



Created by [Microsystems](#)

E-commerce with Back Office ERP Integration

Introduction



E-commerce Overview

E-commerce refers to the buying and selling of goods and services over the internet. It enables global reach, 24/7 availability, and convenient accessibility for businesses and customers alike.

ERP Systems Overview

ERP (Enterprise Resource Planning) systems integrate various business processes, including finance and accounting, inventory management, human resources, and sales & customer relationship management (CRM).

Importance of Integration

Integrating e-commerce platforms with ERP systems is essential for streamlining operations, enhancing data accuracy, improving customer service, and facilitating real-time data access, leading to increased efficiency and effectiveness in business operations.

What is E-commerce?

Definition

E-commerce refers to the buying and selling of goods and services over the internet, allowing businesses to expand their reach beyond geographical limitations and provide 24/7 accessibility and convenience to customers.



= What is an ERP System?

Definition

An ERP system integrates various business processes, including finance and accounting, inventory management, human resources, and sales & customer relationship management (CRM), providing a consolidated platform for managing diverse business functions.





Importance of Integration



Enhance Data Accuracy

Integration enhances data accuracy by eliminating manual data entry errors and ensuring consistent and reliable information across the integrated platforms.

Streamline Operations

Integrating e-commerce with ERP systems streamlines business operations by ensuring seamless data flow and process automation, leading to improved efficiency and reduced operational complexities.

Benefits of Integration



Operational Efficiency

Integration enables automated data entry, reducing manual errors and optimizing process efficiency, ultimately leading to enhanced business performance.

Financial Management

Integration provides real-time financial data and accurate reporting, enabling better financial management and informed decision-making.

Inventory Management

Real-time inventory updates and synchronized inventory levels across platforms help in avoiding stockouts or overstocking, improving inventory management.

Key Integration Points

Order Management	Synchronize orders between e-commerce and ERP systems.
Inventory Management	Ensure real-time inventory levels across platforms.
Financial Data	Sync sales data for accurate financial reporting.
Customer Data	Maintain unified customer information across systems.
Items Data	Updating collections and images from an ERP system



Goal of Integration

Objective

The objective of integrating Shopify with our ERP system is to streamline operations, improve inventory management, and enhance customer service. This integration aims to ensure seamless data flow between the two platforms, leading to increased operational efficiency and customer satisfaction.

Reason for Integration

The integration is essential to meet the increasing demands of our business. By integrating Shopify with our ERP system, we seek to centralize data, reduce manual efforts, and enable real-time synchronization to handle orders, inventory, and customer information more effectively.

Primary Focus: Implement a seamless process for sending e-receipts directly to the tax authority from our Shopify sales platform through our ERP system.

Benefits

Automated Tax Reporting: Automatically sends e-receipts to the tax authority, ensuring compliance with local regulations.

Error Reduction: Minimizes human errors in tax reporting by automating the data entry and submission process.

Real-time Data Access: Provides up-to-date financial information, improving decision-making processes.

Increased Data Accuracy: Reduces discrepancies in financial reporting by ensuring data consistency across platforms.

Implementation Process

=

Analysis

Gap Fit findings
Understanding Document (Light Functional Requirements Document)
Customer approval of the requirements for each of the cross phases

Design

- Solution Mapping Document (Light Functional Design Document)
- Process Test Scenarios
 - Customer acceptance of the Solution Mapping Document
- Customer approval of the development time and cost estimates

Build

- Complete System Configuration of the standard solution
- User Acceptance Test (UAT) Scripts
- Process Test Results
 - Process Testing complete

Deployment

- UAT Results
- Complete System Acceptance
 - Train-the-Trainer training
 - Pilot
 - User Acceptance Testing
- GO LIVE

Operation

- Rapid Post go-live support
- Standard Solution transitioned to Support
 - Customer acceptance of the post live support agreement
- Customer formally closes the project

Outcomes



Operational Efficiency

Streamlined operations, leading to improved order processing, reduced manual errors, and faster fulfillment cycles, ultimately resulting in enhanced overall operational efficiency.

Inventory Accuracy

Improvements achieved in inventory management, such as real-time inventory updates, reduced stock discrepancies, and better handling of backorders, leading to improved inventory accuracy and reduced carrying costs.

Financial Accuracy

Real-time data transfer between Shopify and our ERP system has improved financial reporting, reconciliation, and budgeting accuracy, resulting in better financial decision-making and compliance.

Interface Screen for Integration



Login Data

The login data allows secure access to initiate the integration process and exchange information between the ERP system and Shopify.

