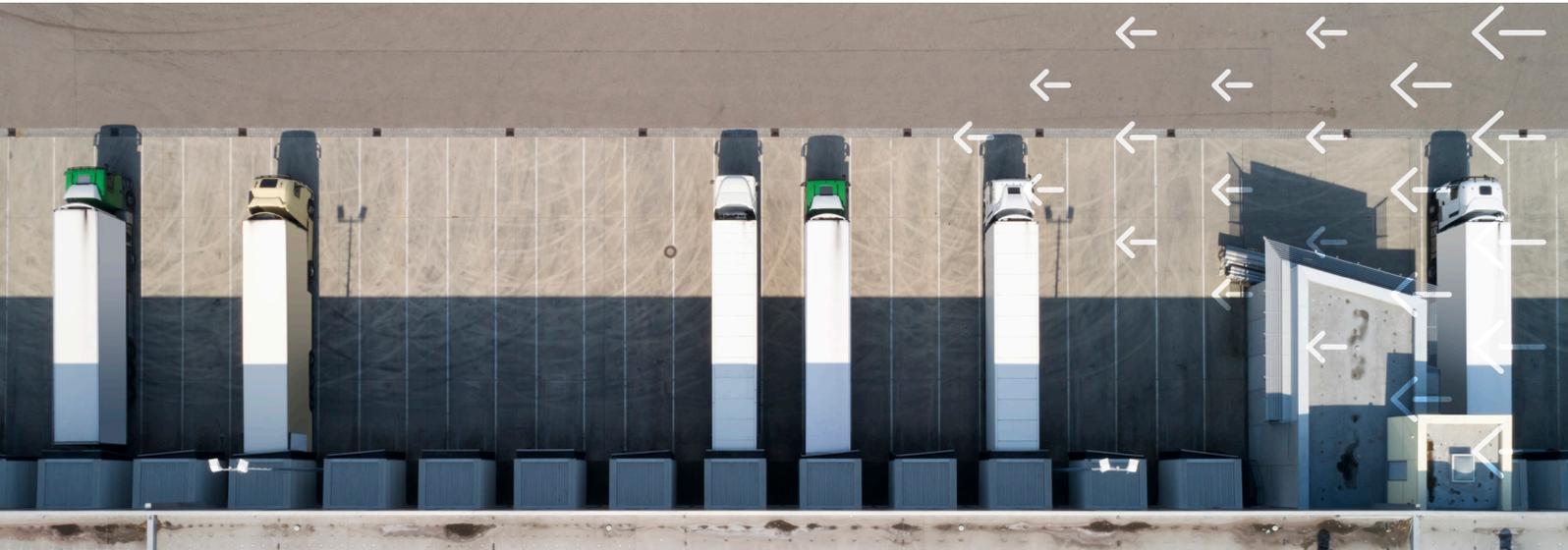# Visibility and Precision in **Yard Execution**

Unlocking yard potential:
The easily integrated digital solution that delivers measurable compliance and empirical metrics to redefine yard efficiencies in real time.

Massmart

Key Challenges
in Yard Execution

End-to-end visibility seems to be the desperate requirement of every yard operator. This complex web of operational touch points has a significant impact on delivery efficiency and timing.

Extended dwell times or late and early arrivals have a cascading impact on yard flow and results in lost hours, ineffective resource management and high levels of frustration which significantly impairs yard execution and adversely affects the smooth flow within many perfectly designed yards. This is the area where innovative tools and technology can transform confusion into seamless, meaningful visibility, real-time operational control and actionable insights.

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The primary issues that organisations face when it comes to the yard include:

→ Delayed deliveries and poor management of outbound and inbound load schedules

→ Manual processes and administration

→ Significant delays relating to paperwork (GRV, POD and DDS)

→ Congestion at the gate due to early or late arrivals and departures

→ Poorly managed operations with no accurate and up to date information

→ Delays which create unforeseen charges and driver detention

→ Limited visibility into truck arrivals with no defined execution process

→ Manual gate administration and disparate gate control & access systems

"Companies have invested extensively into **solutions that fail to positively influence or control the level of visibility in the yard** and deliver what is actually needed to make tangible and relevant changes to **yard flow and efficiency.**"
– David Slotow, CEO, Trackmatic.

