Peace Parks Foundation utilizes Microsoft solutions to protect, restore, and rewild South African ecosystems.
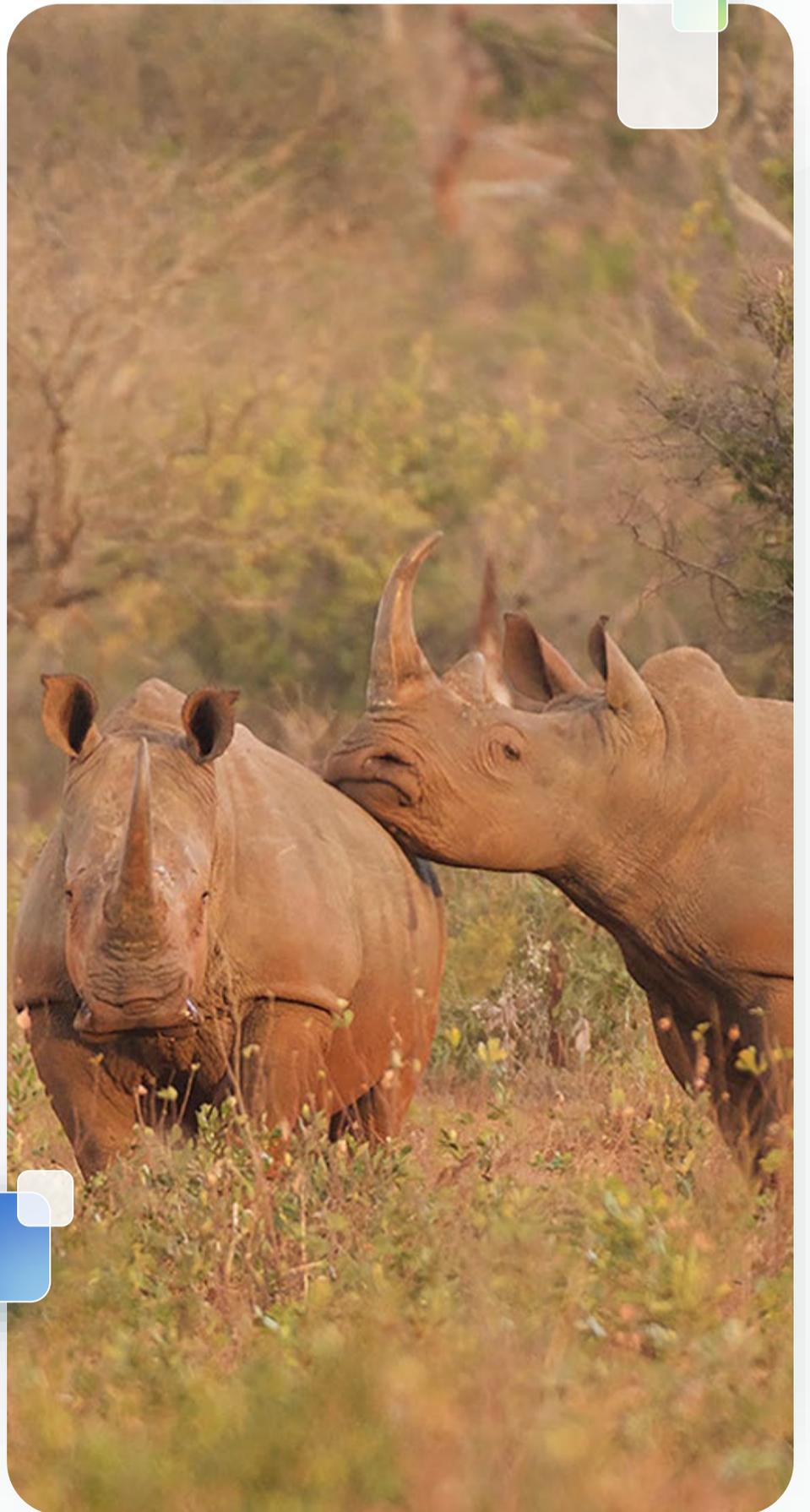
Peace Parks Foundation is using cutting-edge technology to achieve conservation at scale. The organization develops and co-manages strategically important parks and projects within transfrontier conservation areas across southern Africa, focusing on ecosystem restoration, environmental protection, and community development. Microsoft Dynamics 365 and Power BI enable Peace Parks to secure essential funding more effectively, while AI and IoT solutions allow rangers to scale their park maintenance and wildlife crime prevention work. Centralized data storage through Azure and communications tools like Teams allow for close collaboration of a workforce that is spread across the globe as they execute complex programs, launch rewilding efforts, and manage parks across borders. Through combining back-to-basics conservation methods with advanced technology, Peace Parks is leading the charge to uplift communities and ensure a harmonious, sustainable future for natural ecosystems in southern Africa.

