

# Digital Market Place Platform



Table of Contents

- 1 Rifumo Empowerment Holdings (REH).....7
  - 1.1 Company Profile (Summarized) .....7
  - 1.2 Proven Track Record .....7
  - 1.3 Our Solid and Robust Methodology .....7
- 2 Digital Marketplace Platform Executive Summary .....8
  - 2.1 Introduction.....8
- 3 Solution Overview .....8
  - 3.1 Vendor Features.....8
    - 3.1.1 Vendor Registration and Onboarding.....8
    - 3.1.2 Dedicated Vendor Dashboard .....8
    - 3.1.3 Product Management .....8
    - 3.1.4 Order Management .....8
    - 3.1.5 Inventory Management .....8
    - 3.1.6 Earnings and Payouts .....9
    - 3.1.7 Promotions and Discounts.....9
    - 3.1.8 Vendor Ratings and Reviews .....9
  - 3.2 Customer Features .....9
    - 3.2.1 Customer Registration and Login.....9
    - 3.2.2 Advanced Search and Filtering .....9
    - 3.2.3 Wishlist and Favorites.....9
    - 3.2.4 Secure Checkout.....9
    - 3.2.5 Order Tracking.....9
    - 3.2.6 Ratings and Reviews .....9
    - 3.2.7 Customer Support.....9
  - 3.3 Admin Features.....10
    - 3.3.1 Admin Dashboard .....10
    - 3.3.2 Vendor Management .....10

3.3.3	Commission Management .....	10
3.3.4	Product Approval Workflow .....	10
3.3.5	Order and Payment Management .....	10
3.3.6	Dispute Resolution .....	10
3.3.7	Marketing and SEO Tools.....	10
3.3.8	Performance Monitoring .....	10
3.4	Marketplace Features .....	10
3.4.1	Multi-Language Support.....	10
3.4.2	Mobile-Friendly Design .....	10
3.4.3	Chat and Communication Tools .....	10
3.4.4	Integrated Logistics .....	10
3.4.5	Analytics and Reporting .....	11
3.4.6	Security Features .....	11
3.4.7	Scalability and Cloud Hosting .....	11
3.5	Technology Features.....	11
3.5.1	APIs for Third-Party Integrations.....	11
3.5.2	Artificial Intelligence .....	11
3.5.3	Blockchain Support .....	11
3.5.4	Chatbots and Virtual Assistants .....	11
3.6	How the Solution Supports Procurement .....	12
3.6.1	Centralized Procurement Hub .....	12
3.6.2	Transparent Vendor Selection .....	12
3.6.3	Cost-Effective Procurement .....	12
3.6.4	Streamlined Procurement Workflow .....	12
3.6.5	Real-Time Tracking and Reporting .....	12
3.6.6	Support for Local Businesses .....	12
3.7	How the Solution Helps Citizens and Businesses .....	13
3.7.1	Empowering Local Businesses .....	13
3.7.2	Connecting Citizens and Vendors .....	13

3.7.3	Promoting Peer-to-Peer Commerce .....	13
3.7.4	Encouraging Local Economic Growth.....	13
3.7.5	Inclusive Access .....	13
3.7.6	Efficient Service Delivery .....	13
3.7.7	Benefits for the Client and Community .....	14
3.8	3.6. Architecture.....	15
3.8.1	Azure Components.....	15
3.8.2	Key Features .....	16
3.8.3	Key Benefits .....	16
3.9	Back End: Business Central .....	17
3.9.1	Reporting Architecture.....	18
3.9.2	Demand E-Commerce Forecasting.....	18
3.10	System Scalability.....	22
3.10.1	Scaling in Azure Kubernetes Service (AKS).....	22
3.10.2	Business Central.....	24
4	Functional Requirements Specification .....	25
5.	Non-Functional Requirements .....	28
6.	Value Chain Management Model.....	30
6.1.	Supplier Management .....	30
6.2.	Product and Service Catalogue .....	31
6.3.	Order Management .....	32
6.3.1.	Order Placement .....	32
6.3.2.	Order Verification .....	32
6.3.3.	Order Routing .....	33
6.3.4.	Order Picking and Packing .....	33
6.3.5.	Shipping & Fulfilment .....	33
6.4.	Procurement Process .....	34
6.5.	Shipping and Logistics.....	35
6.5.1.	Unified Platform:.....	35

6.5.2. Inventory Management: .....	35
6.5.3. Shipping Integration: .....	35
6.5.4. Tracking and Notifications: .....	35
6.6. Payment Processing and Pricing Strategy .....	35
6.6.1 Vendor Payments .....	35
6.6.2 Customer Payments .....	35
6.6.3 Electronic Payment Processing .....	36
6.6.4 Cash Management .....	36
6.7. Returns and Dispute Resolution .....	36
6.7.1. Initiation of Purchase Order Return Request .....	36
6.7.2. Assessment of Purchase Order Return .....	37
6.7.3. Purchase Order Return Authorization / Approval .....	37
6.7.4. Receiving and Inspecting Returned Items .....	37
6.7.5. Processing the Purchase Order Return .....	37
6.7.6. Refund or Replacement .....	38
6.8. Data Management and Analytics .....	38
6.8.1. E-Commerce Data Management .....	38
6.8.2. E-Procurement .....	38
6.8.3. Data Analytics Capabilities .....	39
6.9. Security and Compliance .....	40
6.9.1. Security Measures .....	40
6.9.2. Compliance Regulations .....	40
7 Proposed Implementation Plan .....	41
7.1 Implementation Approach .....	41
7.2 Data Migration and Conversions .....	43
7.3 Report Development .....	43
7.4 Systems and Resource Training .....	44
7.5 System Testing .....	44
7.6 On-going Support Services .....	45

7.7	Other Requirements.....	46
7.7.1	Azure Data Residence Requirements.....	46
7.7.2	Information Security Requirements.....	46
7.7.3	Disaster Recovery.....	47
7.8	Out of Scope or Exclusions .....	47
7.9	Project Dependencies .....	48
8	Technical Approach and Methodology .....	50
8.1	Methodology.....	50
8.1.1	Diagnostic Phase .....	51
8.1.2	Analysis Phase.....	52
8.1.3	Design Phase .....	52
8.1.4	Development Phase .....	53
8.1.5	Deployment Phase .....	55
8.2	Operation Phase .....	55
8.3	Communication Plan.....	56
8.4	Issue Management Procedure.....	56
8.5	Change Control.....	57
9	Project Roles and Responsibilities.....	58
9.1	Rifumo Roles and Responsibilities.....	58
9.2	Customers' Roles and Responsibilities .....	59
10	Pricing Summary .....	60
10.1	Validity Period .....	61
10.2	Warranty Period .....	61
10.2.1	Warranty Conditions.....	62
10.2.2	Warranty Outcomes .....	62

# 1 Rifumo Empowerment Holdings (REH)

## 1.1 Company Profile (Summarized)

Established in 2013, Rifumo Empowerment Holdings (REH) is an Information Technology firm specializing in Process Automation (PA), Business Intelligence (BI), eCommerce Solutions, Data Warehousing (DW), Digitization, Customer Relationship Management systems (CRM), Application Development and Microsoft Business Central (BC). Our expertise in the development and implementation of Microsoft Technology (MT) enables our team to utilize standard best practices in the implementation of new technology and innovation. REH is a 100% black-owned SMME, B-BBEE Level 1 contributor and a Microsoft Gold Partner.

REH excels in development, customization, configuration, and implementation of technology solutions that offer expert guidance on the latest developments in technology across multiple industries. The organization provides tailor-made solutions that are user-centric and customer focused, to enable digital transformation using standard best practices and tried and tested methodologies.

We provide innovative technology through dedicated partnerships with our clients as we work to achieve outcomes that are user-driven and cost-effective. We take pride in enabling solutions and sharing knowledge collaboratively with our clients.

## 1.2 Proven Track Record

Rifumo has a proven track record and strong credentials in Microsoft Dynamics 365 projects, eCommerce, ICT Assessments, Business Process Design, System Integrations, and Project Management techniques. We remain a partner of choice to several Public Sector Clients. Our clientele base includes but is not limited to the following.

- Johannesburg Development Agency JDA
- City of Johannesburg Departments
- Public Investment Corporation
- Gauteng Department of Education

## 1.3 Our Solid and Robust Methodology

Our Project Management and Implementation methodology is based on the Microsoft Operations Framework and the Dynamics Sure-Step toolsets. These are tried, tested, and trusted methodologies which have, over the years been utilized, and proven to add the desired value to Clients.

*For a detailed company profile please click on the link below.*

## 2 Digital Marketplace Platform Executive Summary

### 2.1 Introduction

Welcome to our Digital Marketplace Platform, a cutting-edge solution designed to empower businesses and individuals to buy, sell, and grow together in a seamless digital ecosystem. This platform acts as a digital hub where multiple vendors can list their products and services, connect with a wide range of customers, and manage their business operations effectively. With user-centric features, powerful administrative tools, and a focus on security and scalability, this platform is set to redefine online commerce.

Whether you're a budding entrepreneur, an established retailer, or a customer seeking variety and value, our platform offers an integrated experience tailored to your needs. Vendors benefit from comprehensive tools to manage their storefronts, while customers enjoy an intuitive and secure shopping experience.

## 3 Solution Overview

### 3.1 Vendor Features

#### 3.1.1 Vendor Registration and Onboarding

- Easy sign-up process with verification steps to onboard vendors efficiently.

#### 3.1.2 Dedicated Vendor Dashboard

- Manage products, orders, inventory, and shipping.
- Monitor sales performance and analytics.

#### 3.1.3 Product Management

- Add, edit, and categorize products with advanced filters and search optimization.
- Support for variable products (e.g., different sizes, colors, etc.).

#### 3.1.4 Order Management

- View, process, and update order statuses.
- Automated notifications for order updates.

#### 3.1.5 Inventory Management

- Real-time stock tracking and alerts for low inventory.



### 3.1.6 Earnings and Payouts

- Track earnings, commissions, and withdrawal requests.
- Integration with multiple payment gateways for payouts.

### 3.1.7 Promotions and Discounts

- Create vendor-specific coupons and offers to attract more buyers.

### 3.1.8 Vendor Ratings and Reviews

- Gain insights from customer feedback for continuous improvement.

## 3.2 Customer Features

### 3.2.1 Customer Registration and Login

- Simplified sign-up process with options for social logins.

### 3.2.2 Advanced Search and Filtering

- Find products easily using filters, categories, and keyword searches.

### 3.2.3 Wishlist and Favorites

- Save desired products for later purchase.

### 3.2.4 Secure Checkout

- Multiple payment options including credit cards, digital wallets, and bank transfers.

### 3.2.5 Order Tracking

- Real-time updates on shipping and delivery statuses.

### 3.2.6 Ratings and Reviews

- Provide feedback on products and vendors.

### 3.2.7 Customer Support

- Access to live chat and ticketing systems for resolving queries.

## 3.3 Admin Features

### 3.3.1 Admin Dashboard

- Oversee marketplace operations with real-time analytics and reports.

### 3.3.2 Vendor Management

- Approve or reject vendor registrations and monitor their activities.

### 3.3.3 Commission Management

- Set and manage vendor commissions, including tiered or fixed rates.

### 3.3.4 Product Approval Workflow

- Approve vendor products before they go live on the platform.

### 3.3.5 Order and Payment Management

- Oversee order flows and ensure timely disbursements.

### 3.3.6 Dispute Resolution

- Manage customer and vendor disputes with robust resolution tools.

### 3.3.7 Marketing and SEO Tools

- Platform-wide promotional campaigns, email marketing, and SEO optimization.

### 3.3.8 Performance Monitoring

- Identify top-performing vendors and products using analytics.

## 3.4 Marketplace Features

### 3.4.1 Multi-Language Support

- Cater to all South Africans audience indigenous language content

### 3.4.2 Mobile-Friendly Design

- Fully responsive platform for seamless shopping on any device.

### 3.4.3 Chat and Communication Tools

- Direct communication between vendors and customers.

### 3.4.4 Integrated Logistics

- Tie-ups with delivery partners for seamless shipping management.

### 3.4.5 Analytics and Reporting

- Insights on customer behavior, sales trends, and market performance.

### 3.4.6 Security Features

- Secure payment gateways, two-factor authentication, and Popia compliance.

### 3.4.7 Scalability and Cloud Hosting

- Ensure smooth performance even during high traffic periods.

## 3.5 Technology Features

### 3.5.1 APIs for Third-Party Integrations

- Connect with external tools for CRM, ERP, and analytics.