Redefining efficiencies in the yard has long been part of the supply chain manifest. Organisations have invested significant time and money into hardware and software that should influence or control the level of compliance and visibility within the yard.

Solutions such as RFID scanners, QR barcodes, asset identifiers, and telematics based gantry solutions have been adopted and implemented, yet very few (if any), have managed to achieve the expected levels of visibility required to truly transform the yard. This is largely due to their limited scope and finite nature (hardware is limited) in an environment where the elements are infinite (sub-contractors, hired vehicles, open supplier networks etc).

They also lack one vital component – context. Context is critical to driving yard visibility. Why are there delays at the gate? Why are vehicles idling in the yard? Why is there congestion, delays in paperwork and no clear execution flow? The answer is in the data. It lies in creating context-based visibility highlighting the factors that influence each element of the logistics operation.

This case study examines how Massmart and Trackmatic co-created an innovative people-led, tech-enabled solution. This solution not only allowed for Massmart to overcome its yard inefficiencies but used data to refine its operational potential, truly empower its people and improve its overall service to suppliers.

The Quest
for **Visibility**

Trackmatic's Link solution was initiated out of a need to provide Massmart with relevant data so that they could reduce dwell times, manage loading and offloading points, and bypass an over-reliance on manual processes to gain a deeper view of the yard and the challenges that the company was facing."
– David Slotow, CEO, Trackmatic.

When it comes to innovation and investing in solutions that improve operations and efficiencies, Massmart has been paying attention. The company has not only invested in its last mile and operations capabilities, but it recognised that it was facing challenges in the yard that should be resolved to improve operations and reduce expenses. The goal was to develop a solution in collaboration with Trackmatic that allowed for the company to bypass the traditional yard scrambles and delays and instead create a cohesive flow that allowed for seamless operations and improved company decision making.

"The yard was continuously full of suppliers that stood for hours unpacking trucks," says Marcus Vosloo, Vendor Relationship Manager at Massmart. "There were complaints around the lack of visibility and finding information about a supplier was an arduous process. The challenge for operators was to understand what was happening at any given point in time."

Massmart wanted a solution that would allow them to extend visibility of the supply chain into the warehouse. It needed to allow for faster tracking and receiving, which would then speed up operations.

"There was definitely a need to relook our entire yard execution process, to improve workflow and replace manual paper-based processes with complete automation, and to radically decrease dwell time which was adversely impacting on our delivery capacity and service to our vendors. Truck bottlenecks within the yard were impacting on flow to dock, paperwork was causing significant delays as drivers waited on operations. Irregular, badly managed fleet arrival times meant that there was no seamless flow from the gate to bay to gate process." says Vosloo.

→

Before implementing Trackmatic Link, Massmart were taking around...

553 seconds on average to offload a case in their **Cape Town branch**

384 seconds in **Riverhorse**

738 seconds per case in **Gauteng**

Due to **manual processes** the data was difficult to interpret and the results were irratic.

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A **Collaborative**
Journey

Trackmatic Link was developed as a collaborative answer to Massmart's challenges. The two organisations worked together to create a people-led technology platform that would provide the end-to-end visibility that every individual needed, at every touchpoint to ensure that the legacy challenges could be permanently and effectively overcome.

Massmart was already running a globally recognised inbound product for its planning around instore replenishments, but its existing yard execution module was too cumbersome. It was difficult to use, over-engineered and didn't pay attention to the user. Trackmatic wanted to create a simple app that was both reliable and incredibly easy to integrate and use.

The solution is a comprehensive innovation of yard execution because of the revolutionary way of refining yard management, using cost-effective tools and technology.

"We wanted a solution that was simple", says Slotow. "A standard scanning process that initiates the flow of behind the scene performance data to create a platform for engagement. It had to be easy and effective for implementation and training with minimal downtime experienced and it needed to effectively overcome yard challenges whilst adhering to process compliance.

Massmart now has reliable, real-time and central visibility into its distribution centres across the group. The implementation of Link has been quick, easy and affordable.

"Trackmatic had already facilitated the implementation of execution and process management platforms in other key areas of our operation," says Lyle Brady, Group Distribution Executive at Massmart. Trackmatic Link was the next crucial piece, enabling greater visibility over our operational eco-system. Trackmatic was an obvious choice as a technology partner because they have a very similar culture to ours and their "can-do" attitude is very exciting. No project is too big or too small and we trusted the team implicitly".

