

# Rideline Power Bikes Hardware Upgrade Proposal

# Executive Summary

Rideline Power Bikes is a growing e-bike company with 40 employees, offering retail, production, and repair services. The company is expanding rapidly and has experienced a significant increase in demand. With its current growth, the company is outgrowing its outdated information systems. Currently, the sales, administrative, warehouse, and repair teams are using spreadsheets, paper records, and a desktop-based POS system. These systems create operational inefficiencies, errors, and bottlenecks.

This proposal recommends a complete upgrade to the current information system's hardware. This will improve productivity and efficiency for each department.

## Business Requirement Needs

The current hardware challenges Rideline Power Bikes are facing:

- Outdated Devices: POS and desktops are slow and outdated.
- Data handling: current hardware cannot efficiently manage inventory, production, sales, and repair documentation. Current hardware does not support customer tracking or feedback.
- Downtime: Aging hardware causes reliability problems and a higher probability for outages or time that the business is non-operational.
- Portability: Staff require tablets/ Mobile devices for on-floor operations in the sales/warehouse departments.

Hardware Needs:

- Upgraded desktops for administrative tasks
- Laptops and tablets for service, sales, and mobile tasks.
- Upgraded POS stations for sales.
- Barcode scanners and sturdy tablets/devices
- Workstations for repair tasks, service, and multimedia.
- Role based peripherals and monitors.

## Proposed Solution

This Proposal recommends upgrading hardware across all departments.

**Administrative Office:** New and modern desktops with dual monitors for inventory management, scheduling, data entry, and logistics handling. Mouse and keyboard for desktop use.

**Sales Staff:** New handhelds/tablets, and POS terminal/register for on-the-floor sales.

**Warehouse Staff:** Desktops, durable/rugged tablets, and barcode scanners for product/inventory management.

**Service Shop:** Rugged tablets and workstations for efficient repair management and tracking.

**Multimedia Specialists:** All-in-one powerful desktop with touch screen capabilities. Powerful CPU and RAM for demanding software's.

These proposed solutions meet business needs and provide improvements to operational efficiency.

**Server:** 1-2 servers for internal IT processes, local storage, enhanced security, Remote access, scalability.

## Detailed Technical Specifications

### Sales Staff:

POS terminal: [Square Register Kit -Includes Square Register \(2nd generation\), cash drawer, and receipt printer.](#)

Cost: \$1,189.00    Quantity: 1

Square Handheld: [“The powerful, pocketable POS, with built-in payments, barcode scanner, and camera. Perfect for tableside ordering, inventory management, and more.”](#)

Cost: \$329.00    Quantity: 4

Desktops: [Dell Optiplex 3060 Small Form Desktop, Six Core i5 8500 3.0Ghz, 8GB DDR4, 256GB NVMe SSD, HDMI, Windows 11 Pro](#)

Cost: \$534.98    Quantity: 2

Monitor: [ACER 24in LCD | DisplayPort | Adjustable Stand | DisplayPort and Power Cable](#)

Cost: \$55.00    Quantity: 2

Mouse and keyboard: [Dell Pro Silent Wired Collaboration Keyboard - KB525C and Mouse - MS116](#)

Cost: \$44.98    Quantity: 2

### **Administrative Staff:**

Desktop: [Dell OptiPlex 3070 | Intel i7 9th gen | 32GB RAM | 1TB SSD | Windows 11 Pro](#)

Cost: \$534.98 per unit    Quantity:40

Monitor: [ACER 24in LCD | DisplayPort | Adjustable Stand | DisplayPort and Power Cable](#)

Cost: \$55.00 per unit    Quantity:20

Mouse and keyboard: [Dell Pro Silent Wired Collaboration Keyboard - KB525C](#) and Mouse - MS116

Cost: \$44.98    Quantity: 20

### **Warehouse Staff**

Monitor: [ACER 24in LCD | DisplayPort | Adjustable Stand | DisplayPort and Power Cable](#)

Cost: \$55.00 per unit    Quantity 3

Desktops: [Dell Optiplex 3060 Small Form Desktop, Six Core i5 8500 3.0Ghz, 8GB DDR4, 256GB NVMe SSD, HDMI, Windows 11 Pro](#)