### 3.5.2 Artificial Intelligence

- AI-driven product recommendations and demand forecasting.

### 3.5.3 Blockchain Support

- Secure smart contracts between suppliers and retailers.

### 3.5.4 Chatbots and Virtual Assistants

- Enhance customer service and engagement.

## Leveraging the Digital Marketplace for Procurement and Community Commerce

The Digital Marketplace Platform is uniquely designed to bridge the gap between procurement, community needs, and local commerce. By integrating advanced tools and user-friendly interfaces, it facilitates seamless transactions, fosters economic growth, and ensures transparency in procurement processes.

## 3.6 How the Solution Supports Procurement

### 3.6.1 Centralized Procurement Hub

- The platform serves as a single digital hub for an organization to procure goods and services from multiple vendors efficiently.
- Government departments for example, can post procurement needs, receive bids, and select vendors through a streamlined process.

### 3.6.2 Transparent Vendor Selection

- Vendors on the platform undergo verification to ensure quality and compliance with regulatory standards.
- The Client can evaluate vendors based on ratings, reviews, and past performance metrics available on the platform.

### 3.6.3 Cost-Effective Procurement

- Competitive bidding enables the Client to compare prices and services from various vendors.
- The platform's analytics tools allow the Client to identify the most cost-effective and reliable suppliers over time.

### 3.6.4 Streamlined Procurement Workflow

- Automated workflows for order requests, approvals, and invoicing simplify administrative tasks.
- Integrated payment gateways ensure timely and secure transactions.

### 3.6.5 Real-Time Tracking and Reporting

- Client officials can monitor the status of orders, deliveries, and service deployments in real time.
- Comprehensive reporting tools help track budget spending and vendor performance.

### 3.6.6 Support for Local Businesses

- Prioritize local vendors to promote the regional economy.
- Encourage small and medium-sized enterprises (SMEs) to participate in procurement.

## 3.7 How the Solution Helps Citizens and Businesses

### 3.7.1 Empowering Local Businesses

- The platform allows local businesses to showcase their products and services to a wider audience, including government entities and citizens.
- Tools like promotions, analytics, and customer feedback help businesses refine their offerings and grow.

### 3.7.2 Connecting Citizens and Vendors

- Citizens can access a wide range of goods and services, from household essentials to professional services, all in one place.
- Direct communication tools enable buyers to negotiate and personalize their purchases.

### 3.7.3 Promoting Peer-to-Peer Commerce

- The marketplace supports individual sellers, enabling citizens to buy and sell goods among themselves.
- Secure payment gateways and buyer protection policies ensure trust and safety.

### 3.7.4 Encouraging Local Economic Growth

- By prioritizing local vendors, the platform helps retain wealth within the community.
- Citizens can support local and regional businesses, fostering a sense of community and economic resilience.

### 3.7.5 Inclusive Access

- Multi-language features make the platform accessible to diverse populations, ensuring inclusivity for all citizens and businesses.
- Mobile-friendly design ensures that users with limited access to technology can still participate.

### 3.7.6 Efficient Service Delivery

- Vendors offering services such as home repairs, professional consulting, or event management can connect with citizens seamlessly.
- Booking and scheduling tools streamline service delivery and customer satisfaction.

### 3.7.7 Benefits for the Client and Community

- **Enhanced Transparency:** By digitizing procurement and commerce, the platform reduces the risk of fraud and enhances accountability.
- **Boosted Local Economy:** Supporting local vendors ensures money stays within the community, spurring job creation and economic activity.
- **Streamlined Operations:** Automation reduces manual workload for the client's officials and vendors alike.
- **Increased Accessibility:** Citizens and businesses gain access to a diverse range of products and services at competitive prices.
- **Resilient Ecosystem:** A thriving digital marketplace fosters innovation and long-term growth for both public and private stakeholders.

In summary, the Digital Marketplace is not just a tool for commerce but a transformative solution that strengthens procurement processes, empowers local businesses, and creates a vibrant, connected community.

## Magento 2 eCommerce Web Based Solution

Dynamics Business  
Central

Supplier Integration

Order  
Processing

Product &  
Service  
Management

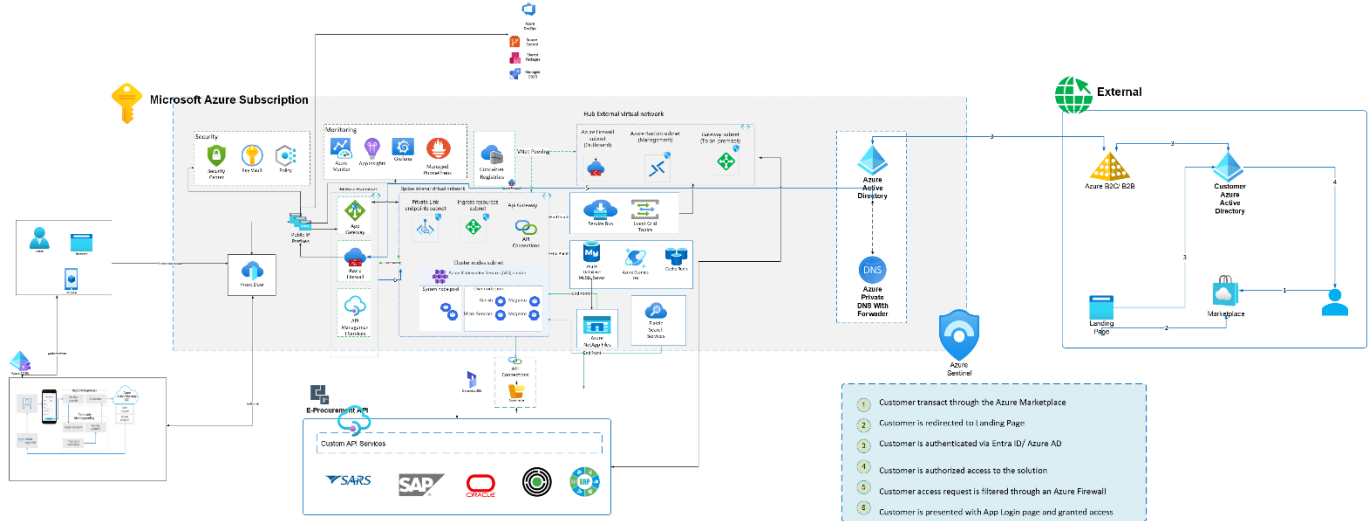
Finance &  
Reporting

Supplier  
Management

Supplier  
Compliance

API  
Integrations

## 3.8 Architecture



### 3.8.1 Azure Components

- Azure Kubernetes Service (AKS) deploys the Kubernetes cluster of Varnish, Magento, Redis, and Elasticsearch in different pods.
- AKS creates a virtual network to deploy the agent nodes. Create the virtual network in advance to set up subnet configuration, private link, and egress restriction.
- Varnish installs in front of the HTTP servers to act as a full-page cache.
- Azure Database for MySQL stores transaction data like orders and catalogs. Version 8.0 is recommended.
- Azure Files Premium, Azure NetApp Files, or an equivalent *network-attached storage (NAS)* system stores media files like product images. Magento needs a Kubernetes-compatible file system that can mount a volume in *ReadWriteMany* mode, like Azure Files Premium or Azure NetApp Files. Storage options for applications in Azure Kubernetes Service (AKS). It is highly recommended that you test input/output operations per second (IOPS) throughput and choose the options that work for you.
- A content delivery network (CDN) serves static content like CSS, JavaScript, and images. Serving content through a CDN minimizes network latency between users and the datacenter. A CDN can remove significant load from NAS by caching and serving static content.

- Redis stores session data. Hosting Redis on containers is recommended for performance reasons.
- AKS uses a Microsoft Entra ID identity to create and manage other Azure resources like Azure load balancers, user authentication, role-based access control, and managed identity.
- Azure Container Registry stores the private Docker images that are deployed to the AKS cluster. You can use other container registries like Docker Hub. The default Magento install writes some secrets to the image.
- Azure Monitor collects and stores metrics and logs, including Azure service platform metrics and application telemetry. Azure Monitor integrates with AKS to collect controller, node, and container metrics, and container and master node logs.

### 3.8.2 Key Features

- User friendly UI & Easy Navigation (Ease of Use)
- Product and Catalogue Management
- Order & Inventory Management
- Marketing & Search Engine Optimisation
- Multichannel Selling
- Themes & Extensions
- Localised Payment Gateways
- Shipping Methods
- Checkout Setup
- Refund Processing
- Analytics and Reporting
- Customisation
- Integrations
- Scalability
- Mobile App Version
- Ratings & Reviews

### 3.8.3 Key Benefits

- **Lightweight:** The eCommerce Solution's theme is built on the Underscore starter theme, which uses minimal resources to allow the store to load quickly. This improves user experience and increases conversion rates.
- **Ease to customize:** The eCommerce theme has a clean and simple design that's easy to customize. This allows for Rifumo to transfer the skills to Customers Development team to do the rest of the customization work as need arises
- **Easy to Set Up and Use –** Our eCommerce is user-friendly and easy to set up, even for those with limited technical expertise. Adding products, setting up payment methods, and starting to sell can be achieved in just a few clicks.



- **Complete Control Over Your Marketplace:** Unlike other e-commerce platforms, our eCommerce provides full control over your marketplace. You can customize it to match your brand perfectly and add any features or plugins you need without restriction
- **Wide Range of Themes and Plugins:** Our eCommerce offers a variety of themes and plugins that allow for customization, including social media buttons and contact forms. With an extensive library of extensions available, users can easily find the tools they need to run their online marketplace successfully.
- **Integration with Popular Tools and Payment Providers:** Our eCommerce supports a range of local payment gateways, including Stripe and PayPal, as well as shipping providers. This integration simplifies the process of managing multi vender online marketplace.

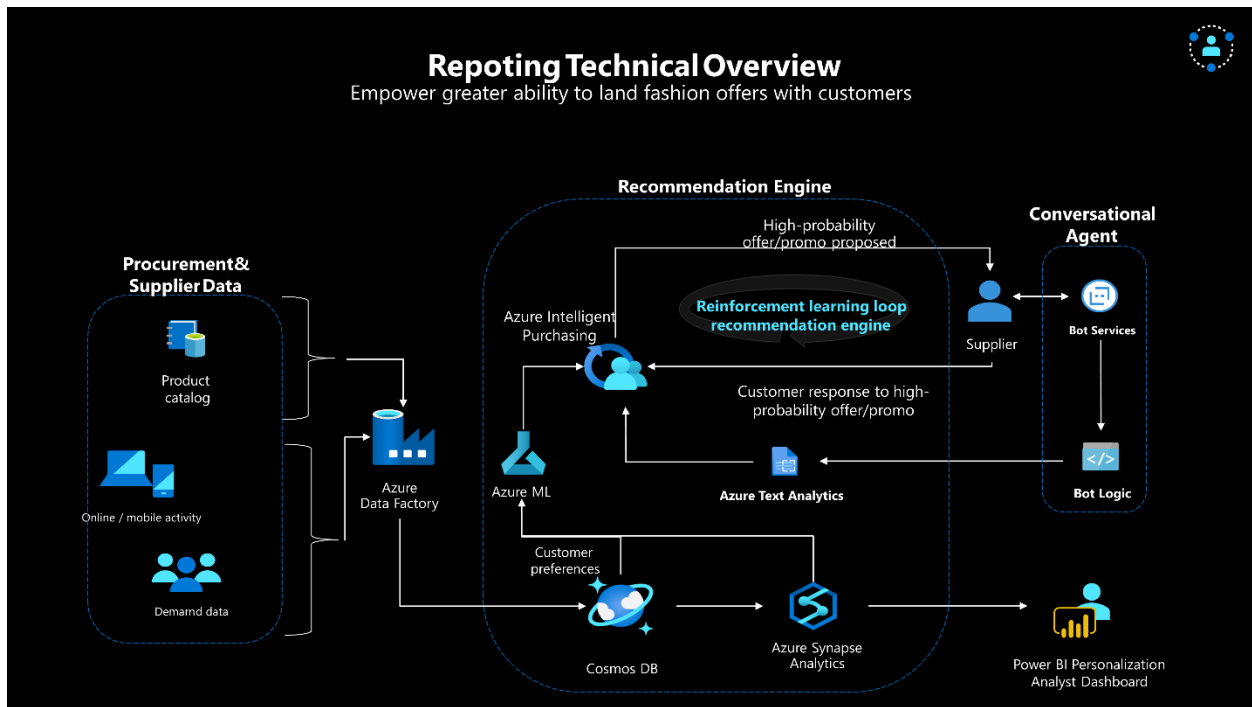
### 3.9 Back End: Business Central

Dynamics 365 for Business Central is a top cloud-based ERP solution for growing businesses with one of the most rapidly increasing userbases worldwide. At its core, Business Central is a complete business management solution built in the cloud designed to centralize and streamline all your data, processes, and core business functions. From finance and sales to inventory and purchasing, it brings your entire business into one platform for faster collaboration, process efficiency, and more intelligent data-based decision-making.

