Retail POS: Real-time ERP Integration Advantages

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Executive Summary

Point-of-sale (POS) systems have evolved significantly since their inception in the late 1800s. The journey began with mechanical cash registers, which replaced simple cash storage boxes and provided sales summaries. Over time, these systems advanced to offer departmental sales totals. By the 1970s, POS systems had become electronic and networked, enabling consolidated reporting via remote mainframes and mini-computers. Today, POS systems have evolved into thin client, software-as-a-service (SaaS) cloud solutions, often integrated with fully functional horizontal ERP (Enterprise Resource Planning) systems. This paper focuses on the latest advancement: browser-based SaaS cloud solutions closely integrated with ERP systems.

Numerous studies have explored the impact of POS systems on businesses. The most credible studies, which controlled for various variables, found that stores with POS systems saw a 25-30% increase in sales and a 30-36% increase in gross margin. Data from a sample of NetScore customers suggests that integrating POS systems with horizontal ERP solutions can boost EBITDA by nearly 7% annually, thanks to cost reductions and efficiency gains. However, the specific benefits depend on the features deployed and the company's commitment to using the system effectively.

Expected Savings: POS Tightly Integrated to ERP

Integrating POS solutions with ERP systems can yield substantial, direct, and indirect savings. Here, we focus on four categories of direct, quantifiable savings:

- **Increased Labor Efficiency**
- **Increased Profit from Speed-of-Service**
- **Decreased Product Shrink**
- **Reduction in Training Costs**

Increased Labor Efficiency

A browser-based cloud solution integrated with an ERP system can reduce labor costs per revenue dollar by keeping sales associates on the floor, enabling fewer staff to effectively serve the same number of customers. Additionally, these systems allow businesses to generate more revenue with the same staffing levels. NetScore customers have found that these efficiencies extend to support personnel, such as warehouse and accounting staff, by virtually eliminating manual sales process interventions.

For example, consider a company with $15 million in annual revenue and a labor cost of 28% of revenue. By reducing labor costs by 2%, the company could save $84,000 annually.

$84,000

Annual Saving

Increase in Profit from Speed-of-Service

An integrated cloud solution can boost sales revenue and net margin by increasing the number of items sold per transaction and the number of daily transactions. By providing salespeople with comprehensive information on a single screen, they can stay engaged with customers and identify additional product needs, eliminating the need to switch between systems or physically check stock and schedules.

For instance:

1. If salespeople sell one additional item per shift, with 12 salespeople and an average item price of $58.78 (net margin of 10%), the company could see an increase in annual revenue and net margin of $236,296 and $23,630, respectively.
2. If each salesperson assists two additional customers per day, with an average transaction value of $226.45 (net margin of 10%), the company could see an increase in annual revenue and net margin of $151,722 and $15,172 respectively.

Overall, these improvements could lead to an increase in revenue of $397,076 and an increase in EBITDA of $39,708, not accounting for qualitative benefits like increased customer satisfaction and lifetime value.

$39,708

Increase in EBITDA

Decrease in Product Shrink

An integrated POS/ERP solution can reduce theft and waste by providing additional controls. Post-Covid, shrink rates have increased by about 24% annually, accounting for approximately 0.91% of net revenue. For SMEs, theft alone accounts for roughly 1.62% of revenue, with shrinkage and product damages adding another 1%, leading to a 2.62% reduction in annual revenue. For a company with $15 million in annual sales, this translates to $393,000 in lost revenue.

An integrated solution can enforce management approvals for overrides, track POS events, and require reason codes for inventory pulls, potentially reducing shrink by 0.5%. This could reclaim $75,000 in revenue, yielding $7,500 in net margin, assuming a 10% net margin.

Reduction in Training Costs

Integrating POS with ERP systems can reduce training costs for customer-facing staff. NetScore customers have reported that employees train an average of eight hours faster due to the system's ease of use, payment integration, and streamlined checkout process. A company with 40 salespeople, an average turnover rate of 20%, and an average hourly wage of $15 could result in annual savings of $960.

Conclusion

A tightly integrated cloud solution offers an impressive internal rate of return (IRR) after accounting for the solution investment and an aggregate tax rate of 40%. Conservative estimates suggest a 3-year IRR of 366% and a payback period of less than eight months, driven by increased labor efficiency, faster service, reduced product shrinkage, and lower training costs.