

Imperial Logistics' digital vision is to create a culture where digitisation enables our people, clients and partners to innovate and continuously improve to achieve competitiveness and differentiation.

Our approach to digitisation and innovation aligns to our business strategy. We monitor technology trends and prioritise our projects based on their ability to achieve operational excellence and provide customised solutions to our clients.

Our focus is to build a global IT capability that serves all companies in Imperial Logistics. The IT quality framework ensures that we employ an appropriate mix of standardised and customised system solutions.

The systematic digitisation of processes is gaining traction, supporting integration and reducing complexity to gain efficiencies, while at the same time, focusing on quality, speed, security, scalability, reliability and visibility. Specific objectives include improved client engagement and debtor management, and procurement cost savings through better visibility and spend control.

The innovation hubs in Germany and South Africa are enabling cost-effective responses to client-focused research and development through collaboration with multiple stakeholders.

### Our digital dimensions



### Link to material issues

- › Deliver customised solutions that deepen clients' reliance on our services.
- › Combine people, partnerships and processes to ensure consistently excellent execution.
- › Ensure legitimacy in demanding markets to underpin competitive advantage.
- › Achieve strategic maturity across Imperial Logistics.

### Opportunity

**Enhanced competitiveness through improved client experience and new revenue streams from product innovation.**

### Risks and challenges

- › New entrants to the logistics industry differentiated by advanced technology and disruptive asset-light business models. Large multinational competitors have the ability to commit significant resources to research and development to counter this threat.
- › Increasing digitisation of industrial processes requires technology-related change.

### Boundary

**All Imperial Logistics entities.**

## Areas of focus

Deliver flawless execution	Support employees (organisation and people)	Drive innovation
<p><b>Priorities</b></p> <ul style="list-style-type: none"> <li>› Employ a pragmatic approach to digitisation and innovation.</li> <li>› Enable competitive differentiation through customised client-focused innovation and systematic digitisation.</li> <li>› Understand and apply appropriate digitisation trends to compete effectively with technology-enabled entrants to the logistics industry and large global competitors.</li> </ul>	<p><b>Priorities</b></p> <ul style="list-style-type: none"> <li>› Increase our attractiveness as an employer for talented individuals.</li> <li>› Educate employees to develop and maintain a competitive and innovative workforce.</li> <li>› Improve the digital and physical working environment to enable employees to perform at their best.</li> </ul>	<p><b>Priorities</b></p> <ul style="list-style-type: none"> <li>› Improve Imperial Logistics' image as an innovative and dynamic logistics company.</li> <li>› Implement structures to consistently collect, evaluate and develop employee ideas.</li> <li>› Screen and embrace new and disruptive digital technologies to generate new business models and additional revenue.</li> </ul>