The Solution

The Missing **Link**

Trackmatic Link is an easily integrated, mobility-based enterprise solution that delivers measurable compliance and empirical metrics that highlights yard inefficiencies in real-time. The technology transforms the entire gate-to-gate process from start to finish ensuring every aspect is meticulously managed, monitored and controlled.

It is a mobile application that utilises handheld devices and interactive live dashboards that captures the live data of critical touchpoints in the yard operation process as it happens and provides actionable analytics and branded communications. It brings all the process data into a common platform for engagement to empower everyone, from the security guard to the executive. It gives a deep understanding of trends relating to booking compliance and yard flow which enables continuous improvement and connects the dots between dwell time reduction, gate-to-gate efficiency and supplier relationships with limited hardware and time investment.

The overall solution is further enhanced with an interactive Supplier Portal which enables greater supplier visibility of real-time activity updates and access to a repository of online delivery documentation.

Seamless **Integration**

Seamless integration of this solution into other technologies and systems allows for the platform to be imbedded into any existing warehouse operation regardless of the Warehouse Management System ("WMS"), Enterprise Resource Planning ("ERP") solution or Financial Application.

For Massmart, Trackmatic Link was embedded as a layer on top of its existing inbound planning and booking management system. It did not require extensive integration or IT support, it simply locked into place with minimal friction across system or department. The low barrier to entry meant that everyone was able to start using the solution from the onset – people were using the data to manage flow within weeks of implementation.

"This solution truly reflects our philosophy of building solutions that deliver relevant and ongoing results to our customers," says Slotow. "Trackmatic Link is in keeping with our commitment to stay relevant, and to always collaborate with our clients in creating solutions that work for them."

"Trackmatic Link was seamlessly integrated across the board. Trackmatic designs smartly and they have an ability to work with us to conceptualise solutions that are relevant for our specific business context. It took us a month to go through the concepts and within a few weeks we had the technology solution in place – we signed in April and by the end of May, Trackmatic Link was live. The Trackmatic approach is very people-led and they bring a fresh perspective to problem-solving. They are true pathfinders and don't stick to the tried and tested. They are willing to explore and create which is critical when you need to re-shape logistics. They also understand the importance of applying the technology to the user, not the other way around. Our team is thrilled with the solution."

– Lyle Brady, Group Distribution Executive at Massmart

Trackmatic Link
Features and Functionality
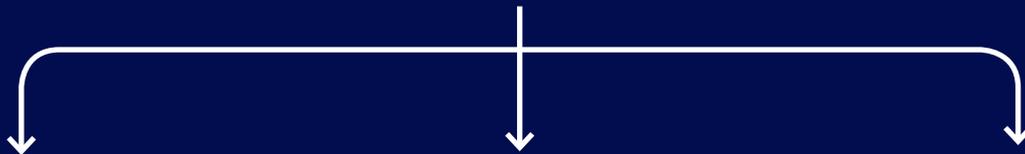
It **Delivers**

→ Cloud based mobility solution

→ Live real-time execution dashboards of critical yard activities

→ Booking system

→ Supplier Portal and advanced notification

→ Online POD repository

→ Real-time activity notification

→ Execution reports

→ Business intelligence model and analytics

Why it is **Different**

→ Easy, quick and seamless integration

→ Measurable efficient and effective yard processes

→ Easy-to-use, and quick to implement

→ Compliant data security and confidentiality

→ Live gate-to-gate and end-to-end yard visibility

→ Supplier visibility of yard activity and online POD repository

How it **Benefits** You

→ Faster truck turnaround times (loading and offloading)

→ Reduced gate-to-gate times

→ Improved supplier booking compliance

→ Reduce overtime and costs

→ Procurement and operational collaboration

→ Agile and reliable operational control

→ Empirical data for insightful decision-making

Trackmatic Link Simplifies Yard Execution

Key takeaways

1 Managing the yard does not require a hefty IT investment

2 Innovative software and mobile technology allow for any organisation to transform yard execution

3 Empowering yard and security personnel with easy to use, user-friendly interactive devices provide real-time insight and enables improved operational control and collaboration

4 The result is substantial cost savings, real-time data visibility and reduced gate-to-gate turnaround times

5 Operational insight drives standard and consistent metrics for ongoing improvement initiative and continuous learning
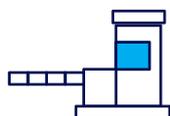
The **Gatekeeper**

Trackmatic Link provided end-to-end visibility of the yard process however it was critical to extend visibility to gate activity and to mitigate security risk. Therefore, Trackmatic developed a gate solution that would ensure quick, easy, yet effective adoption and high utilisation. It would need to bypass frequent individual churn at the gate and improve the effectiveness of inbound compliance.

