International Journal of Science and Research (IJSR)
ISSN: 2319-7064
SJIF (2020): 7.803

Recurring Revenue from Ecommerce for Subscription of Software Purchases

Saurav Bansal[1], Preeti Tupsakhare[2]

[1]Manager, Enterprise Architecture , IT - Fortune Brands Home & Security, Inc.
Eamil: *saurav.bansal.kbl[at]gmail.com*

[2]Engineer Sr - Information Technology, Anthem INC.
Email: *pymuley[at]gmail.com*

Abstract: ***The advent of eCommerce has revolutionized the way businesses operate, particularly in the software industry. This paper explores the recurring revenue model facilitated through eCommerce platforms for subscription-based software purchases. It delves into the core concepts of recurring revenue, Enterprise Resource Planning (ERP), and eCommerce, and high- lights the key objectives and benefits of integrating these systems. Additionally, the paper discusses best practices, implementation strategies, and key performance indicators (KPIs) for measuring success. A case study of a leading security company utilizing recurring revenue as a channel is also presented to provide practical insights.***

Keywords: Recurring Revenue, eCommerce, ERP, Sub- scription Model, Software Purchases, Integration, Payment Gate- way, Stripe, Boomi, EDI System, Oracle

1. Introduction

The recurring revenue model has gained significant trac- tion in the software industry, offering a stable and predictable income stream. This model is especially effective when integrated with eCommerce platforms, enabling seam- less subscription-based software purchases. The integration of ERP systems further enhances the efficiency and accuracy of this process, automating order management and financial transactions. This paper aims to provide a comprehensive overview of these concepts and their implementation, along with a practical case study.

2. Concepts of Recurring Revenue

Recurring revenue is generated from customers who make regular, ongoing payments for access to a product or service. This model is commonly seen in subscription-based businesses, such as software as a service (SaaS), where customers pay a monthly or annual fee. Key benefits include predictable revenue, improved customer retention, and enhanced financial stability [1].

1) Concepts of ERP

Enterprise Resource Planning (ERP) systems are integrated software platforms used by organizations to manage their business processes in a unified manner. ERP systems streamline operations by integrating various functions, including finance, human resources, supply chain, and customer relationship management. In the context of recurring revenue, ERP systems play a crucial role in automating order management, invoicing, and payment processing [2] [3].

2) Concepts of Ecommerce

eCommerce refers to the buying and selling of goods and services over the internet. It encompasses a wide range of online business activities, including retail sales, online auctions, and subscription services. eCommerce platforms provide the infrastructure for businesses to reach a global audience, manage transactions, and offer subscription-based products [4].

Key Objectives of Setting Up This Channel

The primary objectives of establishing a recurring revenue channel through eCommerce for subscription-based software purchases include:

- Revenue Stability: Achieving a predictable and stable revenue stream.
- Customer Retention: Enhancing customer loyalty and retention through continuous service.
- Operational Efficiency: Automating order management and financial transactions to reduce manual efforts.
- Scalability: Enabling businesses to scale their operations seamlessly.

3. Scope of Integrations

Integrating eCommerce platforms with ERP systems is critical for automating the subscription order process. This integration ensures that subscription orders from eCommerce platforms are automatically fed into ERP systems, eliminating the need for manual entry. The integration process typically involves:

- Order Capture: Capturing subscription orders on the eCommerce platform.
- Payment Processing: Processing recurring payments through a payment gateway like Stripe.
- Data Transfer: Transferring order and payment data to the ERP system through middleware like Boomi.
- Invoice Generation: Generating invoices and recording payments in the ERP system.
- Reporting: Providing real-time reports and analytics on subscription revenue [5].

Reusable Components for ERP and Ecommerce Integrations

To facilitate seamless integration, the following reusable components can be utilized:

- API Connectors: Standardized APIs for communication

between eCommerce platforms and ERP systems.
- Middleware Solutions: Middleware platforms like Boomi for data transformation and transfer.
- Payment Gateways: Integration with payment gateways such as Stripe for handling recurring payments.
- EDI Systems: Electronic Data Interchange (EDI) systems for automated data exchange and order processing.