Dynamics 365 Business Central is the chosen solution to drive the eCommerce solution's backend order processes. The solution is from Microsoft and with customizations from Rifumo and it will be responsible for driving the back-order processes from the stage when an eCommerce Order is created and linking the data back to customers Financial systems such as SAP, Oracle and others for backend financial reconciliations.

Business Central will drive all the financial reconciliations in the back for all the Orders placed through the eCommerce platform to ensure that the various suppliers for products and services purchased from the Marketplace is accurately apportioned to the respective department's ERP solutions

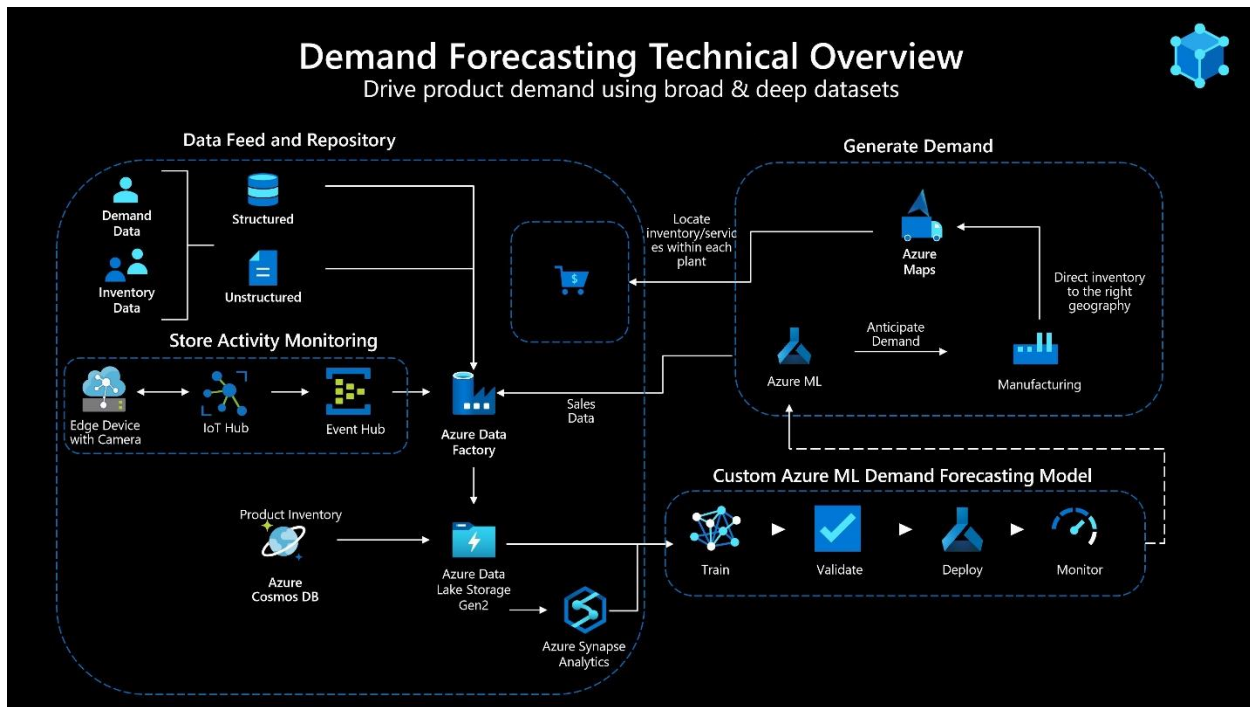
### 3.9.1 Reporting Architecture



### 3.9.2 Demand E-Commerce Forecasting

#### Demand Forecasting for an E-commerce Platform: Azure-Based Architecture

Demand forecasting is crucial for e-commerce platforms to ensure optimal inventory management, reduce operational costs, and enhance customer satisfaction. Leveraging Azure's comprehensive suite of services, the architecture integrates structured and unstructured data, advanced analytics, and supplier collaboration to create an efficient and scalable solution. Below is an overview of the system:



### 3.9.2.1 Architecture Overview

The demand forecasting system is built using a mix of Azure services, including Azure Machine Learning (Azure ML), Azure Synapse Analytics, Azure Data Factory, Azure Data Lake Gen2, and Azure Maps. Here's a breakdown of its components:

#### 3.9.2.1.1 Data Ingestion

- **Structured Data Sources:**  
Inventory records, sales history, and supplier data are integrated into the system. These structured data sources are often in formats like SQL databases or CSV files.
- **Unstructured Data Sources:**  
Customer reviews, social media data, and product feedback are ingested through Azure Data Factory and stored in Azure Data Lake Gen2.
- **Real-Time Location Data:**  
Azure Maps provides geospatial data for insights on regional demand trends and delivery logistics.

#### 3.9.2.1.2 Data Storage and Processing

- **Azure Data Lake Gen2:**  
All data, structured and unstructured, is stored in Azure Data Lake Gen2. This storage layer ensures scalability and supports both batch and real-time processing.

- **Azure Synapse Analytics:**

Data is transformed and prepared for analysis within Azure Synapse Analytics. This includes joining disparate datasets, cleaning data, and aggregating metrics like demand trends, seasonality, and regional sales.

### 3.9.2.2 Demand Forecasting Model

- **Azure Machine Learning:**

A forecasting model is developed using Azure ML. Leveraging techniques like time series analysis, the model incorporates:

- Historical sales data
- Seasonal trends
- Regional factors (powered by Azure Maps)
- External signals such as social media trends and weather data

- **Model Training and Deployment:**

The model is trained iteratively using historical data. Once validated, it is deployed as a web service, accessible via APIs for seamless integration.

### 3.9.2.3 Supplier Integration

- **Data Sharing and Inventory Replenishment:**

Suppliers are integrated into the system via APIs. Forecasted demand is shared with suppliers to enable proactive inventory replenishment.

- **Real-Time Updates:**

Updates on stock levels and shipping timelines are synchronized between the platform and suppliers to prevent stockouts or overstocking.

### 3.9.2.4 Visualization and Insights

- Dashboards are created to provide stakeholders with real-time insights into demand forecasts, inventory levels, and supplier performance. These dashboards use tools like Power BI, integrated with Azure Synapse.

### 3.9.2.5 Feedback Loop

- The forecasting system incorporates a feedback loop, wherein actual sales data is continually fed back into the Azure ML model to improve accuracy over time.

### 3.9.2.6 Key Benefits

- **Accurate Forecasting:**  
Advanced ML models provide precise demand predictions, reducing errors.
- **Enhanced Scalability:**  
Azure Data Lake Gen2 and Synapse Analytics ensure the system can handle increasing data volumes as the business grows.
- **Improved Inventory Management:**  
By integrating suppliers, the system minimizes stockouts and overstocking.
- **Geospatial Insights:**  
Azure Maps adds a layer of regional analysis, allowing location-specific demand predictions.
- **Actionable Insights:**  
Data visualization tools empower stakeholders to make informed decisions.

### 3.9.2.7 Challenges and Considerations

1. **Data Quality:** Ensuring clean and consistent data across sources is critical.
2. **Model Accuracy:** Regular updates and retraining of the ML model are required to maintain high accuracy.
3. **Supplier Collaboration:** Establishing robust APIs and data-sharing protocols with suppliers is vital for real-time integration.
4. **Cost Optimization:** Managing costs across storage, compute, and analytics layers is important, especially during peak demand periods.

### 3.9.2.8 Conclusion

This Azure-based demand forecasting architecture offers a robust solution for e-commerce platforms. By leveraging machine learning, real-time data processing, and supplier integration, the system optimizes inventory management, enhances customer satisfaction, and drives business growth. Its scalable and modular design ensures adaptability to evolving market dynamics, making it an indispensable tool for modern e-commerce operations.

## 3.10 System Scalability

### 3.10.1 Scaling in Azure Kubernetes Service (AKS)

Azure Kubernetes Service (AKS) offers various mechanisms to scale applications and underlying infrastructure, enabling efficient resource utilization and optimal performance. The scaling capabilities in AKS can be broadly categorized into **horizontal scaling**, **vertical scaling**, and **auto-scaling mechanisms**. Here's an in-depth overview of the multiple ways AKS can scale:

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#### 3.10.1.1 Horizontal Scaling (Scale Out)

Horizontal scaling involves increasing or decreasing the number of pods, nodes, or clusters to meet workload demands.

#### Pod-Level Horizontal Scaling

- **Kubernetes Horizontal Pod Autoscaler (HPA):**
  - Adjusts the number of pod replicas based on resource usage metrics like CPU, memory, or custom application metrics.
  - Configured using resource definitions (HorizontalPodAutoscaler) in YAML.
  - For example, the HPA can scale a deployment from 2 to 10 pods if the CPU usage exceeds a threshold.

#### Node-Level Horizontal Scaling

- **Cluster Autoscaler (CA):**
  - Automatically adjusts the number of nodes in a node pool to ensure sufficient resources for pending pods.
  - Removes underutilized nodes when workloads decrease, reducing costs.
  - Useful for scenarios with variable traffic patterns or burst workloads.

#### Multi-Cluster Scaling

- **Azure Kubernetes Fleet Manager:**
  - Allows scaling across multiple AKS clusters.
  - Enables efficient workload distribution and supports disaster recovery by dynamically routing traffic between clusters.

### 3.10.1.2 Vertical Scaling (Scale Up)

Vertical scaling involves increasing or decreasing the resources (CPU, memory) allocated to individual pods or nodes.

#### Pod-Level Vertical Scaling

- **Manual Resource Adjustment:**
  - Resource limits and requests can be manually updated in the pod's deployment YAML to increase CPU or memory.

#### Node-Level Vertical Scaling

- **Resizing Virtual Machine (VM) Instances:**
  - Node pools in AKS consist of VM instances that can be resized to larger sizes (e.g., from Standard\_D2\_v2 to Standard\_D8\_v2) to handle heavier workloads.
  - Achieved through Azure CLI or the Azure Portal.
  - May require downtime depending on the node's configuration.

### 3.10.1.3 Auto-Scaling Mechanisms

AKS offers multiple automated scaling options to ensure optimal resource allocation with minimal manual intervention.

#### Cluster Autoscaler

- Dynamically adjusts the node count in a node pool.
- Triggered by pending pods that cannot be scheduled due to resource constraints or when underutilized nodes are detected.
- Works seamlessly with HPA for a robust scaling solution.

#### Virtual Nodes

- Leverages Azure Container Instances (ACI) to scale workloads elastically.
- Suitable for burst scenarios where immediate additional capacity is required without provisioning new VMs.
- Example use case: Temporary batch jobs or unexpected traffic spikes.

#### Event-Driven Autoscaling

- **KEDA (Kubernetes Event-Driven Autoscaling):**
  - Scales pods based on external events or custom metrics like queue length in Azure Service Bus, database queries, or messages in Kafka.

- Works alongside HPA to respond to real-world events.

#### 3.10.1.4 *Scaling Node Pools*

Node pools in AKS can be scaled independently, providing flexibility for workloads with varying requirements.

#### **Manual Scaling**

- Node pools can be manually scaled through the Azure Portal, Azure CLI, or ARM templates.

#### **Scaling with Multiple Node Pools**

- Allows creation of specialized node pools (e.g., GPU-enabled pools for machine learning or smaller VMs for lightweight workloads).
- Each node pool can scale independently, aligning resources with workload demands.

#### 3.10.1.5 *Continuous Integration/Continuous Deployment (CI/CD) Scaling*

AKS integrates with Azure DevOps and GitHub Actions for automated scaling during deployment cycles:

- Trigger scaling actions in response to new application versions or infrastructure changes.
- Supports canary or blue-green deployment models to handle traffic distribution dynamically.

### 3.10.2 Business Central

Business Central can accommodate the needs of large enterprises. It can effortlessly manage complex operations and high transaction volumes. Case studies from prominent businesses demonstrate its seamless scalability.

#### **Flexible subscription options**

Business Central offers unlimited user subscriptions with monthly, annual, or triennial plans. This allows businesses to scale their user base to match their workload fluctuations.

