Realizing 2030:
The new era of human-machine partnerships

A public policy roadmap for governments

VISION | TRUST | INNOVATION | SUSTAINABLE DEVELOPMENT | WORKFORCE READINESS

People have lived and worked with machines for centuries. Society is now about to enter a bold new phase.

Robotics, automation, artificial intelligence (AI), machine learning (ML), virtual and augmented reality (VR and AR) and cloud computing are all enabled by significant advances in software.

These emerging technologies have the potential to solve some of humanity's largest problems and lead to a new era of prosperity.

Roadmap to prosperity in the 2030 era of human-machine partnerships

To prepare for 2030, we've outlined four sets of public policies that can help societies prosper. We hope our recommendations provide policymakers with a vision for a thriving community in 2030 — and help develop policies that:

1. Preserve trust in the technologies that drive advancements.

2. Foster innovation by supporting entrepreneurship, the data economy, and open markets for the global flow of goods, services and data.

3. Support workforce readiness by using emerging technology in schools and businesses for personalized learning, remote learning, hiring and on-the-gig and in-the-moment training.

4. Promote sustainable development through smart city and sustainability initiatives.

Trust

Innovate with privacy and security in mind.

1. Promote data privacy and cybersecurity via voluntary conformance with open, global standards.

2. Encourage developers to adopt privacy-by-design approaches in their technology solutions.

3. Utilize standardized agreements among governments to resolve cybersecurity and data privacy conflicts of law or jurisdiction.

4. Implement smart, open data platforms that allow government data to be shared and innovation to be fostered while still safeguarding privacy.

5. Encourage R&D in technologies such as blockchain and quantum computing that could offer new security options.

6. Incorporate global standards into procurement policies to ensure respect for justice, transparency and sustainable practices across operations and supply chains.
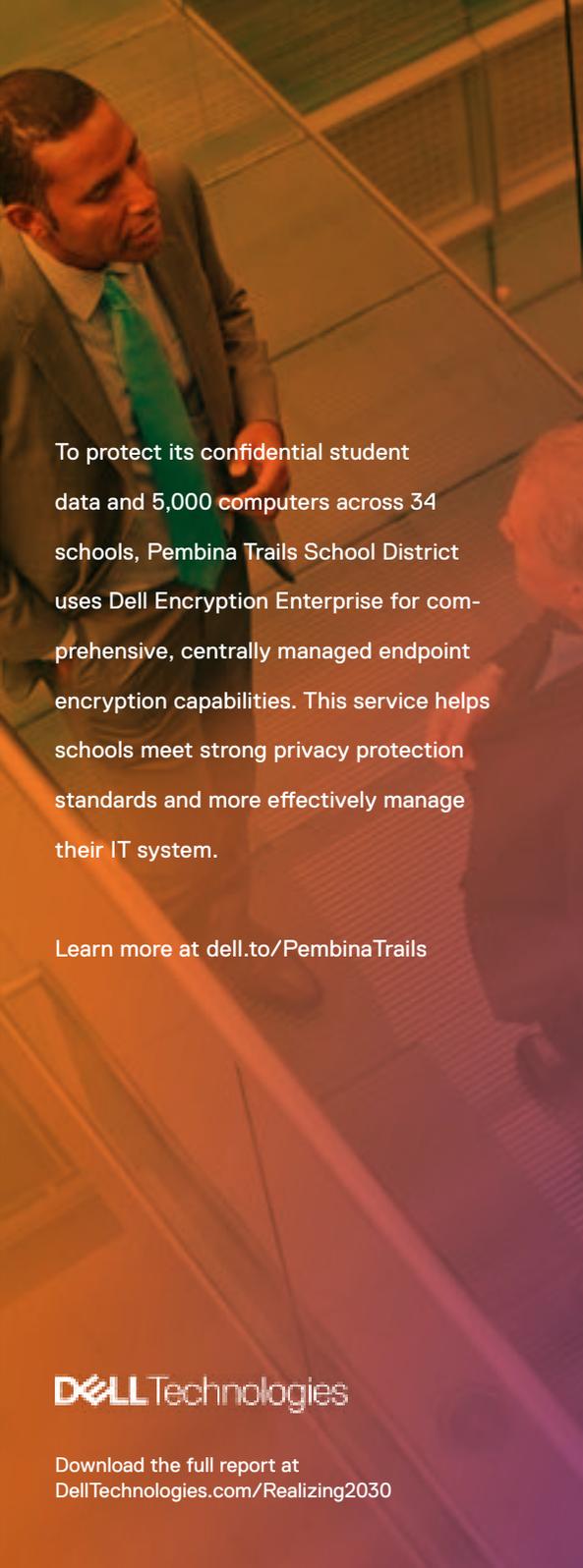
To protect its confidential student data and 5,000 computers across 34 schools, Pembina Trails School District uses Dell Encryption Enterprise for comprehensive, centrally managed endpoint encryption capabilities. This service helps schools meet strong privacy protection standards and more effectively manage their IT system.

Learn more at dell.to/PembinaTrails

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Download the full report at
DellTechnologies.com/Realizing2030

Innovation

Think beyond your borders.

1. Improve access to capital for entrepreneurs by offering incentives for startups and infra-structure — reducing scale-up costs.

2. Facilitate technology access and strengthen Information and Communication Technology (ICT) infrastructure, including high-speed broadband and spectrum for mobile services.

