

CUSTOMER SUCCESS STORY •

Giving End-of-Life Devices a Second Life with FydeOS

Upper Grand District School Board

An Ontario school board explores a governed, sustainable approach to extending Chromebook lifecycles while maintaining security, privacy, management, and support standards.

Story at a glance

UGDSB evaluated FydeOS as a lightweight, ChromiumOS-based platform for selected retired devices. The initiative combines technical testing, security review, controlled pilots, documented deployment procedures, and explicit decision gates.

Customer	Upper Grand District School Board
Industry	K-12 Education
Location	Ontario, Canada
Solution	FydeOS on selected end-of-life Chromebook hardware
Focus	Lifecycle extension, sustainability, cost optimization, and managed deployment

Executive Summary

Upper Grand District School Board (UGDSB) launched an initiative to evaluate whether retired Chromebook hardware could be repurposed using FydeOS, a ChromiumOS-based operating system. The objective was to maximize existing hardware investments, reduce electronic waste, and provide additional access to computing resources while maintaining alignment with the board's security, privacy, and support standards.

Through a structured evaluation process that included technical testing, security review, pilot planning, and operational-readiness activities, UGDSB identified FydeOS as a promising platform for extending the useful life of selected Chromebook devices that had reached the end of their primary-use lifecycle.

UGDSB's work illustrates how device reuse can be approached as a governed lifecycle program, not simply an operating-system replacement.

"Our objective was simple: determine whether we could responsibly extend the life of devices that still had useful hardware while maintaining the security, management, and support standards expected in a modern educational environment." — Peter Scantland, UGDSB ICT Manager.

The Challenge

UGDSB manages technology assets that eventually reach vendor end-of-life milestones even when some of the underlying hardware remains functional. Replacing large numbers of devices can place pressure on technology budgets and contribute to electronic waste.

The board sought an approach that could:

- Extend the lifespan of existing hardware
- Reduce unnecessary device disposal
- Support modern, web-based use cases
- Maintain security, privacy, and operational standards
- Continue using existing Google Workspace for Education management practices
- Increase access to computing resources without relying solely on new hardware purchases

Evaluating the Alternatives

The ICT team compared several operating-system options for aging Chromebook hardware. The project materials record the following observations:

Platform	Observation recorded during evaluation
ChromeOS Flex	End-of-life concern identified during evaluation
Ubuntu	Poor performance; GNOME required more demanding graphical support
Lubuntu	Outdated interface and poor user experience
Windows	Poor performance
Raspberry Pi OS	Poor user interface

Why FydeOS?

FydeOS is a lightweight, cloud-focused operating system based on ChromiumOS. It provides a ChromeOS-like interface and supports Android applications and Linux environments. It can use local accounts or optional cloud integration. After comparative testing, UGDSB selected FydeOS for further evaluation.

Security and Governance

Security and privacy were foundational requirements. The security and compliance review considered operating-system update cadence, patching, authentication, data storage, student-data risks, third-party services, and acceptable deployment scenarios. The project documentation marks this review phase as complete.

- Passed the board's internal security vetting
- Accepted the board's Google enterprise policy and could be managed in the Google environment
- Supported locked-down software settings

Stability and Performance

The technical update reports no crashes and no recovery events during testing. The same source reports better performance than Ubuntu, ChromeOS, Windows, and ChromeOS Flex on the evaluated hardware.

Sustainability and Value

The initiative provides a potential pathway to reuse hardware that might otherwise be retired. The project materials identify extended device lifespan, reduced electronic waste, lower environmental impact, and more efficient use of technology resources as key motivations.

A Structured Deployment Strategy

UGDSB established an eight-phase lifecycle to evaluate technical viability, security acceptance, support impact, and educational value before making a scaling decision.

Phase	Purpose
1. Discovery and Feasibility	Inventory devices, research support and licensing, and define potential use cases.
2. Pilot Planning	Select representative devices, define success measures, and document rollback.
3. Technical Testing	Validate hardware, wireless, peripherals, battery health, and performance.
4. Security and Compliance Review	Assess patching, authentication, data, privacy, third-party services, and approved scenarios.
5. Pilot Deployment	Use controlled environments and monitor stability, experience, and support incidents.
6. Evaluation and Decision	Proceed, proceed with restrictions, or stop and retire the devices.
7. Scaled Deployment	Create a standard image and workflow, deploy in batches, and update asset records.

Phase	Purpose
8. Operational Transition	Define support boundaries, publish documentation, train support staff, and set end-of-life criteria.

Built-in safeguard

The project could be stopped at any phase if security, stability, or support risks are considered unacceptable.

Prepare to Scale

The technical planning material describes a potential 1,000-device build. The proposed workflow uses parallel USB imaging, with one technician handling multiple devices while portions of the build run unattended. The deployment model required additional effort to prepare retired, damaged or marketed up devices before deploying the FydeOS. Our efforts have averaged 10 devices per hour.

Results Snapshot

- ✓ Completed discovery and feasibility activities
- ✓ Completed the security and compliance review phase
- ✓ Reported no crashes or recovery events during technical testing
- ✓ Demonstrated compatibility with existing Google enterprise policy and management practices
- ✓ Established a phased governance and deployment framework
- ✓ Identified opportunities to extend hardware life and reduce electronic waste

Looking Ahead

UGDSB's FydeOS initiative shows how an educational organization can explore device lifecycle extension through structured testing, security governance, operational planning, and explicit decision gates. The work creates a framework for deciding whether selected end-of-life devices can continue to deliver value beyond their original deployment lifecycle.

The next stages in the documented roadmap are pilot deployment, evaluation, and an executive decision to proceed, proceed with restrictions, or retire the devices. Broader claims about financial savings, deployment scale, user impact, or educational outcomes should be added only after those results are documented.