"Massmart needed greater gate-to-gate visibility, especially around booking compliance and yard access," says Slotow.

Trackmatic's Gatekeeper Module seamlessly integrates with the Link Solution by feeding the gate entry and exit data to the system which enables complete control over the booking adherence in respect of departures and arrivals. The security team can instantly access the booking information on their handheld devices and ensure booking compliance is enforced and effective security and license validity controls are maintained.

"Initially, implementing these changes was a challenge," says Slotow. "The security personnel had to enforce booking compliance and only allow access on the presentation of a valid gate pass. This impacted suppliers and receiving of expected stock, but supplier compliance was quickly rectified and this ensured overall procedure compliance and enhanced yard efficiency."

When a supplier or carrier meets the following criteria, only then is access allowed:

→ They have a valid gate pass
→ The gate pass is valid for that day
→ They have arrived at the correct booking time
→ The driver and truck licence have been successfully scanned and validated by the security personnel

Trackmatic's Gatekeeper Module is a critical component of the yard execution solution. It creates an instant structure that manages execution for the yard at the point of entry, ensuring that every vehicle arrives at the right time and on the right day. Once the vehicle has passe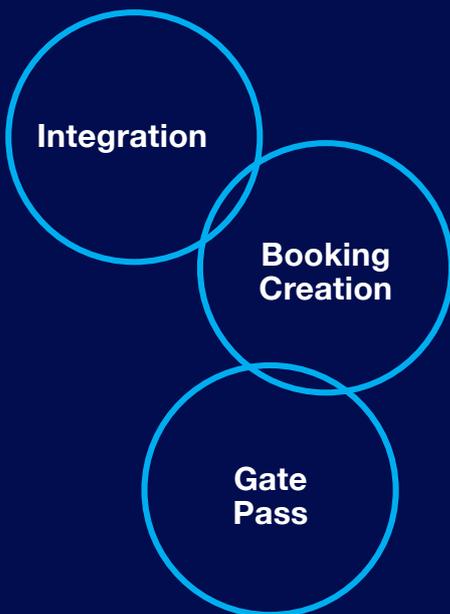d through security, it is then sent to an allocated bay for offloading. The driver knows precisely where to go, operators know the truck has arrived and operators can start execution. The result has been a tangible and measurable improvement in vendor compliance and delivery efficiency.

Trackmatic' s Gatekeeper Module

Key takeaways

1 The right vehicle has arrived at the right time and is now directed to its allocated bay

2 Vendor compliance has made gate-to-gate adherence more efficient

3 Driver and vehicle license validity is enforced

4 Accurate visitor management for other visitors such as contractors, staff and visitors can be maintained in the same application.
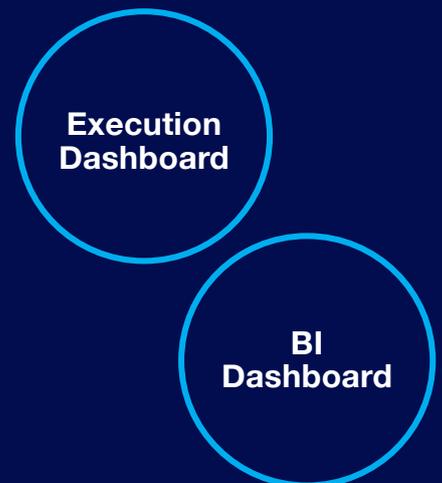
Integration & Booking Management