## Top five digitisation and innovation projects

<p><b>Supply chain control tower</b> (implementation in progress)</p>	<p>› Deliver specific high-potential supply chain control tower opportunities on the existing One Network platform (see <a href="#">understanding the opportunities associated with supply chain control towers</a>).</p>	<p><b>Value contribution</b></p> <ul style="list-style-type: none"> <li>› Improving visibility, execution and planning across multi-stakeholder supply chains.</li> <li>› Creating a disruptive differentiator globally.</li> </ul>
<p><b>Blockchain</b> (first proof of concept completed)</p>	<p>› Provides a platform for logistics services to enable fast, secure and highly automated logistics processes without human interaction (see <a href="#">encouraging digital collaboration</a>).</p>	<p><b>Value contribution</b></p> <ul style="list-style-type: none"> <li>› The potential to fully automate logistics processes, including those related to quality of goods, handling and invoicing.</li> <li>› Full transparency and data security.</li> </ul>
<p><b>Serialisation of products</b> (delivery: early 2019)</p>	<p>› Implement an end-to-end chain of custody for serialised items, integrated into various other systems in the supply chain (see <a href="#">using education and technology to drive access to affordable, quality-assured medicines</a>).</p>	<p><b>Value contribution</b></p> <ul style="list-style-type: none"> <li>› Enabling detailed track and trace ability on high-value items up and down the supply chain.</li> <li>› Combating counterfeiting, diversion and other illegal activity.</li> </ul>
<p><b>ShareHouse</b> (commercialisation in progress)</p>	<p>› Platform to connect providers and customers of available warehouse space and standardised value-added services (see <a href="#">introducing a marketplace for warehousing space</a>).</p>	<p><b>Value contribution</b></p> <ul style="list-style-type: none"> <li>› Asserting Imperial Logistics' position as a logistics disrupter.</li> <li>› Creating transparency around warehouse space and increasing the use of warehouses.</li> </ul>
<p><b>Mobile solutions</b> (delivery: early 2019)</p>	<p>› Provide a mobile solution for transport management (activity execution and digital proof of delivery and administration process) to improve visibility and speed up order-to-cash cycles.</p>	<p><b>Value contribution</b></p> <ul style="list-style-type: none"> <li>› Efficiencies and improved cash flow.</li> <li>› Improving visibility of transport execution and speed and accuracy of proof of delivery.</li> <li>› Improved service by reducing debtors time and improving cash flow.</li> </ul>

## Opening a new supply chain innovation laboratory in Cape Town

During the reporting year, we opened a supply chain innovation lab in Cape Town to complement the innovation lab in Berlin. The complex supports an open innovation approach and enables our IT experts to work with logistics experts, IT specialists and IT students to develop, test and implement structured solutions tailored to individual client requirements.

Both Imperial Logistics supply chain labs host digitisation workshops and training courses to consolidate digital skills. During these interventions, problems are solved, solutions conceptualised and initial prototypes programmed in five-day creathons or 'design sprints'.

Another approach is minimal viable products (MVP) where the first version of the solution provides only the most essential functions. The solution is then enhanced based on the learnings from users or clients. An example of an MVP recently developed is a business intelligence tool that analyses the profitability of contracts. After just six weeks of development, the product was presented to the Imperial Logistics board of directors, which provided valuable insight into what needed to be adjusted. The tool is now being introduced to all Imperial Logistics companies.

## Introducing a marketplace for warehousing space

ShareHouse, an independent start-up in Germany, was developed by the Imperial Logistics supply chain lab in Berlin, together with our clients, to address warehousing space. Launched early in 2018, the new web-based marketing platform assists primarily small and medium-sized warehouse operators to digitally market their free warehouse space among a large number of interested parties.

Manufacturers and distributors, and particularly e-commerce (online) retailers, need to access extra storage facilities at short notice to meet their seasonal sales fluctuations. In the past, it was difficult for these organisations to access information on available storage space, price and possible value-added services. ShareHouse (the Airbnb of warehousing) provides a platform for warehouse operators, and producers and retailers to connect and rapidly arrange storage agreements. The platform enables warehouse operators to increase the use and profitability of their property. It costs nothing to market warehouse space and ShareHouse charges the operator an agency fee of 10% of the value of the contract once an agreement has been signed. ShareHouse also offers certain insurance services.

We aim to continually expand ShareHouse's offering and will soon provide operators with certain functions associated with a digital warehouse management system, including access to key performance indicators, including utilisation levels, picks and turnover. Going forward, the platform will also provide additional services, including digital document administration, customs clearance and transportation and consignment tracking, among other things.

## Understanding the opportunities associated with supply chain control towers

As global supply chains become increasingly complex there is a growing need for centralised control, planning and execution of supply chain activities across all supply chain partners.

The advancement of cloud-based technology that can make sense of big data has made the concept of a control tower that provides end-to-end visibility, process orchestration and deep analytical capability, a reality. Supply chain control towers (SCCTs) act as central hubs that capture and use supply chain data to provide a bird's eye view of multiple operations across different transport modes, regions and activities. The platform receives status information from asset owners, suppliers and clients, enabling timeous, informed decisions and the ability to solve immediate requirements as they arise. It also supports longer-term strategies to continuously improve.