Target User

Specifies the user role or profile within the ERP system authorized to interact with the Shopify platform through the integration interface.

Retrieve Shopify Store ID

Enables the ERP system to retrieve the unique identification of the Shopify store for seamless data interchange and synchronization.

Items Master Interface



Update Items

Methods for updating, adding, or removing items and their associated information in the ERP system's master database, ensuring accurate inventory management.

Hold/Active Items

Controls to manage the status of items, enabling temporary deactivation or reactivation of items within the ERP system based on stock availability or other factors.

Multi (Upload/Delete) Images

Functionalities for uploading and deleting images, connecting them to item codes and attributes with a structured approach to maintain visual integrity.

= Sales Document Integration

Sales Document (API)

API-based processes for appending, canceling, and updating orders and sales documents, enabling seamless synchronization between ERP and Shopify for efficient order management.



Payment and Store Management

=

Store Set Stock Balance

Methods to set and synchronize stock balances for physical and digital products, ensuring accurate stock levels across Shopify and the ERP system.

E-Receipt-interface (API)

API-based interfaces for managing electronic receipts and reconciling payment information between the ERP system and Shopify.

Re-Upload Balance in Shopify (API)

API-based functionality to re-upload and refresh stock balances in the Shopify platform to reflect real-time inventory updates from the ERP system.



Data Exchange Between Flow ERP and Shopify



From Flow ERP to Shopify



Product Information

Flow ERP seamlessly sends detailed product information to Shopify including item groups, individual item variants, and associated images. This ensures that Shopify reflects accurate and comprehensive product details, enhancing the customer's online shopping experience.

Promotions and Pricing

Flow ERP ensures real-time updating of promotional details and pricing adjustments on Shopify to reflect current offers and changes. This dynamic updating keeps Shopify in sync with ERP's promotional strategies, enhancing customer engagement and experience.

Inventory Updates

Inventory balances are automatically synced between Flow ERP and Shopify, ensuring that the displayed stock levels are accurate and up to date. This synchronization prevents overselling and improves customer satisfaction by delivering accurate stock information.



