Journal of Forest Business Research, April 2024



The road ahead

As the forestry industry continues to change and adapt for the future, software can bridge operational gaps, transforming raw data into actionable profit while mitigating labor shortages and environmental impact. These modern solutions ensure that your business is optimized for performance, allowing data-centric decisions to align daily operations with long-term sustainability goals.





THE TRIMBLE DIFFERENCE

Connecting you from forest-to-mill

At Trimble Forestry, we bring deep expertise across the forestry supply chain—understanding what drives it, designing systems that keep every stakeholder connected, and applying decades of experience to help avoid costly inefficiencies and operational disruptions.

Our industry-leading solutions manage over 100 million hectares globally, seamlessly integrating your people, products, and processes.

With over 40 years of technology innovation and a commitment to reinvesting 14% of our revenues back into products and R&D, we provide scalable, purpose-built solutions that drive productivity, and quality. We make sure your day-to-day operations are perfectly aligned with the big picture.

Visit our website to learn more about our products or to speak with our team of experts: **forestry.trimble.com**