While we are already leveraging this technology to drive client competitiveness, we have identified the need for a more formalised understanding of the potential opportunities associated with SCCTs, particularly around enhancing client relationships. Late in 2017, we created a working group to investigate and advance the use of this sophisticated solution. The working group consists of 20 participants from seven different countries, representing 12 Imperial Logistics operations. We expect to complete the SCCT implementation roadmap in 2019.

## Encouraging digital collaboration

During 2018, we became a founding member of a new industrial initiative which aims to build a cross-company transaction protocol bringing automation and new business models to the supply chain. The D+ Supply Chain Protocol represents a new form of collaboration, providing the infrastructure for a digital agreement procedure between several independent parties in the supply chain. An initial pilot project is already underway.

The protocol employs blockchain, the internet of things and artificial intelligence. The blockchain technology guarantees that the data cannot be changed and is comprehensible to the parties involved. As a result, the contracting process, tracking consignment and conditional settlement, including payments and claims management, can be automatically handled without an intermediary. This contrasts with earlier approaches in Web 2.0, where a central authority sends the data and activates the transactions. Participants in the pilot project say that they are benefiting from efficiencies gained as a result of less time required to process documents manually.

# Driving digitisation and innovation – continued



## Project ETA at Palletways

In the United Kingdom (UK), Palletways has enhanced customer experience by launching a new estimated time of arrival (ETA) tool that provides the receivers of goods with a two-hour delivery window during which to expect their order. The ETAs are also visible to our clients sending the freight, enabling them to have sight of when all shipments are being delivered in real time. In addition, our clients can send customised and branded texts and a listing of the products being delivered to their customers.

Designed, developed and implemented by the Palletways IT team, the project was delivered in just seven months. In addition, comprehensive training was provided to the employees of over 100 delivery partners in the Palletways UK network.

The success of the tool is reflected in the virtual elimination of telephone calls from customers enquiring about when to expect their deliveries.

## Advancing our transportation management system

Our switch to a new standardised transportation management system, replacing a number of individual systems, is progressing well. Implementation is taking place for all road transport operations in Africa and Europe, automating a number of processes including planning and controlling, tracking and telematics, quoting, order management, invoicing and accounting. The advanced web-based platform synchronises data in real time and is designed to reduce logistics costs and eliminate transmission errors. Portals provide our clients with more visibility in real time and they have access to better reporting and analytics capabilities.

The system is able to handle enormous volumes of data in a short time. This capability is key to our needs, as for one client alone, we handle between 10 and 15 thousand orders within tight timeframes on a daily basis. In addition, the system is able to interface with many other transport management systems, which means that our sub-contractors can easily connect to it through a web portal. Plans are in place to link around 900 drivers to the system, enabling them to deliver their status reports using an app.

When the roll out of the system is completed in 2019, it will support around 2 000 users. Implementations to date have increased the productivity of operations in a matter of weeks.

## A new app for African farmers

Developed by Imperial Logistics company, Resolve, the uLima app provides farmers in Africa with access to crop libraries, livestock libraries, real-time localised weather information with weather alerts and the latest market price information by crop, grade and country. A key feature is the tailor-made crop calendar for each farmer, which offers step-by-step assistance from pre-planting to post-harvest. The app also provides access to smallholder farmer forums, enabling the sharing of knowledge across various crop categories. It is hoped that the app will help farmers increase their yields so that they are better able to respond to the increasing demand for food across the continent while at the same time enhancing their livelihoods. The app can be downloaded for free and operates on smartphones and USSD cellphones.



Imperial Logistics' newly opened supply chain laboratory in Cape Town, which brings together IT experts to develop, test and implement structured solutions tailored to individual client requirements.