#### **Resource elasticity**

Business Central online provides resource elasticity to support current and future demands. This includes making more of certain resources available, such as database computing, server CPU cores, and web service capacity.



## Cloud-based solution

Business Central is a cloud-based solution that allows businesses to scale up or down as needed. This includes adding or removing users, increasing storage capacity, and adjusting subscription levels.

## Release waves

New capabilities are released in waves that consist of a major update and minor updates. Major updates are typically released twice a year, in April and October, and minor updates are released every month.

# 4 Functional Requirements Specification

The table below addresses how our platform will address the highlighted Functional Requirements

Functional Requirement	Solution Component	Fit/ Gap
User Management & Authentication	Our solution uses OAuth2/ OpenID authentication with utilises Microsoft Azure AD/ Entra ID. This provides for a single sign on solution that utilises existing authentication mechanism such as emails for sign on thereby minimising duplication or multiple logins. With the inception of multi-factor authentication, customer can be rest assured that additional security is enforced to ensure the safety of corporate and user data.	Out of Box
Product & Service Catalogue Management	Our eCommerce Solution Provides front end tools to allow the various Suppliers for Customer to easily upload and update their Item & Service Master list. Business Central as the back-end system provides the advanced backend configs to allow for more advanced product and service management.	Out of Box
Procurement Process	Business Central as a Core Financial System has built in modules to manage Supply Chain Processes. These processes may include but not limited to Approval Automation for Purchase Requisitions. The approved department users can then use eCommerce marketplace to make the purchases as per approved documentation. The backend purchase document will then be synched to the financial system for reconciliation.	Out of Box
Purchase Order Generation	Business Central's Supply Chain Module has a standard function to manage and automate the Purchase Order process. This may also be	

	incorporated with approval automation to allow for the documents to flow through the various electronic approval chain of commands within the departments	
Reporting & Analytics Capability	The eCommerce solution provides for a number of reports to report on various activities related to the marketplace. Business Central also provides for a vast majority of financial reporting that allows the finance team and management to pull through various Finance related reports. To extend the reporting capability Microsoft Fabric allows for additional data from external sources to be combined and provide for a powerful and centralised reporting engine which allows for sharing.	Out of Box, Customisation
Compliance with Regulations	Our platform adheres to various application compliance, service compliance and certifications which are country/ region specific. These include but not limited to Tax Audit Certifications, compliance with bookkeeping laws as well as other cross industry compliance standards such as ISO 27001, ISO 27017 & ISO 27018.	Out of Box
Product Management	On the inventory front, our eCommerce also shines. Customer as the marketplace owner will appreciate how it automatically tracks product stock levels. The platform will alert when items are running low, and stock numbers update instantly with each sale. This means customer will always in the know about their supplier inventory, thereby ensuring they can manage stock efficiently and avoid the pitfalls of suppliers overselling or stockouts.  Additionally, customer can even choose to allow backorders, giving various departments the option to purchase even when an item is temporarily out of stock. Plus, customer can easily mark orders as shipped and manage fulfilment processes, giving customer complete control over your order workflow.	Out of Box
Payment Gateways	Our eCommerce solution offers versatile payment options. It accepts all the major debit & credit card by integrating with a host of payment gateways including local one. Examples include PayPal, Payfast, Yoco, Apple Pay, Google Pay, etc. Also available are credit facilities, Buy Now, Pay Later and also Crypto Options.	Out of Box
Core Platform Development	Our eCommerce Platform and Business Central are highly customisable solutions, allowing the solution to be developed to the specific user requirements. They use standardised methods to delivering code via the	Out of Box

	<p>use of popular tools like DevOps and Visual Studio. This allows for tracking and deploying code in a controlled manner. Certifications programs area available for skills transfers.</p>	
Integration Services	<p>The availability of API services allows the extension of the platform to other existing financial system with the Treasury’s ecosystem. Rest APIs, SOAP and OData services provide ways to expose data from and to our Platform. These are industry standard extensions that allow systems to securely communicate without data compromise.</p>	Out of Box Customisation
Service & Product Catalogue Maintenance	<p>Our ecommerce catalogue management process provides customer &amp; their respective suppliers the ability to organize, maintain and update the product information for the online marketplace. This encompasses everything from product descriptions to images, pricing, inventory and other details displayed on the website.</p> <p>Catalogue maintenance also entails adding new products, updating product information, removing out-of-stock items/ outdated products and organizing products into categories for easy browsing. Additionally, this provides the customer users with accurate and up-to-date product information and make it easy for them to find what they're looking for.</p> <p>Our platform provides the following features as part of the routine maintenance features</p> <ul style="list-style-type: none"> <li>- Update Product Information</li> <li>- Optimize Product Images</li> <li>- Classification of Products into Categories</li> <li>- Product Reviews</li> <li>- Product Availability</li> <li>- Offering Related or alternative Products</li> <li>- Testing Catalogue Navigation</li> </ul>	Out of Box
Payment Services	<p>Our eCommerce solution offers versatile payment services. It accepts all the major international and local debit/ credit card by integrating with a host of payment gateways including local ones. Examples include the likes of PayPal, Payfast, Yoco, FNB Pay, Apple Pay, Google Pay, etc. Also available are credit facilities, Buy Now, Pay Later and also Crypto Options.</p>	Out of Box
Search Engine Optimisation (SOE)	<p>When it comes to ensuring that your content gets found, our eCommerce offers the best built-in SEO capabilities. These features include content creation</p>	Out of Box

	and editing, permalinks, meta descriptions, 301 redirects, and more. Thanks to them, you can lay a solid SEO foundation from day one, driving organic traffic and attracting customers without relying solely on paid advertising	
Business Intelligence Reports	<p>Our BI Solution, Microsoft Fabric offers an end-to-end analytics platform that simplifies the integration, management, and analysis of customer's data. It brings together key Microsoft technologies, including Azure Data Factory and Azure Synapse's real-time analytics. In short, Microsoft Fabric streamlines how businesses handle data across functions for better decision-making.</p> <p>Fabric's integration with Power BI offers rich visualization tools and dashboards to transform data into actionable insights for business decision-makers. Power BI's intuitive interfaces and advanced analytical capabilities help customer users to quickly identify trends, anomalies, and opportunities.</p>	Customisation
System Administration	<p>Our Platform offers super users the ability to perform a number of administrative functions these include and are not limited to the following</p> <ul style="list-style-type: none"> <li>- Creating users</li> <li>- User Settings</li> <li>- Assigning Permissions</li> <li>- Managing &amp; Maintaining Products and Services Catalogue</li> <li>- Product &amp; Services Setups</li> <li>- Financial Setups</li> <li>- Other Administrative Settings</li> </ul>	Out of Box

## 5. Non-Functional Requirements

Below are the Non-Functional Requirements for the E-Commerce Systems:

Non-Functional Requirement	Solution Component
<b>Performance and Load handling Capabilities</b>	<p>The E-Commerce Solution provides appropriate messaging to ensure everyone is able to understand how to navigate your e-commerce platform, no matter how they are accessing it.</p> <p>Also the System is designed such that it avoid selling products or services that are not accessible or using navigation guides that are not accessible, such as those that</p>

	<p>require someone to use a screen reader to access them, but do not give users with disabilities the opportunity to use the screen readers of their choice.</p> <p>Providing additional useful descriptions that a screen reader can relay to help users with disability navigate images, videos, grids, and tables.</p> <p>Undertaking frequent accessibility audits of the e-commerce platform to ensure no user with a disability is excluded from accessing it due to reading or navigation issues.</p>
<b>Usability and Accessibility Features</b>	The E-Commerce Marketplace consist of a simple, clear, and organized interface with minimal clutter. Users should be able to navigate easily, locate key features quickly, and perform tasks efficiently.
<b>Reliability and Uptime Guarantee</b>	<b>Automatic Failover:</b> The E-Commerce system should automatically shift to backup infrastructure in case of hardware or software failures, ensuring continuity. The system should have regular backups (daily or more frequent) to ensure data can be recovered quickly if a failure occurs. The recovery point objective (RPO) defines how much data can be lost in an incident, and the recovery time objective (RTO) defines how long it will take to restore data.
<b>Security Measures, Including data Protection and Encryption</b>	<p>The E-Commerce) system must be protected with SSL Certificates (HTTPS):  Encrypts the data transmitted between the user's browser and the server, protecting sensitive information such as credit card numbers and personal details</p> <p>Firewalls: Installing web application firewalls (WAF) to prevent unauthorized access to the e-commerce platform</p> <p>Ensuring the Marketplace (E-Commerce) Customer Data must be Encrypted: Encrypting stored sensitive customer data such as credit card numbers and personal details.</p>
<b>Compliance with relevant standards and regulations</b>	<p>The E-Commerce adheres to ISO 921 International standards for ergonomic design and usability of software, applicable in some industries where user interaction is critical.</p> <p>E-commerce Solution implement data security measures to protect customer data from breaches and unauthorized access which complies with <b>POPIA</b> to govern the processing of personal data in South Africa.</p> <p>The E-commerce solution must provides customer with the rights to cancel online contracts within a specified cooling-off period. ECTA also requires proper disclosures, such as clear terms of service and visible pricing, to protect consumers from fraud. The <b>ECTA</b> regulates all online transactions, including contracts, electronic signatures, and consumer rights in e-commerce.</p>

## 6. Value Chain Management Model

### 6.1. Supplier Management

A **Government E-Vendor** is authorized to provide goods or services to government agencies through electronic or digital platforms. This usually involves registering with government procurement portals, which allow vendors to participate in tenders, bids, and supply contracts.

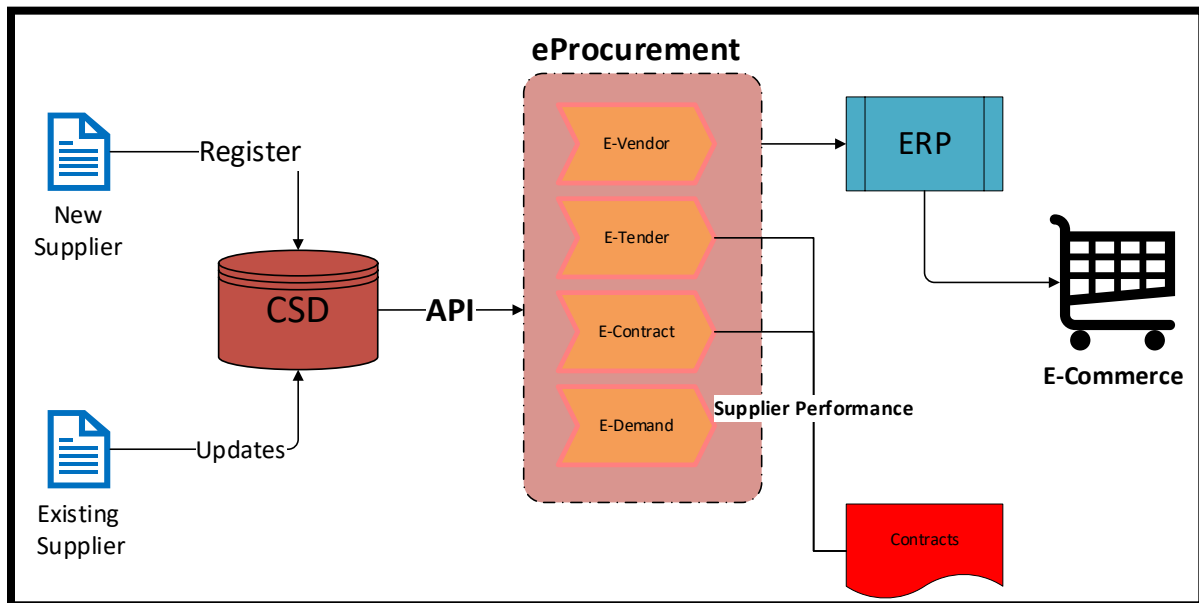


Figure 1 – Supplier Management

Key features of government e-vendor systems include:

1. **Supplier Registration:** Suppliers must register through official government e-procurement systems or vendor portals which integrates with existing CSD system to ensure supplier compliance and conformance with the government policies and standards of procurement.
2. **Supply of Goods and Services:** Suppliers can participate in an online E-Commerce system which enables suppliers to sell their goods and services on E-Commerce where Customer can select items sold based on price and ensure smooth purchase.
3. **Compliance and Monitoring:** E-vendors must comply with government regulations regarding quality, pricing, and delivery timelines. Government agencies often track the performance of the supplier through these platforms.



- 4. Payments and Contracts:** Contracts awarded through e-vendor systems usually involve digital agreements, and payments may be processed through online platforms in accordance with the terms of the contract.

