Challenging the Last Mile

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Defining the Last Mile

The last mile. The final frontier of logistics. The front line where customer and company clash on the distribution borders of complexity and expectation. It is the blaring horns of trucks and bikes as they navigate city streets in search of that elusive address.

It is the missed delivery that cost money, it is the late arrival of a truck at a distribution centre that impacted on stock availability and brand reputation, and it is the single touch point and interaction that may determine the likelihood of repeat business and a favourable referral or recommendation. But it can also be the moment when meticulous planning and leveraging technology results in absolute customer delight. And a happy customer means great reputation, continued customer engagement and a healthy and sustainable bottom line.

However, the last mile remains one of the most difficult stages in the delivery process to master. The issues that affect the last mile vary dependent on market and country of origin. The business to consumer (B2C) last mile may share some similarities with the business to business (B2B) last mile, but the two segments have vastly different concerns when it comes to customers and challenges. The same applies to our country – the South African supply chain has significantly different problems to the likes of the United Kingdom or the United States, for example. These differences all serve to emphasise a shared similarity – no one delivery is alike.

“In the complex puzzle that makes up the delivery system, the last mile is the piece that finally puts the picture together.” – David Slotow, CEO, Trackmatic.
According to Frost & Sullivan’s¹ ‘Urban Logistics Opportunities – Last Mile Innovation’ analysis, the global logistics market is set to reach $US10.6 trillion by 2026 and 70% of that amount is in transportation. As a significant portion of logistics costs belong to the last mile, the report found that companies are increasingly searching for inventive solutions to last mile problems. Organisations are looking to the cloud, big data, mobility and other technology innovations to tackle the challenges of the last mile in ways that few could have predicted even as recently as five years ago.

The biggest name in last mile transformation and innovation is Amazon. The company has long been touted as the leader in logistics with its relentless commitment to customer delight. From same day delivery (2009) to Amazon Prime (2015) to Amazon Flex (2015) to drones (2016), Amazon is constantly reinventing itself and the methodologies it uses to change the face of the last mile. In February 2018, alongside the company’s quarterly results announcement, came the hint that Amazon would be taking on its own last mile logistics in the future.

Startups such as Deliv, Darkstore and Postmates in the US hint at how digitalisation and mobility are impacting on last mile innovation. In South Africa, companies such as Takealot, Coricraft and Makro have been paying attention to the unsatisfied customer rumblings that have long plagued South African last mile logistics. Makro announced the purchase of WumDrop, a local last mile delivery startup, to cut its delivery timelines from three days to three hours. Takealot acquired a 60% stake in Mr Delivery in 2013 to improve its last mile reputation and is now a fully-fledged supply chain solution. They may not be an Amazon behemoth, but it is sneaking up on the bricks and mortar retail market with stealthy efficiency. Coricraft invested in innovative technology to transform its last mile delivery and overcome significant challenges around customer satisfaction and company reputation.

More recently, smart solutions such as Picup and Zulzi are changing the delivery space while in the on-demand food market, OrderIN and Uber Eats are fighting for customer attention. This white paper examines the challenges that are impacting on the last mile of the South African supply chain, the technologies that have the potential to transform it, and uses Coricraft as an example of how an organisation can overcome distinctive last mile complexities to redefine customer engagement.

### Narvar²: State of Post-Purchase Experience Report: Key takeaways

<table>
<thead>
<tr>
<th>Key Challenges</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Customers become repeat customers if deliveries are timely</td>
<td>72%</td>
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<tr>
<td>A simple exchange or return process would inspire 70% of customers to stay with the service provider</td>
<td>70%</td>
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<tr>
<td>Want an exact delivery date</td>
<td>60%</td>
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<tr>
<td>Don’t believe their delivery will arrive on time</td>
<td>42%</td>
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<tr>
<td>Are worried that their package won’t be in good condition when it is delivered</td>
<td>49%</td>
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Consumers will choose a retailer that acts proactively if there is a delivery problem.

There are numerous challenges impacting on the last mile and the ability of the industry to deliver on customer expectations. These issues are further compounded by the South African landscape – a uniquely prickly space that puts both last mile delivery service and consumer under inordinate pressure.
Address accuracy

Address validation is an issue in every country, everywhere, but in South Africa the landscape introduces its own set of unique problems.