Integration

Booking Creation

Gate Pass

Execution

Gatekeeper Arrival on Site

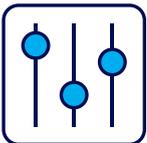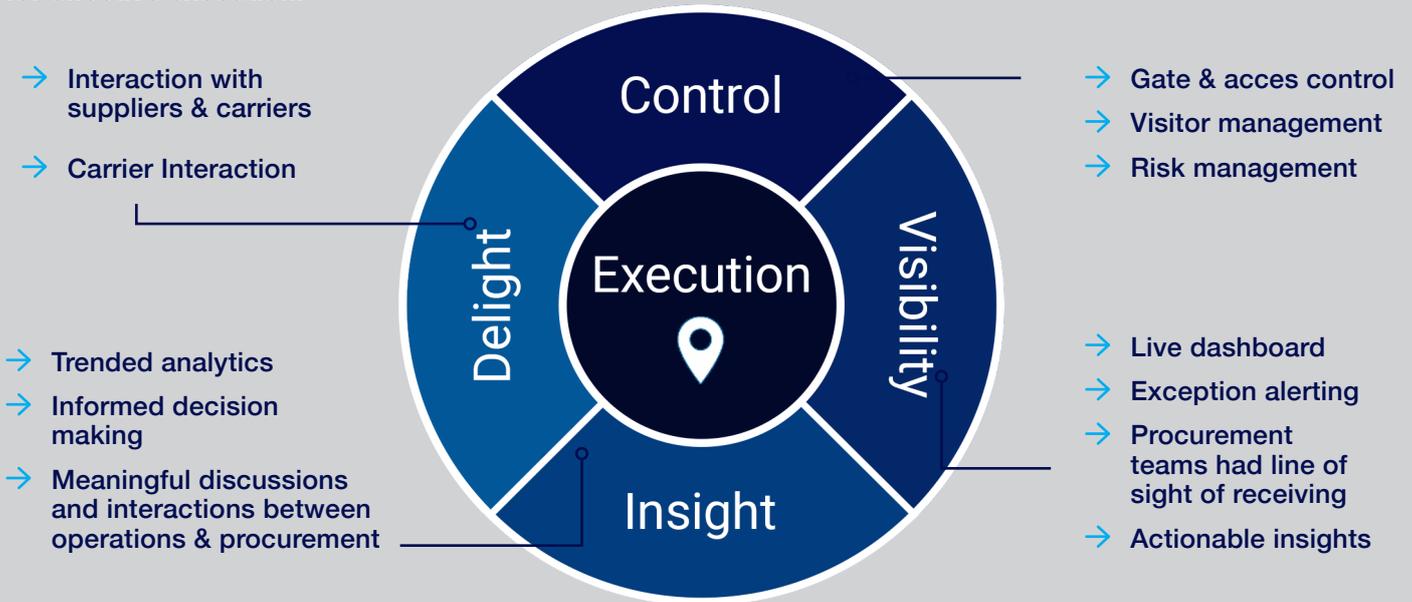Link Execution Flow

Visibility

Execution Dashboard

BI Dashboard

Execution

As a basis for the implementation of any of Trackmatic's technology solutions, the approach of focussing on 4 key elements was critical to the execution methodology for Trackmatic Link as a successful implementation.

The implementation methodology covers 4 critical aspects for effective execution.

→ Interaction with suppliers & carriers

→ Carrier Interaction

→ Trended analytics

→ Informed decision making

→ Meaningful discussions and interactions between operations & procurement

Control

Delight | **Execution** | **Visibility**

Insight

→ Gate & acces control

→ Visitor management

→ Risk management

→ Live dashboard

→ Exception alerting

→ Procurement teams had line of sight of receiving

→ Actionable insights

Control

For any operationally intensive business to achieve success in the implementation of any software application, particularly an innovative solution like Trackmatic Link, there needs to be a firm focus on operational adoption and compliance.

This is a prerequisite for success. Control over the operational discipline at the gate and in the yard was achieved by ensuring that the security personnel (employed independently by a security service provider and not employed by the operating company) make use of Trackmatic Gatekeeper (a mobile application) from Trackmatic whilst the yard execution operators make use of a the Trackmatic Link application. Both applications are seamlessly integrated to provide centralised data of the process flow from gate to yard.

The distinction between these two dependent but fundamentally different roles ensures that there is a separation of duties and independence in the overall control however visibility and reporting is aligned upstream in the process.

Visibility

The buzz word in any supply chain operation today is 'visibility' but what does this mean in the context of yard execution and how can it be achieved?

For Massmart, the most critical visibility requirements were needed in real-time with no delays and across multiple touch points both in the facility and centrally in the National Operations Centre ("NOC") located in Germiston.