## 6.2. Product and Service Catalogue

An **E-Commerce Product and Service Catalogue** is a comprehensive online listing of products and services that a business offers on its digital platform or marketplace. It serves as a digital showcase, allowing customers to browse, compare, and purchase goods or services.

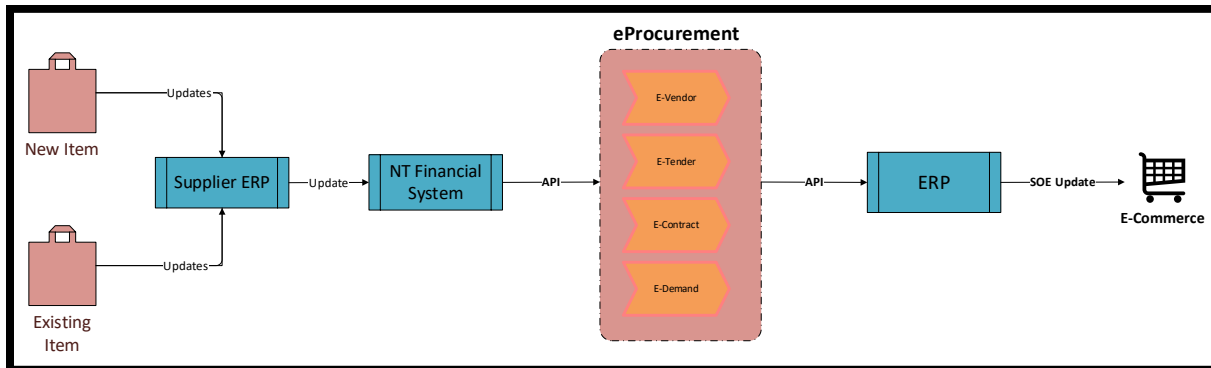


Figure 2 - Product and Service Catalogue

### Key Components of an E-Commerce Product and Service Catalogue:

Product Information	<p><b>Name:</b> Clear product name or service title.</p> <p><b>Description:</b> Detailed explanation of features, benefits, and use cases.</p> <p><b>Specifications:</b> Technical details, dimensions, materials, or performance metrics.</p> <p><b>Pricing:</b> Display of costs, discounts, and tax information.</p> <p><b>Images &amp; Media:</b> High-quality images, videos, or 3D models to showcase products.</p> <p><b>Categories:</b> Organized into specific categories for easy browsing (e.g., electronics, apparel, etc.)</p>
Service Model	<p><b>Service Scope:</b> Description of what the service includes (e.g., consulting, installation, maintenance).</p> <p><b>Duration &amp; Availability:</b> Timeframes, schedules, or availability of service delivery.</p> <p><b>Pricing Model:</b> Flat fees, hourly rates, or subscription options.</p>
Search and Filtering Component on E-Commerce	<p>Customers can search for products or services using keywords and filter results by price, rating, availability, or other attributes.</p>

## 6.3. Order Management

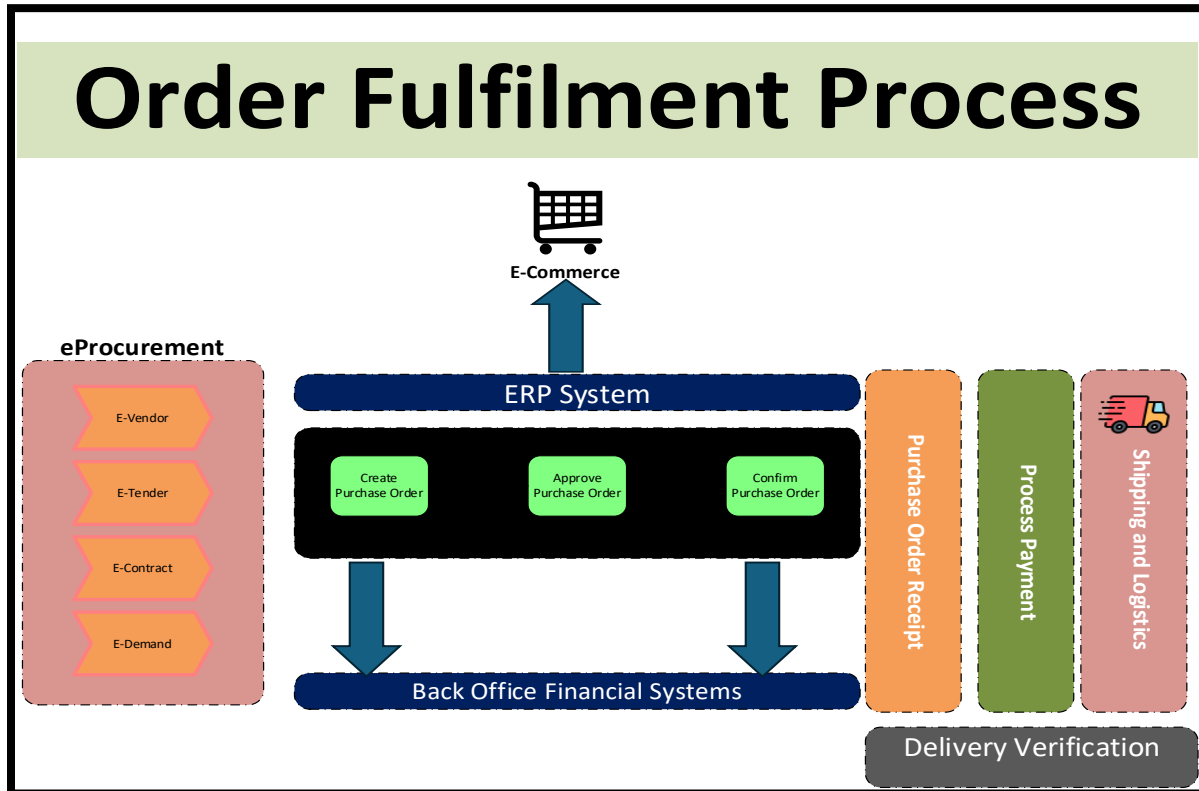


Figure 3 - Order Fulfilment Process

### 6.3.1. Order Placement

- **Customer Places Order:** The order process starts when a customer adds products to their cart and completes the checkout process. This includes selecting shipping options, providing payment details, and confirming the order.
- **Order Confirmation:** The system generates an automatic order confirmation email, including the order summary, estimated delivery time, and transaction receipt.

### 6.3.2. Order Verification

- **Inventory Check:** The system checks whether the ordered items are in stock. If available, the order moves forward. If out of stock, customers may receive an alert, or the system might trigger a backorder.



- **Fraud Detection:** Some e-commerce platforms have systems in place to detect fraudulent transactions by reviewing suspicious patterns, address mismatches, or flagged payment methods.
- **Payment Authorization:** The system verifies the customer's payment method through a payment gateway (e.g., PayPal, Stripe, credit card processor) and holds or deducts the funds based on authorization.

### 6.3.3. Order Routing

- **Order Assignment:** In companies with multiple fulfilment centers, the order is routed to the nearest or most appropriate warehouse based on customer location and inventory levels.
- **Warehouse Notification:** The warehouse responsible for fulfilling the order is notified, and the order details are sent to the fulfilment team or software for picking and packing.

### 6.3.4. Order Picking and Packing

- **Picking:** Warehouse staff or automated systems retrieve the items from storage according to the order details. This process can be optimized through techniques like batch picking or zone picking.
- **Packing:** The picked items are securely packed using appropriate packaging materials, often including product protection (bubble wrap, fillers), packing slips, and marketing inserts (discount codes, thank-you notes).
- **Labeling:** Shipping labels are printed with customer details, carrier information, and tracking numbers.

### 6.3.5. Shipping & Fulfilment

- **Carrier Assignment:** Based on the shipping option chosen by the customer (e.g., standard, expedited, same day), the appropriate carrier (UPS, FedEx, DHL, etc.) is selected.
- **Shipment Tracking:** Tracking information is generated and sent to the customer via email or text, enabling them to monitor their delivery.
- **Order Dispatch:** The package is handed off to the shipping carrier for delivery.

## 6.4. Procurement Process

**Purchase Order (PO) creation** is a key step in the e-Procurement process where a formal document is generated to authorize the purchase of goods or services from a supplier. This document outlines the specifics of the transaction and serves as a legally binding agreement once accepted by the supplier. Below are Key Components in PO Generation:

- **Automated Systems:** E-procurement or ERP systems streamline PO creation, ensure accuracy, and reduce manual effort.
- **Approval Workflow:** Automated workflows for PO approval, especially for large or strategic purchases.
- **Supplier Integration:** Many systems are integrated with supplier portals for direct communication, PO submission, and acknowledgment.
- **Tracking and Matching:** Systems track order status and provide tools for three-way matching between PO, invoice, and goods receipt.

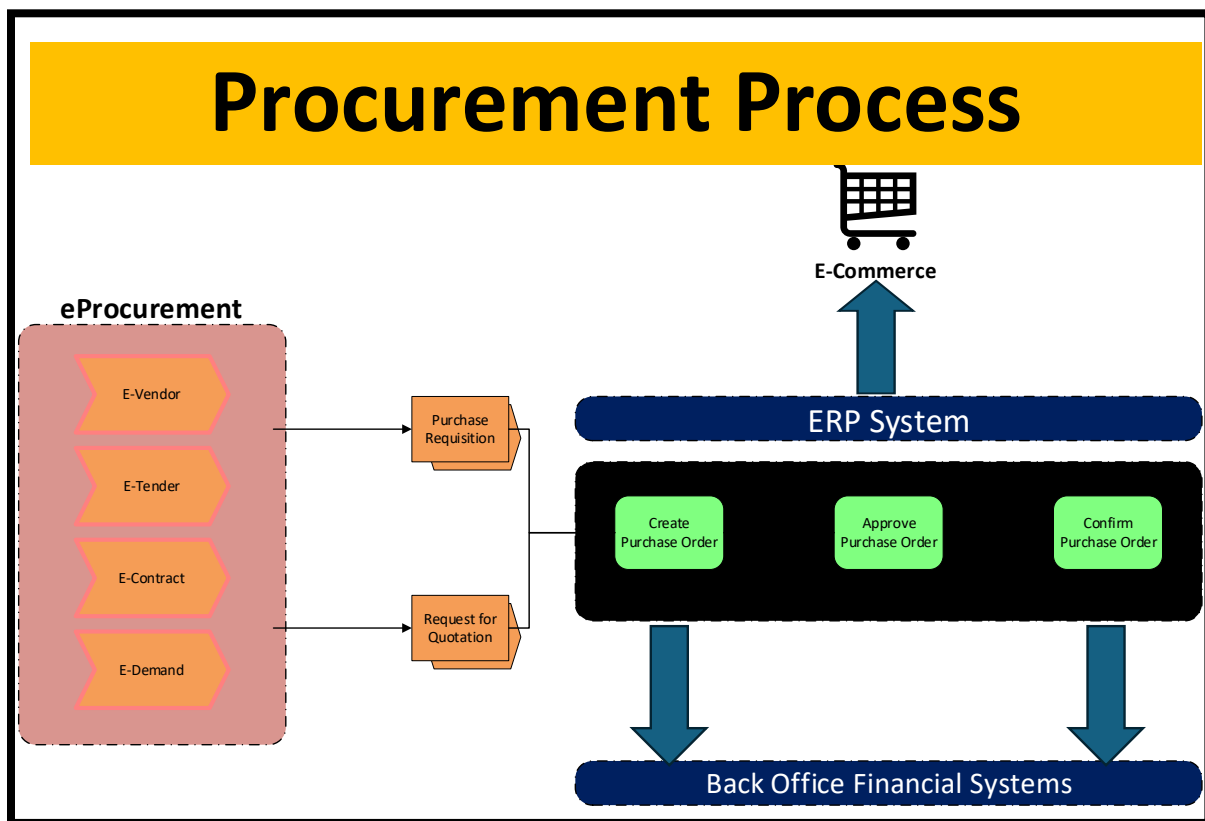


Figure 4 - Procurement Process

## 6.5. Shipping and Logistics

### 6.5.1. Unified Platform:

- Business Central offers a centralized platform for managing inventory, sales orders, and shipping logistics. This integration helps maintain accurate records across all departments.

### 6.5.2. Inventory Management:

- Track inventory levels in real time, ensuring you always have sufficient stock to fulfil orders.
- Set up alerts for low inventory levels to prevent stockouts.

### 6.5.3. Shipping Integration:

- Integrate with various shipping carriers (e.g. DHL, FedEx, etc) directly from Business Central for real-time shipping rates and label generation.
- Generate shipping labels automatically based on order details.