We're trying to go back to restore the basics, but in order to do it, we need technology.

– Wayne Brider
Information and Communications Technology (ICT) Manager
Peace Parks Foundation

Human-made systems to support the natural world

The issues plaguing the natural ecosystems of southern Africa are largely human-made. Civil wars, illegal logging, a lucrative poaching market, encroachment, exploitation of resources by an ever-expanding human population, and other activities have led to the endangerment of animal species and the destruction of natural habitats. According to Wayne Brider, the Information and Communications Technology (ICT) Manager at Peace Parks Foundation, the solution to rehabilitating and restoring these ecosystems is also human-made.
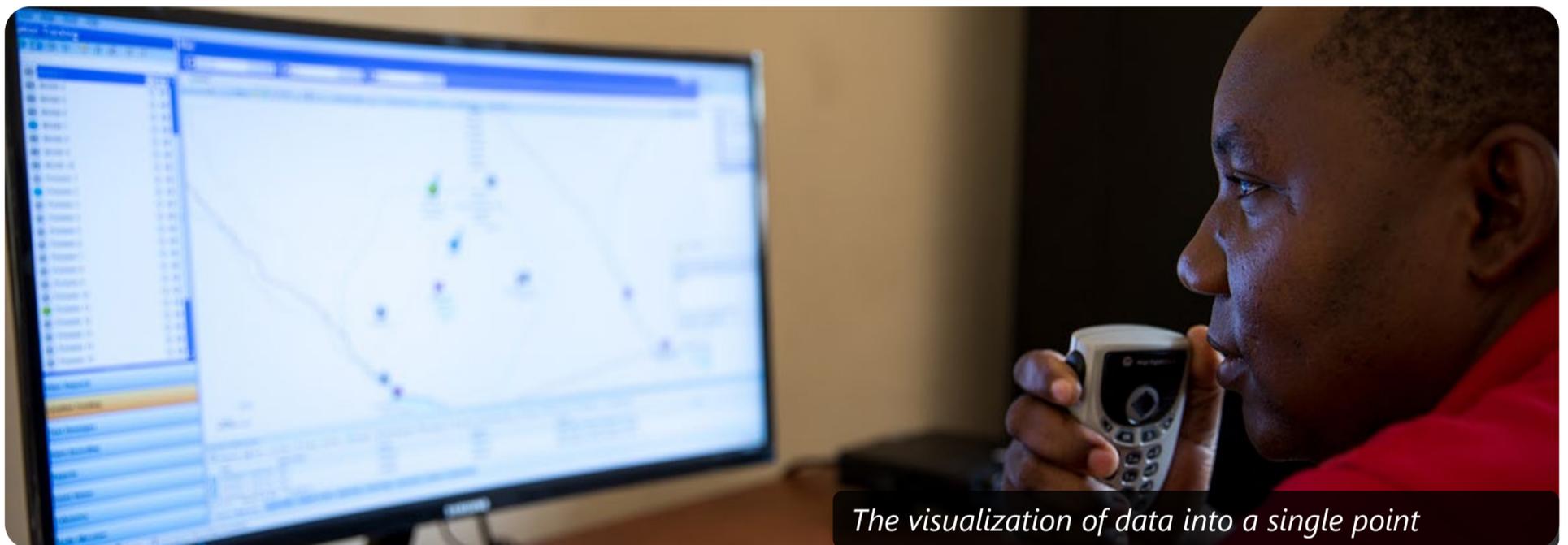
The visualization of data into a single point

Founded in 1997, Peace Parks exists to protect, rebuild, and rehabilitate the natural ecosystems in southern Africa, and to create a harmonious balance between people and the natural environment. The 25-year-old organization has played a vital role in the establishment of ten transfrontier conservation areas (TFCAs), or "peace parks", across the region. Today, Peace Parks focuses on the restoration and development of eight parks and reserves within four of these TFCAs. Throughout the organization—from fundraising and communications to wildlife crime prevention and rewilding initiatives—Peace Parks relies on Microsoft technology to help achieve its mission.