Best Practices for Integrations

Implementing effective integrations between eCommerce and ERP systems involves several best practices:

- Standardization: Use standardized APIs and data formats to ensure compatibility and ease of integration.
- Automation: Automate as many processes as possible to reduce manual intervention and errors.
- Scalability: Design integrations to handle increasing volumes of transactions as the business grows.
- Security: Ensure data security and compliance with regulations during data transfer and processing.
- Monitoring: Implement monitoring and alerting systems to detect and resolve integration issues promptly [6] [7].

4. Implementation Strategies

Successful implementation of eCommerce and ERP integration involves:
- Planning: Define clear objectives, scope, and requirements for the integration project.
- Design: Develop a detailed integration design, including data flow diagrams and system architecture.
- Development: Build and test integration components, ensuring they meet the defined requirements.
- Deployment: Deploy the integration solution in a phased manner, starting with a pilot phase.
- Monitoring: Continuously monitor the integration process and make necessary adjustments for optimization [8] [9].

Key Performance Indicators (KPIS)

To measure the success of the recurring revenue model, the following KPIs should be considered:
- Customer Retention Rate: Percentage of customers who continue their subscription over a period.
- Monthly Recurring Revenue (MRR): Total revenue generated from subscriptions on a monthly basis.
- Customer Lifetime Value (CLTV): Total revenue expected from a customer over their subscription period.
- Churn Rate: Percentage of customers who cancel their subscription.
- Average Revenue Per User (ARPU): Average revenue generated per subscriber [10].

Table I Summaries the KPIs.

Table I: Key Performance Indicators for Recurring Revenue Model

KPI	Description
Customer Retention Rate	Percentage of customers who renew their subscription
Monthly Recurring Revenue	Total monthly revenue from subscriptions
Customer Lifetime Value	Expected revenue from a customer over the subscription period
Churn Rate	Percentage of customers who cancel their subscription
Average Revenue Per User	Average revenue generated per subscriber

Case Study: Leading Security Company

Background

A leading security company implemented a recurring revenue model for its software products, targeting industries such as real estate, property management, utilities, facilities management, and healthcare.

Implementation

Subscription Orders: Subscription orders were captured on the company's eCommerce platform.
- Payment Processing: Recurring payments were processed through Stripe, with funds deposited into business unit-specific bank accounts.
- Data Integration: Boomi middleware was used to create EDI files and transfer data to the EDI system.
- ERP Integration: The EDI system imported orders into Oracle, generated AR invoices, and created prepayments.

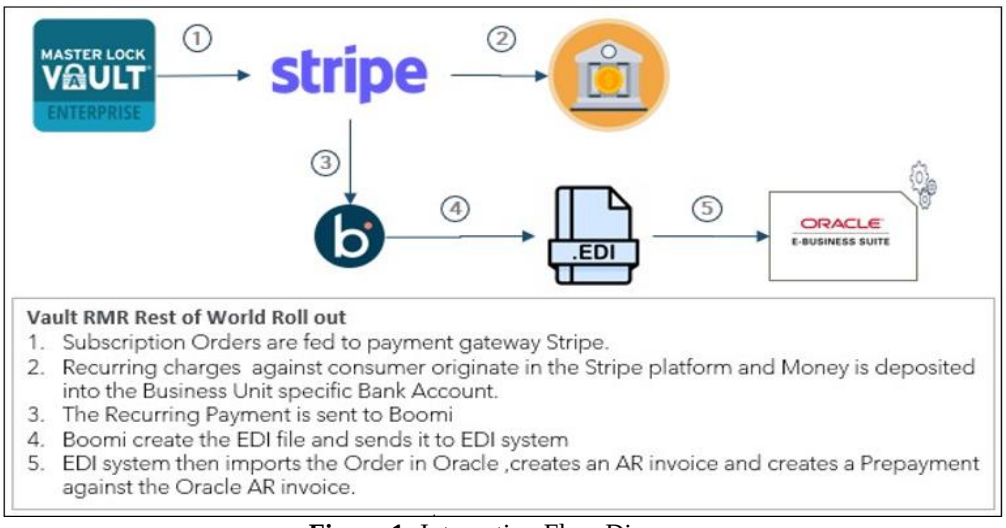

Figure 1: Integration Flow Diagram

Business Benefits

- Temporary Access Codes: Enabled secured temporary access codes for a specified time window.
- Ongoing Software Upgrades: Charged for ongoing soft- ware upgrades in Vault Enterprise.
- Subscription Pricing: Implemented recurring monthly subscriptions for $3 USD/$4 CAD/ C3 EUR/£3 GBP per lock per month.