### 6.5.4. Tracking and Notifications:

- Provide customers with tracking information directly from Business Central, keeping them informed about their shipment status.
- Set up automated notifications for order confirmation, shipping updates, and delivery confirmation.

## 6.6. Payment Processing and Pricing Strategy

### 6.6.1 Vendor Payments

- **Automated Payment Proposals:** Business Central allows you to create payment proposals based on due dates and vendor terms, helping you manage cash flow efficiently.
- **Multiple Payment Methods:** Supports various payment methods such as checks, bank transfers, and electronic payments.
- **Payment Journal:** You can enter and process vendor payments through a payment journal, allowing for easy tracking and reconciliation.

### 6.6.2 Customer Payments

- **Customer Invoicing:** Create and send invoices directly from Business Central and manage customer payments against those invoices.

- **Receipt Management:** Handle customer payments by recording receipts, whether they're received in cash, credit card, or bank transfer.
- **Customer Payment Reconciliation:** Automatically match customer payments with open invoices to ensure accurate accounting.

### 6.6.3 Electronic Payment Processing

- **Integration with Banks:** Connect directly with financial institutions to facilitate electronic payments and direct debits.
- **Payment Files:** Generate electronic payment files (e.g., ASV ) that can be uploaded to your bank's online platform.

### 6.6.4 Cash Management

- **Bank Account Management:** Manage multiple bank accounts within Business Central, track balances, and perform bank reconciliations.
- **Cash Flow Forecasting:** Use built-in reports to forecast cash flow based on payment terms, vendor payments, and customer receipts.

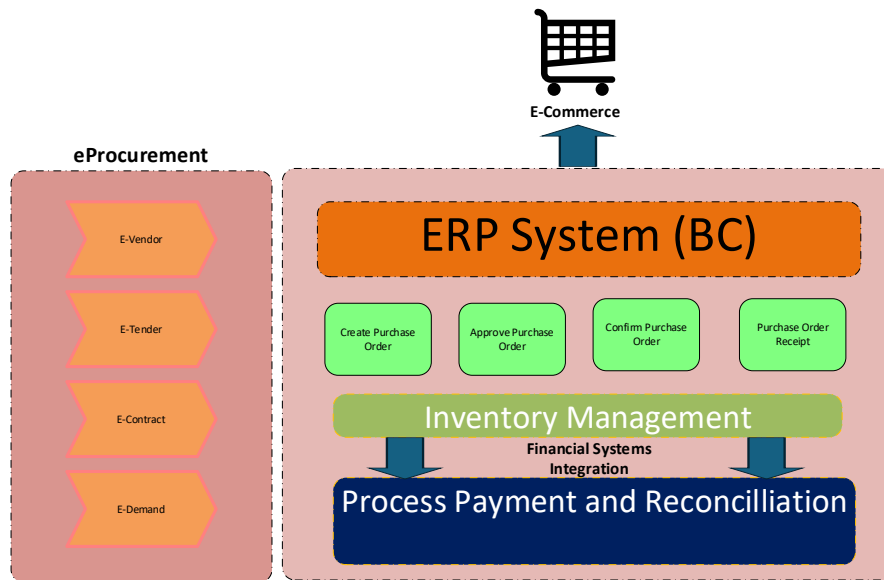


Figure 5 - Payment Processing and Pricing Strategy

## 6.7. Returns and Dispute Resolution

### 6.7.1. Initiation of Purchase Order Return Request

- **Identify the Need for Return:** The process begins when a product is found to be defective, incorrect, or otherwise unsatisfactory.

- **Submit Purchase Order Return:** The customer (or internal team) submits a return request. This could be done through an online form, email, or phone call.
- **Gather Information:** Collect necessary details such as order number, item details, reason for return, and any relevant supporting documentation.

### 6.7.2. Assessment of Purchase Order Return

- **Review Return Policy:** Ensure the return request complies with the company's return policy (e.g., time frame, condition of goods).
- **Evaluate Validity:** Assess the reason for the return. Common reasons include:
  - Defective or damaged items
  - Wrong item shipped
  - Buyer's remorse (may be subject to specific policies)
- **Approval or Rejection:** Approve or reject the return request based on the assessment. Communicate the decision to the requester promptly.

### 6.7.3. Purchase Order Return Authorization / Approval

- **Generate Return Authorization (RA) Number:** If the return is approved, create an RA number to track the return.
- **Communicate Instructions:** Send the return authorization details and instructions for returning the item to the customer or internal team. Include:
  - Shipping address
  - Deadline for return
  - Packaging requirements
  - Any required documentation (e.g., the original invoice, RA form)

### 6.7.4. Receiving and Inspecting Returned Items

- **Log Purchase Order Return Receipt:** Upon arrival, log the returned item into the inventory management system.
- **Inspect Condition:** Inspect the returned items to assess their condition. Verify against the return request and authorization.
- **Record Findings:** Document any discrepancies, damages, or issues discovered during the inspection.

### 6.7.5. Processing the Purchase Order Return

- **Restocking or Disposal:** Decide whether the item can be restocked, requires refurbishment, or needs to be disposed of.

- **Inventory Update:** Update inventory records to reflect the return status, adjusting stock levels accordingly.

#### 6.7.6. Refund or Replacement

- **Initiate Refund:** Process refunds to the customer using the original payment method, if applicable.
- **Send Replacement:** If a replacement is requested, initiate the shipping process for the new item.

### 6.8. Data Management and Analytics

#### 6.8.1. E-Commerce Data Management

E-commerce data management involves the processes and technologies used to collect, store, analyse, and manage data generated from e-commerce activities. It is crucial for understanding customer behaviour, optimizing operations, and making data-driven decisions.

##### Key Components:

- **Data Collection** - Gathering data from various sources such as website analytics, sales transactions, customer feedback, and social media.
- **Data Storage** - Utilizing databases and cloud storage solutions to securely store e-commerce data.
- **Data Integration** - Combining data from different systems (e.g., CRM, ERP, e-commerce platforms) to create a unified view of business operations.
- **Data Analysis:** Analysing data to derive insights on customer preferences, sales performance, and market trends.
- **Data Governance** - Implementing policies and procedures to ensure data accuracy, security, and compliance with regulations.

#### 6.8.2. E-Procurement

E-procurement refers to the use of electronic methods, typically over the Internet, to facilitate the procurement of goods and services. It involves automating purchasing processes to improve efficiency, reduce costs, and enhance transparency.

##### Key Components:

- **Electronic Purchase Orders** - Automating the creation, approval, and sending of purchase orders to suppliers.

- **Supplier Management** - Maintaining a database of approved suppliers, including their contact information, product offerings, and performance metrics.
- **Catalog Management** - Creating and managing online catalogues where employees can browse and select products.
- **Invoicing and Payment** - Streamlining invoice approval and payment processes to reduce delays and improve cash flow.
- **Contract Management** - Storing and managing contracts electronically, ensuring compliance and easy access to terms and conditions.
- **Spend Analysis** - Analyzing purchasing data to identify trends, savings opportunities, and compliance issues.

### 6.8.3. Data Analytics Capabilities

- **Reporting and Dashboards:**
  - Use built-in reporting tools to generate purchase order reports that highlight key metrics such as order quantities, costs, and delivery times.
  - Create custom dashboards that visualize data related to purchase orders, allowing for real-time insights into procurement activities.
- **Key Performance Indicators (KPIs)** – Track KPI's such as
  - **Order Cycle Time:** The average time taken from placing an order to receiving goods.
  - **Cost Savings:** Evaluate savings achieved through negotiations and bulk purchasing.
  - **Supplier Performance:** Measure metrics like on-time delivery rates and order accuracy.
- **Spend Analysis:**
  - Analyse spending patterns by vendor, category, or time period to identify cost-saving opportunities.
  - Monitor compliance with budgetary constraints and procurement policies.
- **Forecasting and Demand Planning:**
  - Leverage historical purchase order data to forecast future procurement needs and improve demand planning.
  - Identify trends in purchasing behaviour to adjust inventory levels accordingly.
- **Integration with Power BI:**
  - Use Microsoft Power BI to create advanced analytics and visualizations by connecting it to Business Central.
  - Build interactive dashboards and reports that aggregate purchase order data with other business metrics.

## 6.9. Security and Compliance

### 6.9.1. Security Measures

- **Data Encryption:** Use HTTPS to secure data in transit, protecting sensitive information such as payment details and personal data.
- **Secure Payment Gateways:** Implement trusted payment processors that comply with standards like PCI DSS (Payment Card Industry Data Security Standard).
- **Firewalls and Intrusion Detection Systems:** Employ these to protect against unauthorized access and attacks.
- **Regular Security Audits:** Conduct vulnerability assessments and penetration testing to identify and rectify security weaknesses.
- **Multi-Factor Authentication (MFA):** Require multiple forms of verification for account access, especially for sensitive operations.

### 6.9.2. Compliance Regulations

The E-Commerce and E-Procurement system is compliance to South African regulations regarding consumers, processing of information, transparency and electronic transaction such as:

- Electronic Communications and Transactions Act (ECTA)GDPR (General Data Protection Regulation)
- Consumer Protection Act (CPA) - Protects consumers in all transactions, including e-commerce.
- Protection of Personal Information Act (POPIA) - Regulates the processing of personal information.
- Promotion of Access to Information Act (PAIA) - Ensures transparency and accountability in government and private bodies.



# 7 Proposed Implementation Plan

## 7.1 Implementation Approach

The implementation plan that Rifumo Holdings will be following will cover the 2 main functional areas. Although the implementation plan is not split into 2 separate plans, Rifumo is confident in the experience of its resources. The implementation team will be deployed in a manner to tackle all areas of the system development lifecycle of each relevant functional area.

### **Module or Functional Area – eCommerce**

#### **1. Project Initiation**

During this phase, Rifumo will include the bid process through to the production of the 'Project Charter'.

#### **2. Analysis & Design**

After the project has been kicked off, Rifumo will conduct JAD (Joint Application Development) sessions with the involvement of Customer's key users to build a working prototype of the proposed eCommerce within the shortest of time. The business processes will be reviewed and mapped accordingly, while gaps are identified and resolved within this stage of the SDLC. A data migration plan will be drafted and approved by both parties.

The design of the system will take center stage while any customizations are being addressed.

Test scenarios are then developed and documented as feedback from the JAD and business process review,

#### **3. Development**

At this stage a test environment has been setup, key integration or interfaces are then reviewed during the various testing exercises being conducted, including user acceptance, unit testing and stress testing. Final review of the designed eCommerce solution, major system improvements or modifications can be done progressively. Key users or super users, that is, will then be trained so they may be the first line of support and assist in facilitating the end user training exercises.

#### **4. Deployment**

End user training will be conducted in anticipation for the Go Live date, role assignment, security access is being finalized at this stage. Procedure manuals and

operational manuals are then produced by Rifumo for both the super and end users of Customer. The complete system will then be deployed in the live environment, and Customer users begin to capture data in the live database. Rifumo will then be available on site for hand holding or onsite support to user.

## **5. Operation**

At this stage both parties, that is, Rifumo and Customer sign off on the project and close the project with the signing of a Service Level Agreement for support, and continual access to support resources.

## **Module or Functional Area – (Microsoft Dynamics 365 Business Central & Supplier Management)**

### **1. Analysis**

During the analysis phase of the eCommerce project, the Customer and the Rifumo project team will conduct business process review sessions to fully understand the current environment and processes. During this stage, gaps are identified with their resolution, and this is all documented in the 'Functional Requirements Document'.

### **2. Design**

The design specification will then highlight all proposed business processes for the purchase & payables function. Some critical areas of the supplier and payments management function and reports will be configured and designed. The data migration process will be outlined, with the necessary templates being submitted to Customer for processing. Test cases and scenarios will then be drafted for the testing stage.

### **3. Development**

The application design and configuration begin, encompassing the key integration with the general ledger, security & workflows, document uploading, email and SMS integration, customization and integration including compliance with the user's requirements and all customizations will need to be addressed. Migration of historical data and take on data will take place and the Rifumo team begins to train the super users in anticipation of the deployment stage.

### **4. Deployments**

End user training will be conducted in anticipation for the Go Live date, role assignment, security access is being finalized at this stage. Procedure manuals and operational manuals are then produced by Rifumo for both the super and end users of

Customer. The system will then be deployed in the live environment, and Customer users begin to capture data in the live database. Rifumo will then be available on site for hand holding or onsite support to user.