Cost: \$249.99    Quantity: 3

Rugged Tablet: [Honeywell ScanPal EDA10A Rugged Tablet \[8GB/128GB\]](#)

Cost: \$717.34    Quantity:5

Barcode Scanner: [WRS100SBR 1D Ring Barcode Scanner with Charging Cradle](#)

Cost: \$199.00    Quantity: 5

Mouse and keyboard: [Dell Pro Silent Wired Collaboration Keyboard - KB525C](#) and Mouse - MS116

Cost: \$44.98    Quantity: 3

### **Service Workshop Staff**

Rugged Tablet: [Honeywell ScanPal EDA10A Rugged Tablet \[8GB/128GB\]](#)

Cost: \$717.34    Quantity:5

All In One Desktop: [HP 23.8-inch All-in-One Desktop AI PC, Intel® Core™ Ultra 5 225U, 8 GB DDR5-5600 MHz RAM \(1 x 8 GB\), 23.8" diagonal, FHD \(1920 x 1080\), IPS](#)

Cost: \$529.99    Quantity: 5

### **Multimedia Specialists:**

Workstations: [HP 27-inch All-in-One Desktop Next Gen AI PC 27-ct0000m](#) AMD Ryzen™ AI 7 350 (up to 5.0 GHz max boost clock, 16 MB L3 cache, 8 cores, 16 threads) + AMD Ryzen™ AI (50 NPU TOPS) + AMD Radeon™ Graphics, 32 GB DDR5-5600 MHz RAM (2 x 16 GB)

Cost: \$979.99 Quantity: 2

Server: [ThinkSystem SR650 Rack Server](#), up to 24x TruDDR4 RDIMM slots; Intel® Optane™ PMem 100 Series, Intel® Xeon® 2nd Generation Cost: \$1,565.99

## Cost Statement

Below is an estimated itemized statement of costs. Hardware Costs are estimated at \$23,495.44.

ITEM	NEEDED	COST	TOTAL COST
Optiplex 3070	20	\$534.98	\$10,699.6
Optiplex 3060	3	\$249.99	\$749.97
Monitors	43	\$55.00	\$2,365
Rugged Tablet	10	\$717.34	\$717.34
POS Terminal	1	\$1,189.	\$1,189
POS Handhelds	4	\$329.00	\$1,316
AIO Desktop	5	\$529.99	\$2,649.95
Multimedia Workstation	2	\$979.99	\$1,959.98
Barcode Scanners	5	\$199.99	\$999.95
Mouse and Key	25	\$44.98	\$1,124.5
Server	1	\$1,565.99	
			Total:
		\$23,495.44	

## Implementation Considerations

-Resources: Internal IT staff and vendor support for set-up, configuration, and testing.

-Feasibility: The cost is within budget, and the hardware is readily available and does not change the physical infrastructure.

-Risks: Delays, DOA products, staff challenges, and hardware compatibility.

-Operational requirements: Implementation will not affect daily operations.

## Benefits and Justifications

- Improved productivity.
- Tablets and handhelds improve mobility.
- Reduced downtime.
- Supports scalability and increased volume.
- Faster Service for improved customer satisfaction.
- Faster operational processes.
- Server for local IT processes and storage.

## Possible Risks and Solutions

### Risks:

- DOA products/malfunctioned Hardware
- Compatibility issues
- Downtime
- Shipping Delays
- Staff training/adjustment

### Mitigation:

- Utilize warranties and trusted vendors
- Verify software/firmware compatibility before implementation.
- Order early and confirm dates with vendors.
- Have backup devices ready
- Conduct Trainings for each department.

## Conclusions and Recommendations

Rideline Power Bikes' current hardware configuration is a hinderance on their growth and efficiency. This proposal provides modern and adequate upgrades that are cost-effective for all departments at Rideline Power Bikes. This hardware upgrade will improve efficiency, productivity, customer satisfaction, and reduce downtime.

## Recommendations:

- Approve the hardware upgrade with a budget of \$23,495,44 with contingency.
- Verify all shipping dates and hardware compatibility.
- Implement a centralized server.
- Conduct employee training for easy adoption.
- Assign internal staff to manage systems after implementation.
- Deploy the appropriate hardware to the appropriate departments.