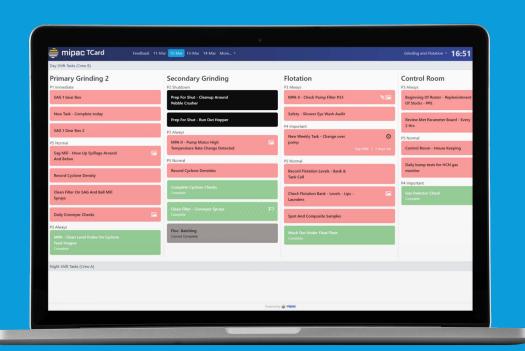




TCardTM

Case Study with Kamoto Copper Company





Case Study



Kamoto Copper Company (KCC) is a copper and cobalt producer in the Democratic Republic of the Congo, jointly owned by Glencore (75%) and Gécamines (25%).

Mipac worked with two assets the Kamoto Concentrator (KTC) and the Luilu Refinery.

KCC extracts ore containing copper and cobalt from its open pit and underground mines. The ore is transported from its mining operations to KTC. The ore is then crushed, concentrated and transferred to the Luilu Refinery.

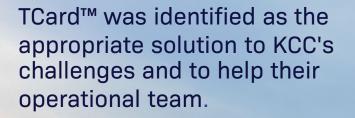
Problems and Challenges

KCC was facing numerous challenges, including:

- No system to manage operational activities
- Struggling with repetitive operational tasks
- Delays and frustrations with giving instructions on a daily basis
- Superintendents unable to keep track of which tasks were assigned and which were incomplete
- Tasks not being assigned correctly
- Critical tasks not being consistently performed across operational crews

KCC required a system to manage operator activities.

KCC sought a simple-to-use operator management system that was able to allocate instructions automatically. The system needed to be bilingual, with French for operators and English for reporting, managers and administration. Training videos were also required to be bilingual.



TCard™ is an operations management solution that enhances stability through teamwork, structure and insight. TCard™ is specifically designed to complement rather than replace existing ERPs and/ or CMMS and is designed to be user-friendly.

The solution

Mipac's in-house Software Development Team were able to work closely with KCC to co-develop multi-language support and automated translation. This included:

- Automated translation of management reports including operator comments
- Automated translation of dynamic fields with TCard™
- Leveraging a translation engine to translate

Mutli-language support allowed KCC to view TCard™ menus and popups in English and French, and translate all terms into French.

Mipac also offered a customised option for the translation of training videos to French. Options for this included:

- Renarration in French, which includes script translation, voice-over, and re-synchronisation against the existing video
- Recapture video in French, which includes recapturing the existing video so that it includes translated French slides and content
- Online video training for Operators, Superintendents and TCard™ administrators.

Implementation Process

Alongside KCC, Mipac successfully executed TCard's™ implementation across both KTC and the Luilu Refinery.

As a part of the first-year subscription price, Mipac includes TCard's™ rapid implementation service. The implementation process involved Mipac hosting multiple workshops, with tailored training given to the KCC teams.

Mipac's team built capabilities within the KCC team so they were able to independently implement the remaining TCards.

In collaboration with KCC, Mipac prioritised actions on the TCard™ roadmap. This included giving precedence to features including:

- TCard™ for mobile
- Overdue task enhancements
- Improved reporting insights

Results

Once TCard™ was implemented at KCC, they were able to:

- Improve coordination and communication between management, Supervisors and Operators
- Increase reporting of non-conformances for spillages and safety
- Improve accountability, with specific people completing specific tasks
- Send reports to all levels of the organisation in one email
- Reduction in unexpected downtime
- Enhancement of overall operational efficiency

As a result of tasks being automatically sent to all levels of the organisation, accountability and responsibility for task completion increased. There has been an increase in reporting of non-conformances. Since implementing TCard™, day-to-day life onsite has become more consistent and simpler.

KCC was able to work with Mipac to further develop TCard™ and introduce features that help improve operations, including having areas reported separately.

KCC is also introducing digital Logsheets to work in conjunction with TCard™.



"Mipac are extremely helpful. They go out of their way to accommodate us in terms of our requirements and needs, so we really appreciate the support we get from the Mipac team. They are very good. We love working with them."

"I like the way they integrate all their products; they'll certainly make our life a lot easier."

Trust Shumba / KTC Operations Compliance Superintendent / Kamoto Copper Company S.A.

Why Mipac

Global leaders in operational technology, control systems and engineering services, Mipac is the perfect partner in driving operational performance.

Our team of trusted advisers includes knowledgeable senior engineers and creative, skilful innovators in technology.

We partner to provide early-stage consultation and continuous optimisation strategies to whole-of operations. From the solid foundations of control systems, software, and engineering, to the latest digital technology advancements, we're committed to pushing boundaries to

create innovative, flexible solutions that consistently fulfill our clients' commitment.

We embrace complex challenges and solve problems in the areas of performance, productivity, and safety by enhancing existing infrastructure systems and technology and providing reporting and decision-making solutions.

We do this by drawing on our extensive onsite experience and unparralled knowledge of comparative solutions on the market to bring real value and insights to maximise the potential for success.

Solutions and Services

We work across various industries to realise the total value of your operation and recommend solutions and services that produce optimal outcomes and increased performance.

- Advanced Process Control
- Industrial Automation
- Data Analytics and Visualisation
- Cybersecurity
- Process Optimisation
- Industrial Software
- Electrical and Instrumentation
- Operations Support
- Mining 4.0 Consulting

Transforming the mining value chain

Over the past

3

decades

our team of

125

engineering professionals

have delivered over

730

projects

across

55

countries globally

for more than

110

customers



We believe in working together with our clients and partners to achieve their goals.

At Mipac, we go beyond the solution.