## **5. Operation**

At this stage both parties, that is, Rifumo and Customer sign off on the project and close the project with the signing of a Service Level Agreement for support, and continual access to support resources.

## **7.2 Data Migration and Conversions**

Data migration will focus on

### **1. Master data for Payables**

Based on the methodology mentioned in this document, before the system can be deployed to production, all customizations, and master take on data will be in the system. Customizations can be reviewed during the User Acceptance Testing phase. All Take on data will be based on a chosen closing period and opening reports will be tested to balance with reports from the old system. These reports will be generated, backed up, submitted for approval, and signed, before adoption.

### **2. Cash book**

During the migration of data, it is critical to note that all Take on information, master(account) and balance information will need to be verified and signed off and approved by Customer. Rifumo will then sign off import the data.

## **7.3 Report Development**

Business Central has its own standard financial report such as trial balances, age analyses, subledger reports designed to be the foundation of the business's reports. Any other data-based reports can be added or customised for Customer's unique view and presentation. Dynamics 365 is equipped with Office 365 or Microsoft office integration and reports can either be printed to screen, directly from the system to paper or to a '.html' file and to Excel.

In addition to the use of filters and custom information views, the system allows the creation of reports directly from the trial balance based on user's reporting preferences. A custom dashboard view is available to produce charts and summarised views to aid key users in understanding the performance of their critical areas. Standard 'Top Ten' reports are available at the service provider/vendor level as well as the inventory and Account Payable level. Customer will need to highlight which areas to be assessed.

All minor enhancements to the standard reports will be tested in the development environment, deployed, and documented.

## 7.4 Systems and Resource Training

A key phase during the setting up of the ERP is the training phase before deployment. Users at all levels will be trained based on their roles and functional area. An administrator user, preferably from the IT department, will be trained on basic administration and management of the ERP solution. Refresher training exercises can be arranged based the SLA Service level Agreement arrangements and hours.

Training will be provided as the new modules are being deployed from Phase 1 up to Phase 3. Training for each module will be allocated an acceptable amount of time within each phase as either super user training, or end user training. According to the project plans, a total estimate of will be set aside for training.

## 7.5 System Testing

### **Testing Activities and Pre-Conditions**

The Solution Testing is conducted before releasing the final build for User Acceptance Testing (UAT). UAT Testing is conducted during the deployment phase, when Customer's key users review the overall solution for completeness and accept it as being fit for purpose.

In addition, Data Acceptance Testing may be performed once data migration has taken place and immediately before go-live occurs to ensure that all data has been successfully migrated from source data.

During testing, Solution testing, and UAT, all extensions—including configuration, custom coding, integration, reporting, and data migration—will be tested. The exact tests that will be performed are based on the specific requirement that is stipulated by Customer. Tests will be performed during the following testing activities when their pre-conditions have been met.

Example table shows activities based on the types of tests being conducted and the required pre-conditions.

Testing Activity	Requisite Pre-conditions
Solution Testing (Integration Testing)	<ul style="list-style-type: none"> <li>• The Test Plan has been reviewed.</li> <li>• Sprint Technical Preview has been conducted and all requirements have received sign off or a Change Request has been created out of the release scope.</li> <li>• The Daily Build has been completed and deployed in the appropriate test environment.</li> <li>• Communication and data transfer between custom systems.</li> </ul>
User Acceptance Testing	<ul style="list-style-type: none"> <li>• The requirements of the solution have received sign-off during the Technical Preview or a Change Requested has been created out of release scope.</li> <li>• Solution Testing has been completed.</li> <li>• The Test Plan has been reviewed.</li> <li>• UAT test scripts have been developed.</li> <li>• The corresponding Testing environment has been set up and configured.</li> <li>• Test Data has been migrated to the corresponding Testing environment.</li> </ul>
Data Acceptance Testing	<ul style="list-style-type: none"> <li>• The Test Plan has been reviewed.</li> <li>• Data Migration Requirements have been reviewed.</li> <li>• Data Migration Test Scripts have been developed.</li> <li>• Source System/Legacy data has been gathered and cleansed prior to migration.</li> <li>• Data Migration Mapping has been completed and transformations have been executed on the source data.</li> </ul>

Table 1: Testing Activities

## 7.6 On-going Support Services

Our support services packages will allow you to utilize Rifumo’s expertise in the way that best suits Customer’s business needs. Whether the support is needed for the Dynamics 365 Business Central ERP solution, or eCommerce applications assistance, Rifumo will fully provide support.

A Service Level Agreement can be used for any of the following:

- Break/fix Issues
- Solution Enhancements
- Customizations
- Development
- On-site or off-site Consultancy

- On-site User Training
- Telephone Support
- Advisory Service
- Remote Assistance
- Upgrades

There are also additional guidelines to the support and response that Rifumo follows to provide Customer with the best value for the SLA and from available support personnel. Standard solution deployment procedure requires any program error or new requirement to be;

- Detailed and documented.
- Error to be investigated and determined in test environment.
- Solution to be tested in test environment.
- Test environment solution to be signed off before deployment on production system after thorough testing.
- Solution to be deployed in production.
- Final user-acceptance conducted.
- Solution signed off.

## 7.7 Other Requirements.

Microsoft Dynamics 365 for Business Central offers role-based security functionality, which will separate key user access based on job roles within Customer as an organization and within the ERP solution. An integral feature of the ERP solution is the integration of the entire system with the general ledger accounts to minimize the multiple posting of data and centralization of organizational information across the various and unique business functions within Customer.

### 7.7.1 Azure Data Residence Requirements.

Microsoft has South Africa as one of its Azure Regions, an Azure Data Region is a combination of multiple centers, and South Africa has 2 data centers (North - Gauteng and South – Western Cape) therefore if Customer should choose the cloud solution, Dynamics 365 Business Central will be hosted in one of these South African Data regions.

### 7.7.2 Information Security Requirements.

Each end-user and key-user will be assigned a user ID and password as the first level of security. In addition, the user IDs, roles will then be assigned to the Customer user groups based on the specific tasks each user must perform within the system. This second level of security will determine what each user views and has access to viewing, capturing, and posting.

Posting restrictions can further be applied on open or closed accounting periods by user groups or by business unit. Further controls may be provided through the implementation of approval workflows on key processes within the ERP system, which will further restrict the unauthorized manipulation of the system’s data. Each posted transaction will however be tagged with the user ID of the user responsible for posting the transaction, thus adding to the comprehensive audit trail capabilities of Dynamics 365 Business Central.

The use of automatically generated One-Time Pin codes using the user’s mobile number can add strength to the standard security features offered by Business Central.

### 7.7.3 Disaster Recovery.

The Data Recovery plan in a Cloud based environment will be determined by engaging data centre owner, that is, Microsoft. However, all data will be stored securely on the Microsoft Data Centres.

## 7.8 Out of Scope or Exclusions

Any area or delivery not explicitly included in the areas in scope section of this document is deemed out of scope for Rifumo’s implementation of the Customer Smart E-Invoice Solution.

Specific items seen to be out of scope for this project are listed in the following table. Please note that the below exclusions are not exhaustive, and further discussions may be necessary to fully understand and document all exclusions once the project analysis phase has started.

Item	Description
<b>Data governance policy implementation</b>	While the scope of work includes an analysis of existing data governance, security and best-practice policies, the actual implementation of these policies or changes to them is outside the scope of the project.
<b>Source system modifications</b>	Any required changes or modifications to the source systems from which the data is drawn will be outside the scope of this project.
<b>Data cleansing in source systems</b>	While data quality checks and cleansing activities are included within the data warehouse, the cleansing of data at the source systems is not included.



<b>Non-priority system data integration</b>	The data integration for systems that are not designated as 'priority' in the initial stages of the project may not be included in the scope.
<b>Custom analytics or reporting requests</b>	The development of custom analytics or reports outside of the agreed-upon priority and standard analytics and reports.
<b>End-User Hardware or Software</b>	Provision or upgrade of end-user hardware or software tools to access the analytics and reporting platforms is not included.
<b>Azure Consumption Costs</b>	While the Azure platform will be used for data storage, any costs associated with the increase in data storage due to data ingestion, data storage overages, or related to specific Azure services are not covered in this SOW and will be for Customer's account.
<b>Infrastructure</b>	Hardware procurement and sourcing will be for the ownership of Customer.
<b>Physical data security</b>	While data security within the Azure platform is a part of the project, physical security of the servers or data centres (in the case of hybrid solutions) is not covered in this SOW.

Table 2: Out of Scope

## 7.9 Project Dependencies

The following project assumptions apply to Rifumo's efforts and associated scope of work shared in this Smart E-Invoice solution implementation proposal:

<b>Item</b>	<b>Description</b>
<b>Customer Involvement</b>	<ul style="list-style-type: none"> <li>▪ Customer will assign a project sponsor to the project.</li> <li>▪ Customer will assign a project manager/lead to the project, with the responsibilities for the project manager to include the following: <ul style="list-style-type: none"> <li>○ Acting as a single point of contact into <b>Customer</b> for the project team.</li> <li>○ Management of Customer assigned project escalations.</li> <li>○ Arrange meetings with Customer stakeholders as required.</li> </ul> </li> <li>▪ Customer resource availability is the responsibility of assigned Customer project manager.</li> </ul>
<b>Customer Resources</b>	<ul style="list-style-type: none"> <li>▪ Customer to ensure that Rifumo has access to all relevant resources for the duration of this engagement. <ul style="list-style-type: none"> <li>○ All business unit or process owners that will be impacted by the solution.</li> <li>○ A single individual from all operational areas who will be using the solution.</li> </ul> </li> </ul>



<p>Error! Unknown document property name. <b>Facilities</b></p>	<ul style="list-style-type: none"> <li>▪ Customer will provide the required facilities, namely: <ul style="list-style-type: none"> <li>○ A board room or training room capable for hosting workshops/meetings.</li> <li>○ A workspace for Rifumo resources for the periods of the engagement.</li> <li>○ A whiteboard with markers.</li> </ul> </li> </ul>
<p><b>Data Availability and Quality</b></p>	<p>The project depends on the availability and quality of data from the source systems. Poor data quality may require additional effort in data cleansing that may not be included in this project scope.</p>
<p><b>Access to existing systems</b></p>	<p>The team requires sufficient access to existing data, analytics, and reporting systems to conduct thorough analyses.</p>
<p><b>Timely Approvals</b></p>	<p>Gaining timely approvals for deployments, changes, and system access is critical to avoid project delays.</p>
<p><b>Technical infrastructure</b></p>	<p>The existing technical infrastructure needs to be robust enough to support the new data platforms and systems.</p>
<p><b>Source System stability</b></p>	<p>The stability and availability of source systems from which data is being ingested are vital to maintain the planned project schedule.</p>
<p><b>Security compliance</b></p>	<p>Compliance with data security policies is critical, and any adjustments or changes to meet these requirements are dependent on the internal security teams.</p>
<p><b>Software and tools</b></p>	<p>The project is dependent on the availability and performance of Microsoft Azure, PowerBI and Business Central SaaS. Any outages, updates, or changes to these tools could impact the project timeline and outcomes.</p>
<p><b>DevOps</b></p>	<ul style="list-style-type: none"> <li>▪ Rifumo will utilise their Azure DevOps instance for management of the activities to ensure that the deliverables are met. <ul style="list-style-type: none"> <li>○ Customer is liable for any licensing and setup required for this.</li> <li>○ License costs may be deferred if Customer has applicable licensing that can be utilised.</li> <li>○ Alternatively, Rifumo will align with any such tooling that Customer uses and will train the Rifumo team.</li> <li>○ Training costs are for <b>Customer's</b> expense.</li> </ul> </li> <li>▪ Azure DevOps license pricing is subject to the USD / ZAR exchange rate fluctuations.</li> </ul> <p><b>Information:</b>  The Azure DevOps features, and pricing are as per the following link:  <a href="https://azure.microsoft.com/en-us/pricing/details/devops/azure-devops-services/">https://azure.microsoft.com/en-us/pricing/details/devops/azure-devops-services/</a></p>

	<ul style="list-style-type: none"> <li>▪ Should Customer opt to utilise an on-premise TFS environment, the time put aside for setting up the Azure DevOps environment will instead be utilised to plan how this will be done and will factor into account what aspects will need to be configured and the current setup. <ul style="list-style-type: none"> <li>○ An output of this will be an estimate to get the same functionality setup with TFS.</li> </ul> </li> </ul>
<b>Travel</b>	<ul style="list-style-type: none"> <li>▪ Travel &amp; Accommodation is excluded from the price quoted whereby Customer will be invoiced monthly for such expenses. <ul style="list-style-type: none"> <li>○ Where so required the Rifumo team members allocated to this project will be working from the premises of Customer.</li> <li>○ Travel is calculated as the extended distance beyond the resource's travel to the nearest Rifumo office, in a single direction only.</li> <li>○ The cost will be based on the official AA rates.</li> </ul> </li> </ul>

Table 3: Project Dependencies

## 8 Technical Approach and Methodology

### 8.1 Methodology

Our implementation methodology for Customer will be the trusted and proven Microsoft SureStep Agile/Waterfall Methodology. SureStep methodology is an industry best-practices methodology developed by Microsoft to facilitate the on-time and on-budget completion of projects, to reduce project risks for the partner and customer and to ensure that the solution meets the customer's highest.