Product Information

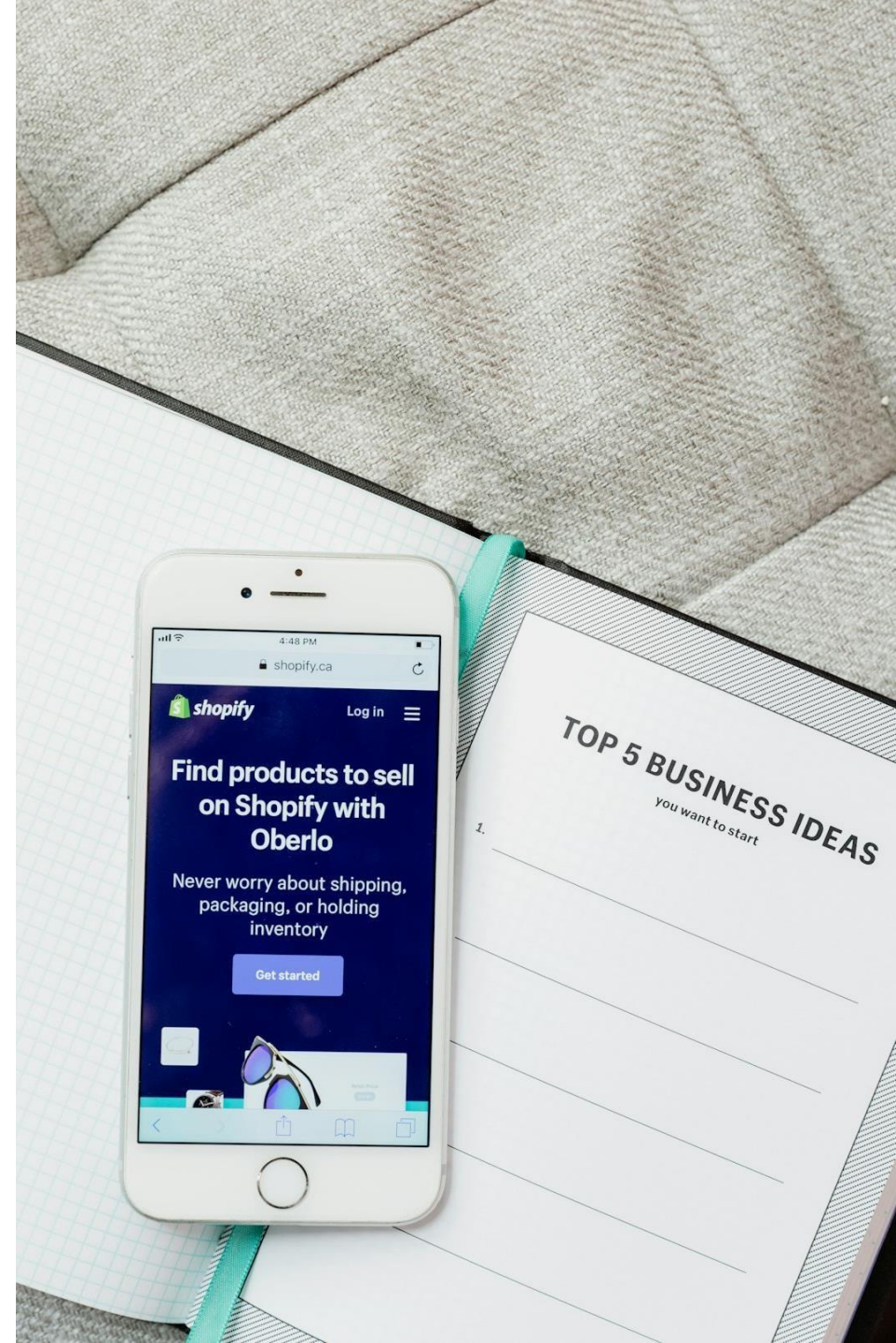
Detailed Product Information

Detailed product information including item groups, individual item variants, and associated images is seamlessly sent from Flow ERP to Shopify. This ensures that customers have access to comprehensive and accurate product details, enhancing their shopping experience.

== Promotions and Pricing

Real-Time Updates

Flow ERP enables real-time updating of promotional details and pricing adjustments on Shopify. This ensures that customers always see the most current offers and pricing adjustments, enhancing their shopping experience and increasing engagement.



Inventory Updates



Automatic Syncing

Inventory balances are automatically synced between Flow ERP and Shopify, ensuring that the displayed stock levels are accurate and up to date. This proactive syncing prevents out-of-stock scenarios and enhances customer satisfaction.

From Shopify to Flow ERP



Customer Data

Customer information, including contact details and purchasing history, is captured on Shopify and relayed to Flow ERP for CRM purposes. This enables businesses to maintain comprehensive customer profiles and enhance their CRM strategy.

Order Information

Orders placed on Shopify are transmitted to Flow ERP for processing, including order details such as quantities, billing information, and shipping requirements. This seamless transfer of order information streamlines order processing and fulfillment, enhancing operational efficiency.

From flow to ETA (Egyptian tax authority)

Compliance and Reporting

Flow ERP generates e-receipts based on Shopify transactions and sends these directly to the tax authority, ensuring compliance with fiscal regulations. This automated process reduces manual efforts and ensures accurate tax compliance.

Data Exchange Between Flow ERP and Shopify

From Flow ERP to Shopify

- Product Information:** Explain how Flow ERP sends detailed product information to Shopify, including item groups, individual item variants, and associated images.

- Promotions and Pricing:** Highlight how promotional details and pricing adjustments are updated in real-time on Shopify to reflect current offers and changes.

- Inventory Updates:** Discuss how inventory balances are automatically synced with Shopify, ensuring that the displayed stock levels are accurate and up to date.

From Shopify to Flow ERP

- Customer Data:** Describe how customer information, including contact details and purchasing history, is captured on Shopify and relayed to Flow ERP for CRM purposes.

- Order Information:** Detail how orders placed on Shopify are transmitted to Flow ERP for processing, including order details like quantities, billing information, and shipping requirements.

Compliance and Reporting

- E-Receipts for Tax Compliance:** Elaborate on how Flow ERP generates e-receipts based on Shopify transactions and sends these directly to the tax authority, ensuring compliance with fiscal regulations.

Microsystems



Contact info.

9211 ElHoda ST.Elkhelifa, El
Mokatam Cairo, Egypt

Tel: (202) 25054478

Help Desk: (202) 25054479

Fax: (202) 25075413

Mob: (+2) 01000098302

Mob: (+2) 01000098307

Web & Email

www.microsystems-eg.com

<https://doc.microsystems-eg.com/>

info@microsystems-eg.com

sales@microsystems-eg.com

Social media



<https://www.facebook.com/CloudBusinessSolutions.Egypt/>



<https://www.youtube.com/channel/UCTp-Fgbinlj5kzVnInyvBCg>



<https://www.linkedin.com/company/10599577/admin/feed/posts/>