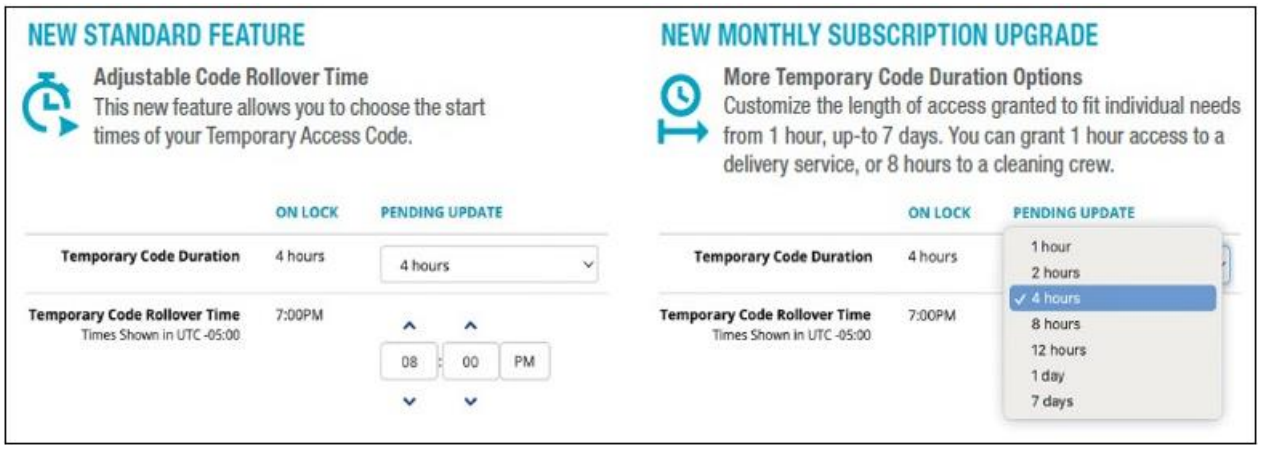

Figure 2: Business Benefits

Results

The integration resulted in streamlined operations, improved customer retention, and a stable revenue stream. The company successfully targeted various industries, including real estate and healthcare, providing them with secure and efficient access management solutions.

5. Conclusion

By adopting the recurring revenue model facilitated through eCommerce and integrated with ERP systems, businesses can achieve operational efficiency, enhanced customer satisfaction, and a stable revenue stream. The case study of the leading security company demonstrates the practical application and benefits of this approach in various industries.

References

[1] R. Calderon, "The Role of Recurring Revenue in Business Stability," *Business Insights Journal*, vol. 12, no. 4, pp. 34–45, 2020.
[2] S. Kapoor, "Predictable Income Streams: The Power of Recurring Revenue," *Financial Review*, vol. 29, no. 2, pp. 67–78, 2019.
[3] T. Johnson, "ERP Systems: Integrating Business Processes," *Enterprise Management Journal*, vol. 22, no. 3, pp. 89–102, 2021.
[4] Miller, "Streamlining Operations with ERP," Tech Innovations, vol. 17, no. 1, pp. 12–25, 2020.
[5] J. Smith, "E-commerce and Its Impact on Modern Business," *E- commerce Trends*, vol. 15, no. 5, pp. 56–68, 2021.
[6] L. Nguyen, "Automating eCommerce with ERP Integration," *Systems Integration Journal*, vol. 11, no. 6, pp. 45–58, 2020.
[7] D. Lee, "Best Practices for ERP and eCommerce Integration," *Tech World*, vol. 14, no. 8, pp. 23–35, 2019.
[8] M. Patel, "Ensuring Data Security in ERP Integrations," *Information Security Journal*, vol. 19, no. 7, pp. 78–89, 2021.
[9] G. Hernandez, "Strategies for Successful ERP Implementation," *Busi- ness Solutions Journal*, vol. 18, no. 2, pp. 34–46, 2020.
[10] S. Roberts, "Monitoring and Optimizing ERP Integrations," *Tech Review*, vol. 16, no. 4, pp. 67–79, 2019.