

iRAP: leveraging technology with the goal to save 450,000 lives globally on safer roads



Client profile

iRAP (the International Road Assessment Programme) is a global charity with a vision for a world free of high-risk roads. Supported by the FIA Foundation, they work in over 100 countries and are the umbrella program for Road Assessment Programmes worldwide. iRAP works with governments, development banks, mobility clubs and road-safety NGOs to provide tools and training that help them make their roads safer. iRAP supports partners achieve a road-safety standard of at least 3 stars, and meet the United Nations Sustainable Development Goal to halve road deaths and injuries worldwide by 2030.

Without action, millions of people will either die on the world's roads or suffer life-changing injuries.

iRAP Connect, a partner management system developed with the assistance of NTT DATA, stores and tracks data that connects partners, countries, projects, activities, knowledge, training, investment and metrics for more than 100 countries.

The system helps iRAP empower its partners to achieve the UN Sustainable Development Goals and related Global Road Safety Performance Targets. If UN Targets 3 and 4 are achieved for all road users by 2030, 450,000 lives could be saved every year.



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Judy Williams

Global Programme and Communications Manager, iRAP

Business need

Connecting people, organizations and data to make roads safer in more than 100 countries

"Imagine receiving a call today telling you that your husband or wife, your child, mum or best friend, isn't coming home today, or ever. That they've been killed in a road crash. In the next hour, 150 people around the world will receive that call. We know that road crashes devastate lives; it's not just the family, it's their friends, their colleagues and the emergency workers who suffer the burden of sights they can never unsee," said Judy Williams, Global Programme and Communications Manager, iRAP.

"It's a public health crisis we must address."

According to the World Health Organization, every year the lives of approximately 1.19 million people are cut short as a result of a road traffic crash. Between 20 and 50 million more people suffer non-fatal injuries. Road traffic crashes cost most countries 3% of their gross domestic product. More than 90% of 92% of the world's fatalities on the roads occur in low- and middle-income countries, even though these countries have around 60% of the world's vehicles.*

iRAP initiatives and projects are undertaken by 15,000 partners in more than 100 countries. Over 1.3 million kilometers of roads have been risk mapped and more than 1 million kilometers star-rated. Nearly 30,000 engineers have been trained and over \$80 billion of infrastructure investment has been made safer.

"Research shows that we can halve road death and injury for every star rating improvement made on a road through safety upgrades," said Williams.

iRAP works with governments, mobility clubs, development banks and road-safety NGOs, providing them with free tools, training and resources to help them make their roads safer. Their Star Rating Methodology provides a simple and objective measure of the level of safety "built in" to a road for vehicle occupants, motorcyclists, bicyclists and pedestrians. A 1-star road is the least safe and a 5-star road is the safest.

* World Health Organization. Road traffic injuries.

May 1, 2026.

<https://www.who.int/news-room/fact-sheets/detail/road-traffic-injuries/>

To support the UN's Sustainable Development Goal to halve road deaths and injuries by 2030, iRAP is helping countries achieve UN Targets 3 and 4 — for all new roads to be built to a 3-star or better standard and for more than 75% of travel to be on the equivalent of 3-star or better roads for all road users by 2030. Achieving this stands to save 450,000 lives a year with an economic benefit of \$8 for every \$1 spent. Almost every country has to cope with the impact of road death and injury, and faces a challenge when meeting the UN targets. With thousands of partners involved in road management, engineers being trained in 140 countries, and new road builds and long-term upgrade projects occurring the world over, it was proving increasingly difficult for iRAP to track partners' activity and progress.

"The frustrating thing is, road crashes are preventable. We have the evidence and know exactly what to do. But empowering and engaging change is hard," says Williams.

Solution

A system to support and assess impact for partners across the globe

To address these challenges, iRAP worked with NTT DATA to develop a global partner management system based on a Microsoft Dynamics 365 CRM platform.

The result was an improved platform called iRAP Connect.

"iRAP Connect is helping the charity mobilize global reach and leverage impact to save lives. It's connecting the people and organizations we work with, with the countries we're working in, their projects, activities and knowledge, training and accreditation programs, policies, road investment and the metrics used to measure success," said Williams.

iRAP Connect is a critical complement to ViDA, iRAP's road-safety analysis and mapping software. It contains the results of more than 1 million kilometers of road assessments, measuring 50 road-safety attributes, which are then transformed into a Star Rating for each road segment and Safer Roads Investment Plans. iRAP Connect provides insight into how people and partners are working together, tracking activities that are being undertaken, the resources that can be shared and metrics to quantify success.

"We had hundreds of different Excel files in lots of places around the world. How it connects together is the insight we've never had before. Now, for example, I can look at Brazil and find out who we work with and what activities have occurred over time. I can see reports and metrics for their kilometers assessed that led to investment in upgrades, training that's occurred and the suppliers accredited."

Outcomes

Creating a platform for global connections and global access to valuable road safety data and best practice

With a team of just 20 staff globally, iRAP is using their technology and systems to leverage the power of partnerships to make roads safer across the world. “iRAP Connect is a game changer for our charity because it helps us connect people and resources, coordinate, track and measure success, building capacity for the benefit of all. We can now pull up everything we need to know about any one of our 100+ countries in one place, from anywhere on Earth,” said Williams.

“For our global team to have this information at their fingertips 24/7 from any part of the world, without needing personal experience of the work – that’s revolutionary. It enables us to rise above partner personnel changes, time zone and language challenges, and connect years of data. The system leverages our resources to achieve more, creating a record of partners’ work.

“The NTT DATA team has been wonderful to work with. Their developers have listened to our challenges and needs, and identified solutions to achieve our goals. They’ve worked alongside us to create a partner management system that’s making a daily difference to our charity and the partners we support,” said Williams.

iRAP Connect has been made possible with the generous sponsorship of FedEx. Its development is part of iRAP’s 5-Star Global Connections Strategy, the next step of which is a novel 5-Star Connections Initiative to unlock the power of partnerships across India – where 17 deaths occur every hour — and share success across the world. The outcome will be a package of templates and resources that other countries can roll out with little investment.

“Our next goal is the development of a Partner Portal that will put the insights of iRAP Connect into the hands of our partners across the world. With this, we aim to provide dashboards on how different countries are tracking on road infrastructure safety, share knowledge and best practice worldwide, and connect our global RAP family.”

“We hope to make this dream possible with NTT DATA’s assistance,” Williams said.

“In this Second Decade of Action for Road Safety, we aim to halve road deaths and serious injuries by 2030. Global connection of partners will be key — every one of us, working hand-in-hand to eliminate high-risk roads and get families home safely.”

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