3. Provide a favorable regulatory and procurement framework to foster new competition and disruptive business models.

4. Implement e-government solutions and open up government data.

5. Transfer more government IT operations to clouds.

6. Invest in R&D that explores emerging technologies and incentivize the private sector to also invest in R&D.

7. Promote global, open standards for reliable cross-border data transfers, business support services and networks.

8. Support diverse workforces and foster mobility for highly skilled workers.

9. Encourage free and open trade while opposing tariffs and trade barriers.

10. Adopt competitive, fair and transparent tax policies for businesses to invest in innovation, infrastructure and training.
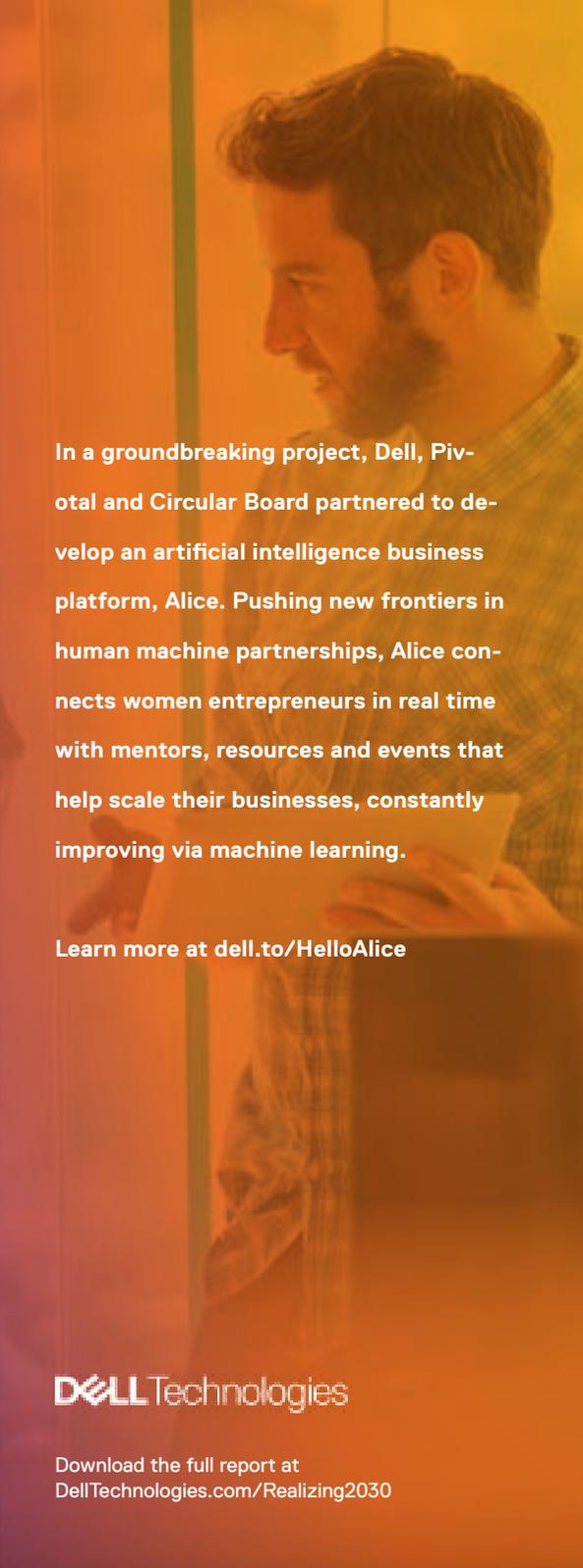
In a groundbreaking project, Dell, Pivotal and Circular Board partnered to develop an artificial intelligence business platform, Alice. Pushing new frontiers in human machine partnerships, Alice connects women entrepreneurs in real time with mentors, resources and events that help scale their businesses, constantly improving via machine learning.

Learn more at dell.to/HelloAlice

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Sustainable development

Think about your potential impact from the start.

1. Work with businesses to use emerging technologies to undertake smart city strategies.

2. Leverage AI, ML and predictive analytics to promote smarter mobility, safety, energy, water and healthcare.

3. Implement smart, open data platforms that allow government data to be shared and innovation to be fostered while still safeguarding privacy.

4. Encourage businesses to use globally recognized third-party certifications to show compliance with environmental and social standards.

5. Promote development, procurement and use of sustainable goods — taking into account the whole product lifecycle and circular economy principles.

India's largest dairy uses technology to help farmers keep their cows healthier and more productive, creating new economic opportunities that transform communities. Chitale Dairy is using IoT sensors and big data analytics to monitor, react to and predict cow behavior in real time to automate and improve milk production through a high-speed, high-availability network.

Learn more at dell.to/ChitaleDairy

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Workforce readiness

Train students and workers to transform.

1. Emphasize STEM, critical thinking, communication and digital literacy in public education and training programs.

2. Foster in schools a culture of innovation, "tinkering," collaboration and entrepreneurship among students.

3. Adopt innovative tech and online platforms for more affordable, accessible and effective education.

4. Use data analytics, VR and AR to personalize and enhance learning with immersive content delivery.

5. Ensure schools have access to high-speed internet and emerging technologies.

6. Foster partnerships with the private sector for student mentoring, career guidance, apprenticeship, ongoing skills and retraining programs.

7. Promote contextualized intelligence, entrepreneurial mindsets and automation literacy among people of all ages.

Dell is helping Interplay Learning become a leader in VR and 3D simulation training for the skilled and industrial trades. Interplay believes that people will soon apply the skills they learn in the real world to virtual reality and will continue their education with the help of an AI virtual mentor.

Learn more at dell.to/InterplayVR

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