It isn’t just the vast rural landscapes that make formal addressing systems impossible to implement and maintain – estates and complexes have new roads and networks that aren’t marked on current maps. The rate of these developments is faster than the release of road segment and mapping data. Dealing with the issues of geocoding for these unknown and new addresses is complicated and address accuracy is often seriously impacted. The lack of roads and infrastructure don’t help either.

If drivers can’t find an address, the delivery will either be delayed or even failed, requiring it to be rescheduled. If they drive on an endless searching loop, looking for an address that isn’t clearly marked, they use up fuel and time. Each delay then has a knock-on effect, toppling the customer dominos until the last of customer expectations are crushed under the weight of delays and disappointment. In addition to the loss of reputation and time, the costs associated with rescheduled deliveries can become prohibitive. It also adds to the risk that delivery goods will be damaged due to over handling.

Address capture is often sloppy. The people at point of sale may be too rushed for accuracy, or don’t appreciate the impact this will have further down the line. The sales person rarely understands the importance of the address. So, the driver is dispatched into the last mile on a tenuous address that may or may not be even marked on any known map.

Whilst there are several innovative attempts to geocode (refine an address to a GPS longitude and latitude string) home delivery points, ultimately the most crucial consideration is the transfer of the information from customer at point of sale. This could be online or in-store but regardless of which, there is often need for additional processing of the information to ensure accuracy.

The introduction of mapcodes, waytag and what3words have provided clever alternatives but as it stands, an address string remains the basis on which operations has to deliver.

Meeting customer expectations

Last mile providers are having to become increasingly efficient thanks to customer expectation. The customer wants immediate and instant fulfilment of their orders, whether this is on-demand food, on-demand shopping or simple eCommerce transactions. Immediacy has crept into consumer behaviour and it is putting the industry under enormous pressure.

This is further impacted by the security sensitive South African market where the layers of defence, wrapping every home in wire and invisible alarms, prevent last mile providers from dropping parcels at untended homes, forcing customers to sit and wait for deliveries that often never come. A lack of access to a delivery point means that any delays caused by incorrect addressing or traffic or driver delays will instantly affect the customer and their satisfaction.
While many of the leading online stores have invested in third-party couriers or solutions, they are still battling with ease of access and meeting customer expectations. Companies are struggling to make the immediate and accurate delivery of goods into an achievable reality.

**South Africa’s last mile is not yet near the elegant efficiency of Amazon.**

In addition to how they anticipate their delivery, the consumer is buying differently. Deliveries are becoming smaller and more frequent as consumers purchase essentials or singular items from niche providers. In its 2016 Report, World Wide Worx³ found that eCommerce in South Africa had passed the 1% mark with a year on year growth of more than 20%. Add to these figures the rise in internet penetration and an increase in customer appetite for online convenience, and it’s easy to see how customer expectations are shaping last mile deliberations.

Excuting profitable routes

The challenges that impact on the South African last mile are vastly different from those that impact on the United States or Europe. In addition to the walled fortress that blocks access to every home, there are the issues of security and location. Criminals impersonate delivery services and police, roads are poorly marked (if at all) and there is little simplicity for either customer or last mile supplier when it comes to putting the package in the right hands.

These issues not only affect customer delight, but the ability of the supply chain to develop profitable routes that mitigate the costs of redelivery and rescheduling. It is essential that the right item is being delivered to the right person on the right truck, every time.

Profitable routes are critical to the industry. Customer delight may have an impact on profit, but so do well-designed routes. The increased pressure on margins means that companies are often driving down the price of their products instore which then sees the relative cost of fulfilment increasing. Routes need to be optimised to reduce wasted kilometres, reduce overtime, reduce delays or repeated deliveries, and ultimately save that all important margin.
High costs

Changes in the South African labour market are impacting on the costs of the last mile. This is further affected by the economy, cost of insurance, the technology investment to mitigate risk – tracking devices, cameras, fuel monitoring devices etc. – and the assets themselves. The cost of meeting demand within the supply chain is rising.

These costs are of course further affected by the issues outlined above – delays, customer returns, rescheduling, damaged goods and fuel. Some companies are further impacted by the high costs associated with individual deliveries. A furniture store, such as Coricraft, will only be delivering one item to one individual on one run. The price tag rises each time the delivery is slowed down or repeated – the loading and movement of a huge truck carrying a dining suite versus a take-away run on the back of a motorbike clearly underscores the difference.

Delays are expensive not only when they impact on the delivery run and overtime, but when the vehicles only provide feedback on failed deliveries once they return to the depot. The disconnect between a failed delivery happening and the Operations department discovering and resolving the problem, is enormous. The last mile needs solutions that allow it to communicate these issues in real time so that they can then be resolved in real time.