Real-time execution dashboards provide clear visibility of inbound loads as well as how bookings in the yard are being executed concurrently.

Insight

The proliferation of data analytics and insight Business Intelligence ("BI") Dashboards in supply chain companies today has increased pressure on logistics teams to ensure that they have the right information timeously.

The dependency on having implemented systems that generate the underlying data that underpins these models is crucial, but often these companies are constrained by budget or the scarcity of BI resources resulting in managers having to spending countless hours on manual (MS Excel) based reporting.

Trackmatic Link provides off-the-shelf insightful BI models that have been crafted and perfected over time and based on extensive collaboration across multiple clients. This results is a set of actionable insights that drive daily improvements within operations. These improvements are trended within the models to ensure continuous learning and refinement of operation as well as making historically difficult supplier engagements more effective. The true power of this BI model is that it is founded on fact and empirical evidence – a single view of trusted information and data across the business.

Massmart realised that visibility could evolve into something more powerful. Through unlocking a transcended user interface (UI), they finally had the ability to use a single source of trusted information across multiple business stakeholders for a holistic execution process. They realised the exponential value that could come from having meaningful analytics across key significant touch-points across their operational eco-system and the potential that this would have to transform collaboration, communication and create shared goals and metrics across the business.

They took their BI to the next level by implementing a 4 layer UI journey to radically improve efficiency and generate significant business improvement projects.

User interfaces at multiple levels provides clarity into output to management

Layer 4: Collaboration
Review of trend data to operational insights from top to bottom across value driven metrics to drive ongoing initiatives for improvement

Layer 3: Performance metrics
Trends driven outputs allow progress review

Layer 2: Live Execution data
Highlight exceptions on screen at management level and available for all involved in the process of execution, across the supply chain for our delivering vendors and carriers.

Layer 1: Mobile handheld operations
Improves effectiveness and is user friendly, the devices are in the hands of the operators. Driving excellence by empowerement.

1 Leveraging live data from the floor (layer1) to the drive the planned time for the gate-to-gate execution.

2 Management of love dashboards (layer 2) presents data and insights in the form of clear performance metrics (Layer 3).

3 These metrics are then analysed to create ongoing improvement projects across operational processes on an internal and external basis with multi-stakeholder collaboration and engagement (layer 4). This collaboration with vendors and carries is the ultimate output for improved relationship management.

Delight

The global focus on companies such as Amazon setting the benchmark in customer service and engagement, there is increasing pressure on logistics companies to improve every aspect of their supply chain fulfilment.

The idea of delivering 'delight' at every touch point and to every role player in the complex network of the supply chain is now a standard expectation. Trackmatic Link is a powerful tool that ensures that suppliers are proactively updated on every interaction at key delivery points which is intended to ensure that sweeping statements such as, 'The 'X' DC is a nightmare to deliver to!' or 'My trucks are always held up for hours whenever we deliver to 'Y' DC!'. The successful implementation of yard execution management solutions like Trackmatic Link, ensure that the admin and pain of manual engagements with suppliers and internal operational personnel is reduced in favour of automated updates. Improved communication is provided which ultimately enhanced the overall customer experience.

Delivering
better way

Massmart has gone from a muddle of yard inefficiencies to significantly improved visibility and efficiency. The data provided by the system has allowed them to improve gate-to-gate turnaround times, overall production planning and supplier management. It has also given the company the opportunity to empower its people, giving individuals accountability in terms of how they engage within their roles. The entire yard has evolved from simply moving trucks and pallets into an environment of continuous learning and improvement. It has also cultivated an atmosphere of collaboration with common goals and unified success metrics.

"Everyone is using the system to see how much more they can do and how they can improve," concludes Vosloo. "Management competes to see who the best can be, using the live dashboards and data to compare performance statistics, floor staff are committed to achieving personal and company goals. Every part of the yard has become more focused on teams and people than on trying to find cohesion in confusion."

