

## Tactical scheduling

A gold mine in Tanzania has found that Maptek™ Evolution Epoch is ideal for optimising resources and enhancing productivity as part of its short-term planning strategy.



Barrick Gold Corporation owns the North Mara Gold Mine in north-west Tanzania. The combined open pit and underground operation commenced commercial production in 2002. The processing plant has an average daily capacity of 8000 tonnes of ore.

Efficient scheduling is paramount to optimising resources and enhancing productivity.

Maptek™ Evolution Epoch has emerged as a leading solution for tactical scheduling.

### Advanced scheduling

Evolution Epoch is designed for activity-based and equipment scheduling. A flexible short-term planning environment enables the definition of mining sequences, facilitating the creation of schedules to guide execution.

Management of multiple activities, tasks and equipment incorporates various dependencies to optimise scheduling.

### Key features

- > Activity-based scheduling ensures that all tasks are planned with precision. This includes drill, blast, load and haul operations.
- > Equipment scheduling ensures that machinery is utilised efficiently. This involves planning for maintenance and ensuring equipment availability aligns with mining activities.
- > Flexible sequence definition is crucial in adapting to unforeseen changes in the mining environment.
- > Dependency management across activities and equipment ensures that all elements of the operation are synchronised.
- > Live dashboard provides real-time reporting and visualisation of scheduling data. This allows for immediate feedback and adjustments to the schedule.

### Implementation

Evolution Epoch implementation at the North Mara Gold Mine aimed to optimise scheduling and enhance overall operational efficiency. The first step was integration of existing data into the system, including importing information across resources, equipment and planned activities.

Customisable equipment data, such as rim pull and retard curves, was imported via CSV files to ensure accuracy and relevance.

Calendars, which manage scheduling of activities and equipment maintenance were imported from CSV files to ensure integration with existing systems.

Detailed task sequences were developed, considering the specific requirements of the operation. This included sequencing of drill, blast, load and haul activities.

Live dashboard monitoring enabled real-time schedule adjustments to accommodate any changes in the operational environment.

### Outcomes

Using Evolution Epoch at North Mara Gold Mine has yielded significant improvements in scheduling efficiency. The real-time reporting capabilities and flexibility in defining mining sequences ensured that operations were optimised, reducing downtime and enhancing productivity.

Integration of customised equipment data and efficient management of dependencies further contributed to successful implementation. The short-term planning team continues to rely on Evolution Epoch to complete daily and weekly plans.

Thanks to  
Barrick Gold Corporation  
North Mara Gold Mine