Technology

Refining the last mile

Statista*: Level of importance of last mile delivery initiatives among retailers and manufacturers in the world in 2017:

In order of importance:

1. Reducing costs and improving margins
2. Gaining greater control over the consumer experience related to delivery
3. Improving access to clear order, consumer and carrier data
4. Improving the ability to take dynamic and proactive action on in-transit issues
5. Improving bi-directional consumer communication
6. Segmenting delivery options based on consumer profile
7. Reducing inbound call volume to customer service and/or shipment enquiries to the logistics team
“Technology” as a general term is challenging. For many years, the supply chain industry has invested in fleets, assets, trucks and hardware – using these tools to gain visibility into the supply chain and manage efficiencies. These costly investments have added value. They’ve allowed for richer route optimisation, improved fuel consumption and given the company valuable insights that have allowed them to make more informed decisions.

But they are not enough.

In light of the challenges that face the industry today, specifically within the last mile, those who do not innovate will struggle to remain relevant and to maintain customer happiness. While the South African market may not be on the cusp of drone deliveries, there are other ways in which technology and innovation can transform the last mile.

The Fourth Industrial Revolution blurs the lines between the ‘physical, digital and biological spheres’, placing the world on the cusp of a transformation that will fundamentally change the course of business and humanity.

It is a revolution that isn’t sidestepping the last mile or the supply chain industry. The next six to 12 months will place the industry under pressure to undergo much needed improvements in digital investment and electronic efficiencies.

This is where mobile technology comes in. The mobile device is a powerful enabler that unlocks the doorway to customer joy and last mile efficiency without a high barrier to entry. It also changes the last mile dynamic. Instead of telematics providing insight into the driver and the vehicle, it is the driver that provides the first hand, proactive and contextualised insight into route, delays, customer engagement and unplanned events. The driver, through the use of mobile devices and customised software solutions, provides immediate feedback around bottlenecks, milestones and hurdles so they can be resolved in real time. More importantly, by being empowered with the right tools and information at their fingertips, they are often able to resolve issues independently.

Mobile technology puts the driver at the forefront of the last mile conundrum and effectively:

- Provides real time visibility that allows for real time resolution of delivery delays or customer issues
- Lowers the costs of the technology investment as hardware costs are reduced and both infrastructure and installation costs are minimised significantly
- Extends the visibility of routes to hired vehicles and contractors without the need for legacy black box telematics devices to be available
- Real time customer engagement – the driver notifies the customer and operations of delays (traffic, late customers, route issues) so they can plan ahead and reroute deliveries for improved optimisation and customer convenience
- Provides the supply chain with data and analytics that can be used to manage customer service, driver behaviour and deliveries with greater accuracy and insight
Companies need to become more confident of their driver’s abilities, empowering them to become engaged with their roles and the company’s objections, allowing them to lead the last mile charge to customer delight and success.

By making information available in real time, the blend of technology innovation and human intervention will deliver crucial insights that will fundamentally change the last mile.

In a recent paper – *Digital Insights are the New Currency of Business* – Forrester stated that ‘*we are drowning in data and starving for insight*’. The need to harness the power of data and use it to better serve the customer and transform process, service and solution, has never been greater than it is today.

It’s not a need defined by a specific industry or market type, either. Data is flowing endlessly from device, system and person, but there is an urgent need for every business to find a way of analysing this data so it delivers key insights that can be harnessed to make valuable decisions.
In the logistics industry, there is a need to be able to assess how vehicles and individuals are performing using data that translates into reports and dashboards that all stakeholders can understand. Data is a wonderful thing, but it has to be used intelligently to be of any value. The challenge facing the industry today is that many of the analytics solutions only provide a glimpse of the data landscape, a sliver of insight that lacks context and relevance.

In the supply chain industry, the tools that have traditionally provided teams with data have been limited to hardware such as the black box and telematics. They offer some insight, but their scope is limited. It is the vehicle that’s empowered, not those who drive it. Insights need to be taken from the people – drivers, Operations, sales – and the devices – smartphones, PCs, vehicles, hardware – and brought together to create comprehensive data ecosystems that offer true business value.