Helping Rangers Protect Endangered Animals

Wildlife crime is a serious issue across Africa, and Peace Parks utilizes advanced technology to stay a step ahead of poachers.

In partnership with Microsoft partner [Cloudlogic](#), Peace Parks developed a cutting-edge technology solution that uses AI and IoT to help protect animals against poachers. In some areas most vulnerable to wildlife crime activity, camera traps automatically photograph any movement. These images are analyzed by software to detect suspicious activity, such as the presence of unauthorized people or cars. If images are flagged as potentially dangerous, the software sends an alert to the counter-poaching team, activating a response from the field rangers.

"Before, poachers often had a 12-hour head start on us, or more," Brider says. "Now, reaction teams can react in less than a minute." The AI-powered solution processes 100,000 images a month—twelve times the volume teams previously assessed manually—and returns only those in which potential threats are identified, thereby significantly reducing the time spent attending to false alerts. In 2021, a network of almost two hundred cameras scanned through 932,534 photos and found potential threats in 4.29% of these, sending approximately 40,000 alerts to the Operational Control Centre. The devices are strategically deployed across poaching hotspot areas, usually along boundary fences, roads, paths, and river crossings as deterrents to any would-be poachers. The network also connects staff in the field to data housed in Azure, enabling access to data in real-time.

Embracing technology means that Peace Parks staff can focus on their expertise—wildlife conservation—instead of troubleshooting IT problems or manually sorting through images. These systems help park rangers scale their conservation efforts and cover more ground, which allows them to build larger, safer spaces for endangered species to roam. "In one specific park where these technologies are implemented, animals are now migrating back into the park because they see it as a safe space. By creating these spaces and locking them down, we can allow nature to heal," says Brider.

One of many types of data capture points used by Peace Parks

Securing essential resources and funding

In collaboration with Microsoft partner Enterprisecloud, Peace Parks adopted Microsoft Dynamics 365 and Dynamics 365 Sales Enterprise for fundraising and donor management, as well as Power BI for reporting. This technology allows the organization to fundraise more effectively, keep overhead costs low, and ensure they have the necessary resources to continue their work. "The simple fact is, if we don't have donors and we don't manage the money, none of this work is going to exist," says Brider.

Peace Parks utilizes Microsoft Teams for communication, Office 365 for email, Authenticator for security, SharePoint for intranet needs, OneDrive for data storage, and Azure for hosting. With streamlined communication channels and centralized data storage, staff can find updated, relevant information quickly—which allows staff to better manage programs, connect with potential donors, coordinate research projects, and more.

Innovating to restore balance between nature and humankind

> The simple fact is, if we don't have donors and we don't manage the money, none of this work is going to exist.
>
> **– Wayne Brider**
> Information and Communications Technology (ICT) Manager
> Peace Parks Foundation

Taking a holistic approach to conservation, Peace Parks strives to understand how all systems—natural and human-made—are interconnected. The organization focuses on community development, sustainable tourism, government and private-sector partnerships, and commercial development to create economic opportunities for those who live in and around the parks.

Looking forward, Peace Parks plans to advance the use of technology to protect wildlife and further scale its conservation work.

By combining this advanced technology with forward-thinking and innovative conservation methodology, Peace Parks is making a positive impact on southern African ecosystems and has established itself as a leader in the environmental movement. "We expect the successes to grow exponentially," says Brider, "and technology is the force enabler."

To learn more about how Microsoft can support your mission, visit: microsoft.com/nonprofit

@msftnonprofits

facebook.com/msftnonprofits

linkedin.com/showcase/microsoft-for-nonprofits