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The Secure Connected Worker

Charter's Secured Connected Worker Solution

One of the top initiatives within a corporate Digital Transformation strategy is the *Secure Connected Worker*. This business imperative exists over a cross-section of industries, including energy, mining, and manufacturing. Recent IDC FutureScape [1] states that by 2025, "one in four underground operations will monitor the precise location of personnel, improving the safety of the operational environment and providing guidance assistance to rescue teams." [2]

A connected worker is someone digitally enabled through mobile devices, networks, and technology (including simulation, software automation, analytics, and artificial intelligence) to innovate and improve how work is executed. The key underlying elements related to *Secure Connected Worker* are workforce productivity, worker safety, and worker quality.

The problems companies see include:

1. **Inefficient shift changeover** of equipment that reduces worker time-on-task/time-on tools.
2. **Inefficient manual processes** for dosimetry tracking and reporting at the worker and site level.
3. **Reduced "real-time" hazard awareness** at the worker or site levels, that can lead to additional incidents.

4. **Reduced awareness of all worker locations** during emergency response events that impact on response scoping and execution.

To deal with these problems, companies consider the following solution elements:

1. **Enhanced dosimetry** (productivity improvement) - automating dosimetry tracking, reporting, and analysis through location and time data correlation with other data sources to enhance site monitoring, reporting and risk analysis, and reduce manual end-of-shift administration (e.g., eliminate time carding)
2. **Enhanced site management** (productivity improvement) - enhanced monitoring and decision support tools for supervisors and workers that correlate worker and equipment locations, worker qualifications, equipment status, permitted work status, etc. to enhance work execution and monitoring by multiple teams.
3. **Enhanced hazard management** (enhanced safety) - live correlational analysis of worker and hazard locations can create automated hazard notifications at the site and worker level when new hazards are identified, or when workers move into an area where an existing hazard has already been identified.
4. **Enhanced emergency response** (enhanced safety) - live situational awareness of worker, responder, and equipment locations can significantly enhance response scoping, improve actions taken, and accelerate the return to normal operating conditions.

Working together with our partners, Charter leads the following steps to implement a solution:

1. **Business process assessment** to identify gaps (Discovery workshop).
2. Identify the right combination of **processes, technology, and professional services** to close the gaps.

3. Develop a **comprehensive proposal** including ROI estimates.
4. Consider conducting a **proof of value** project.
5. Develop 18- to 24-month **implementation roadmap** and key deliverables.

For more information, call 1-800-349-4491 or email info@charter.ca

References

- [1] IDC: *The premier global market intelligence firm*. (n.d.). IDC: The Premier Global Market Intelligence Company. <https://www.idc.com/>
- [2] IDC *FutureScape: Worldwide Mining 2023 Predictions*. (n.d.). <https://www.reportlinker.com/p03374506/IDC-FutureScape-Worldwide-Mining-Predictions.html>

About the Author



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Mark George is a proven business leader with global experience across multiple industries. He currently serves as the Director - Energy, Resources and Industrial Markets for Charter. Prior to that, he worked for five years as Managing Partner and Founder of EdgeMark Capital and Advisory Services Inc., a capital markets and financial advisory services firm. Mark's in-depth energy markets experience developed through leadership roles with Environmental Refueling Systems Inc. and with PricewaterhouseCoopers. From 2000 to 2010, he served as the Founder and President of the Cielo group of companies, a fully integrated residential and commercial construction and real estate development company in Arizona.

Mark has an intense interest in emerging technologies, having spent 15 years with Nortel, Bay Networks, DEC, and Honeywell in progressive sales, management, and executive roles throughout the Americas and Asia Pacific.

Mark proudly serves on the boards of several privately held companies and not-for-profit organizations. bit.ly/40T7GrH