**CORICRAFT**

Unpacking Last Mile Logistics

There are few things that underscore the impact of the last mile as well as customer feedback. Coricraft, a leading South African home furnishing design and production company, was getting plenty of that and it wasn’t positive. Complaints were laid on several noteworthy platforms as customers found issue with:

- Service on delivery
- Delayed deliveries with no clear time frames
- Waiting times and customer inconvenience
- A lack of support and/or customer engagement when items were missing or damaged

The problem for Coricraft was that almost every delivery made was to a new customer at a new address. Unlike many other companies within the supply chain, their orders were rarely repeats. The company lacked visibility and faced unique challenges.

By implementing Driver-Led Visibility mobile technology and address validation solutions with Trackmatic, Coricraft saw results such as:

- **27%** Improved delivery accuracy
- **80%** Increase in customer service
- **94%** Turnaround adherence times
- **32 minutes** Reduced average delivery time

Customers can adapt their timing around the driver updates so they don’t endure long and frustrating waiting times. Technology has helped Coricraft to fine tune deliveries, optimise operations and redefine customer engagement. Each and every challenge around visibility, communication, control and timing has been addressed through the use of innovative solutions and driver empowerment.

“We have seen fewer failed deliveries since implementing the Trackmatic solution, and they also assisted customers in communicating with us when they couldn’t make the scheduled delivery times. This has helped us to adjust our customer planned deliveries and not waste time.” - William Webb, Operations Executive, Coricraft.

For more information, visit trackmatic.co.za
Conclusion

‘In fact, the variety of delivery options and the perceived quality of the delivery service are major decision-making criteria for online customers and hence directly affect e-commerce players’ success in the marketplace.’ – How Customer Demands are Reshaping Last-Mile Delivery – McKinsey6.

Last mile delivery has never been more important. It is the benchmark by which the customer defines its delight with a brand. It is the final slice of time that determines the success or failure of a business and its customer relationships. It is complex, challenging and fraught with issues unique to country and continent. It is also one of the most dynamic and exciting spaces within which a company can thrive and redefine its image, customer delight and growth.

There have been incredible developments within the last mile space over the past few years. From drones to autonomous cars to Uber to inventive ideas developed by South African minds that understand the challenges of the local landscape – all these harness the potential and power of technology to turn the last mile into an experience that delights the customer and brings them back time and time again.

While the Amazon drone is not quite sitting outside the local front door…yet, there are plenty of solutions refining how the market engages with its customers and the last mile logistics. And they are doing it well. What happens next will depend on the openness of the industry to innovate and the willingness of the supply chain and brand to take a chance on something new.

Trackmatic: It’s personal

Trackmatic solves the challenges of last mile deliveries by creating people-led technology enabled solutions. Drivers are empowered to communicate in real-time with customers at every critical touch point on the delivery journey because they gain immediate insight into distance, drive time and arrival.

Trackmatic has redefined the last mile frontier for enterprise clients with mobility, address validation software, analytics and intelligence that allow you to empower your people and transform your customer experiences.
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**David Slotow**, CEO and founder of Trackmatic, held several senior positions in successful start-up ventures prior to shifting his focus to disrupting logistics in the supply chain. Having formally studied a BComm Honours in Investment Management from RAU, his real passion lies in solving complex operational challenges and inefficiencies using innovative technologies and processes. As a provocative pioneer and pathfinder, he is obsessed with challenging the status quo and finding ways to align and collaborate with some of South Africa’s leading logistics operators to finally introduce insightful, practical and effective software solutions to close the gap in daily operations and address longstanding business challenges in the industry. With global ambitions and a love for innovation, David focusses on strategy and how to deliver a better way. His commitment to customers has seen Trackmatic being recognised most notably by Famous Brands as their Logistics Supplier of the Year and more recently his nomination as ABSA Jewish Achiever ‘Entrepreneur of the Year’.

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**Craig Schneeberger** has extensive experience, in excess of 20 years, in the furniture retail industry. Craig started off his working career at the then Wetherlys (Pty) Ltd in 1995 as a Sales Assistant. He was quickly promoted to their youngest ever Branch Manager, Regional manager and then Director in 2000. On the sale of Wetherlys to Ellerines, Craig was promoted to Business Unit Director for the Wetherlys brand. Craig was later approached by Coricraft and joined them in 2006 as Retail Director and subsequently was made Chief Operations Officer (COO). Craig lives in Johannesburg, has been married since 2000 and has two children. When not at work Craig is an avid reader and extreme sports enthusiast- he has completed the Comrades Marathon, Half Iron Man and most recently the Berg to Bush and Sani to Sea mountain bike cycle races.