The results have been **incredible!**

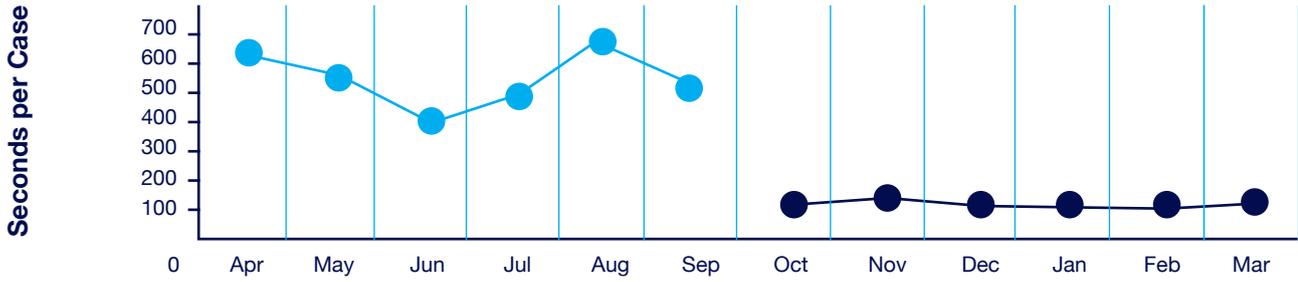**179** seconds per case in **Cape Town**

200 seconds per case in **Gauteng**

100 seconds per case in **Riverhorse**

and the timing is improving monthly

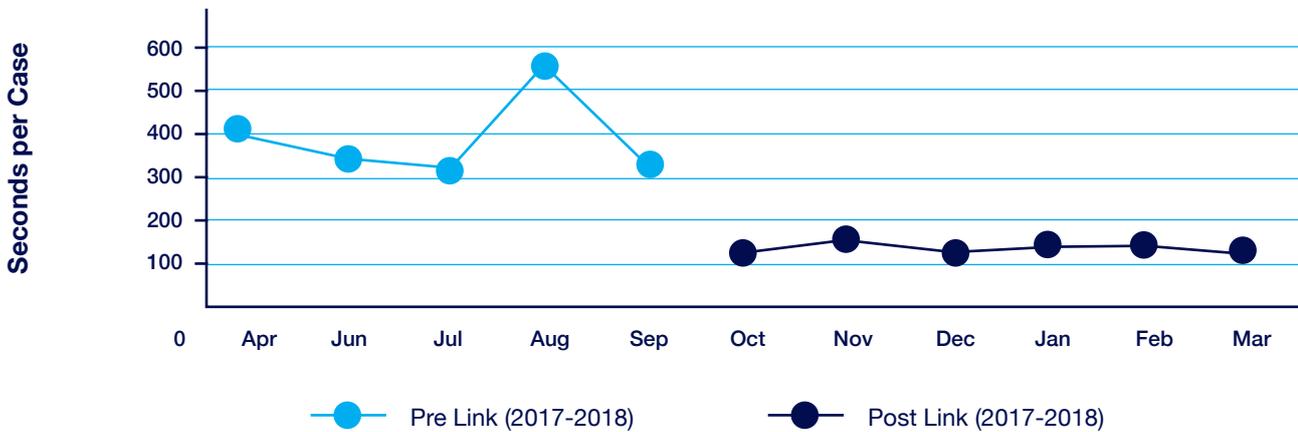This reduction in time has been achieved in less than four months.

Time (Seconds) Per Case By Month DC 1

Seconds per Case

	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar

(Pre Link: Apr ~620, May ~540, Jun ~400, Jul ~480, Aug ~680, Sep ~510)
(Post Link: Oct ~110, Nov ~140, Dec ~110, Jan ~110, Feb ~105, Mar ~120)

Time (Seconds) Per Case By Month DC 2

Seconds per Case

(Pre Link: Apr ~710, May ~890, Jun ~505, Jul ~600, Aug ~690, Sep ~840)
(Post Link: Oct ~225, Nov ~200, Dec ~225, Jan ~250, Feb ~215, Mar ~225)

Time (Seconds) Per Case By Month DC 3

Seconds per Case

	Apr	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar

(Pre Link: Apr ~410, Jun ~345, Jul ~315, Aug ~560, Sep ~330)
(Post Link: Oct ~125, Nov ~155, Dec ~125, Jan ~145, Feb ~145, Mar ~130)

— ● — Pre Link (2017-2018)   — ● — Post Link (2017-2018)

End-to-end visibility at every touchpoint is the new frontier of yard efficiency and flow. Trackmatic and Massmart will continue their quest to push the boundaries of what is possible and reshape the future of logistics.

Are you ready to gain visibility into your yard?

Contact Trackmatic today: **trackmatic.co.za**