A waterfall methodology is a breakdown of project activities into linear sequential phases, where each phase depends on the deliverables of the previous one and corresponds to a specialization of tasks.

The diagram below is a graphical display of the phases in the SureStep Methodology.

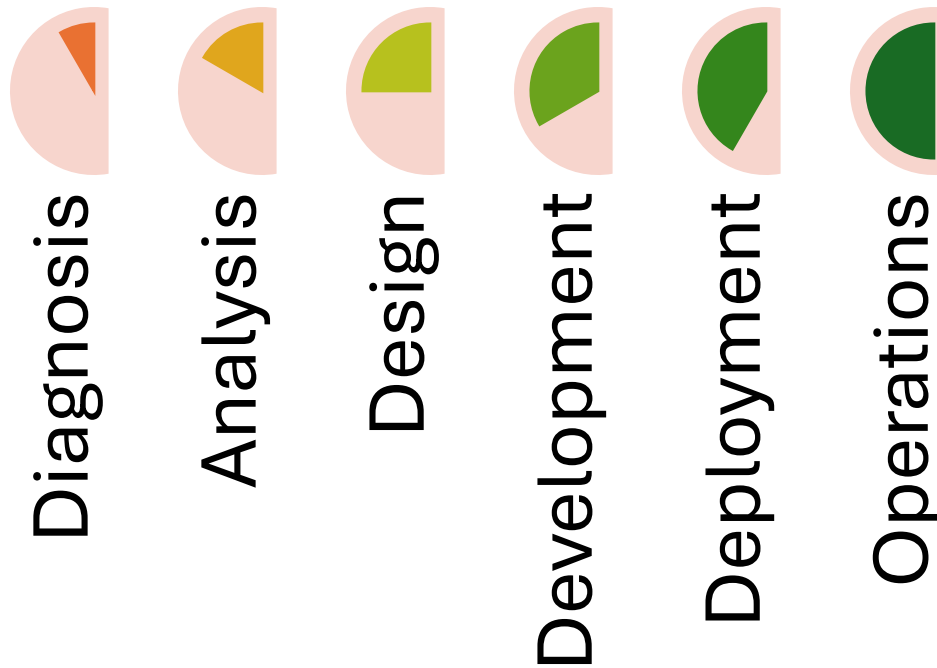


Figure 6: SureStep Project Lifecycle Phases

The benefits of the Microsoft SureStep method for our customers are:

- Allows you to keep control of project efficiency and success
- Supports close collaboration, communication and coordination in ongoing projects
- Ensures that the process is fully documented in a standardized, integrated manner
- It can be scaled to any size of business
- It can be adapted to any project type (local, global, central or decentralized)

### 8.1.1 Diagnostic Phase

The initial phase in our Methodology will be the Diagnostic Phase, where we will facilitate sessions with all stakeholders and decision makers to re-affirm and finalise requirements as stated in the tender document.



Figure 7: Sure Step Diagnosis Phase

#### Key Activities/ Deliverables

The goal of the Diagnostic phase is to gather enough information to define the high-level project scope and make a confident proposal for the remaining phases of the implementation. The major deliverable is the implementation proposal and contract.

### 8.1.2 Analysis Phase

The Analysis phase represents the official start of the implementation project. The overall goal is to define and agree upon all the business requirements related to the new Microsoft Dynamics™ solution. This includes the business and data migration requirements, as well as integration requirements. The major deliverable is the comprehensive functional requirements document.

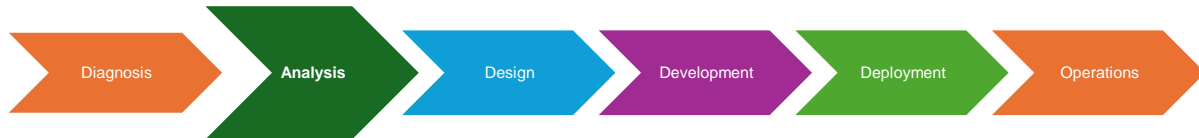


Figure 8: SureStep Analysis Phase

#### Key Activities/ Deliverables

- Key User Training
- Detailed Business Process Analysis
- Gap/Fit Analysis
- Gap Resolutions
- Description of Interfaces
- Data Migration Plan
- Project Plan
- Functional Requirements Document

### 8.1.3 Design Phase



Figure 9: SureStep Design Phase

#### Key Activities

The goal of the Design phase is to define how the business requirements will be implemented. The phase includes design of both the overall Microsoft Dynamics™ solution

configuration and the design of specific customizations and integrations needed to satisfy business requirements identified during the Analysis phase. The customizations can range from simple user interface or report modifications to complex functionality additions or modifications. The phase also includes mapping and designing processes for data migration, as well as an analysis of current hardware and infrastructure environment to ensure optimum system performance, (on premise or in the cloud).

### **Deliverables**

- Design Specifications
- High level design specifications
- Technical design specifications
- Data Migration Design and Mapping
- Test Cases, Scenarios and Plan
- Technical architecture and infrastructure support

### 8.1.4 Development Phase



*Figure 10: SureStep Development Phase*

### **Key Activities**

The goal of the Development phase is to develop the customizations, integrations and data migration processes that are defined and approved in the design specifications. The major deliverables are the completed feature customizations, reports, integrations and data migration processes. Each component is tested and verified to be functioning according to specifications.

### **Deliverables**

- Feature customizations coded and tested, including integrations
- Data migration processes and Conversion coded and tested as per the requirements in the RFP

### **Data Conversion Architecture**

The Data Import/Export Framework creates a staging table for each entity in the Microsoft D365 database where the target table resides. Data that is being migrated is first moved to

the staging table. There, you can verify the data, and perform any cleanup or conversion that is required. You can then move the data to the target table or export it.

## Systems Integration - The Import/Export Process

The following diagram shows the steps that are required to import or export data in Microsoft Dynamics 365 Business Central.

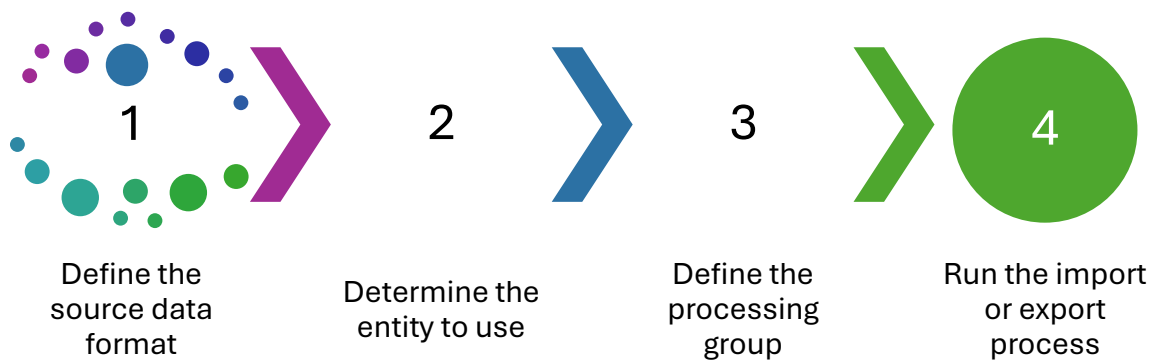


Figure 11: Data export/import process

Determine the source of the data to export or import and create a source data format for the data.

1. Determine which entity to associate with the data. This entity is either the source of the export data or the target for the import data. You can use an existing entity or create a custom entity.
2. Determine which entities should be imported or exported together and put all these entities in a processing group. A processing group is a set of entities that must be processed in a sequence, or that can logically be grouped together. The entities in a processing group are exported together, or they are imported together from source to staging and then from staging to target. In a processing group, you also associate each entity with a source data format.
3. Use the processing group options to either import or export data. For import, you first import the data to a staging table, where you can clean or transform the data as you require. You should validate that the data appears accurate, and that the reference data is mapped correctly. You then migrate the data from the staging table to the target table. You should validate that the entity appears accurate in the target table.

For export, you also move the data from the source to a staging table, where you can clean or transform the data as you require. You then export the data to Microsoft Dynamics 365 Business Central.

### 8.1.5 Deployment Phase



Figure 12: SureStep Deployment Phase

#### Key Activities

The Deployment phase is where all the efforts of the project team come together for a successful transition to the new Microsoft Dynamics 365 Business Central solution. There are several important activities that must be completed to reach the end goal. The phase includes all the activities related to final system and load testing, training End Users, and the actual cut-over to the new production environment.

#### Deliverables

- Go Live Plan and Checklist
- System (User Acceptance) Test Plan, as per Testing and Acceptance requirements in RFP
- End User Training Plan and Training Documentation, (user, training manuals etc.)
- Functioning Live (Production) System

### 8.2 Operation Phase



Figure 13: SureStep Operation Phase

#### Key Activities

The goal of the operation phase is to transition the customer from the implementation project into on-going support following a successful go live. The deliveries for this phase

include final project and software related documentation, project review documentation, and on-going support contracts. At the end of this phase, the project will be transitioned to the customer and on-going support.

### **Deliverables**

- System Acceptance Sign-off
- Facilitating User adoption through proper training plan
- Project Review Documentation
- Post Live Support Agreement, (System Stabilization Support)
- SLA Schedule of Services Doc. (Provided with RFP response, please note scope needs to be confirmed with Customer).

## **8.3 Communication Plan**

A formal process will be employed to facilitate communication during the delivery of the scoped services. There will be two key vehicles for providing this communication: a weekly status report and a weekly status meeting.

- The Rifumo Project Manager, working in conjunction with Customer Project Manager, will compile status reports for distribution to both Customer and Rifumo Management.
- Meetings will be held to review overall status, the project schedule and open issues noted in the status report.
- Additionally, a Steering Committee will be constituted, and a meeting will be conducted on a monthly basis, after which a status report will be prepared and circulated.

## **8.4 Issue Management Procedure**

A formal process will be employed to track and resolve Service issues. The following general procedure will be used to identify and manage project issues:

1. Identify.
2. Document.
3. Assign Responsibility.
4. Monitor and Report Progress.
5. Communicate Issue Resolution.



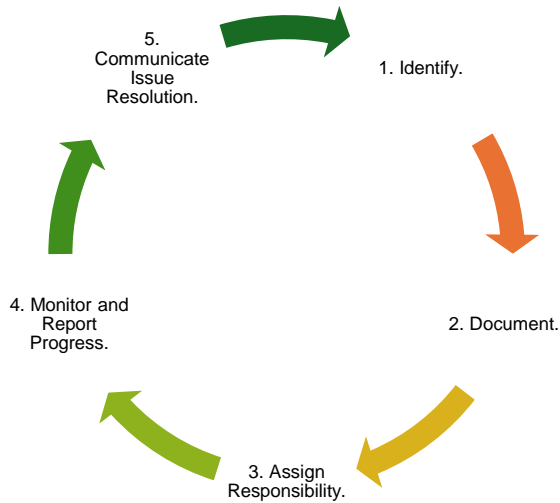


Figure 14: Issue Management process

## 8.5 Change Control

During the delivery of the scoped services, items might arise that are outside the scope of work contemplated by either party. To address such items so that they are given proper consideration and to increase the probability that project scope is carefully managed, and costs are contained, Rifumo will employ a formal change control process.

The proposed change control process that Rifumo will employ is as follows:



Figure 15: Change Control Process

## 9 Project Roles and Responsibilities

### 9.1 Rifumo Roles and Responsibilities

Role	Responsibilities
<b>Functional Consultant</b>	<ul style="list-style-type: none"> <li>▪ Responsible for configuring and customizing the Microsoft Dynamics application to achieve the customer's business requirements.</li> </ul>
<b>Solution Developer</b>	<ul style="list-style-type: none"> <li>▪ Responsible for the design and development of modifications to the Microsoft Dynamics standard application and integrations to the customer's existing systems.</li> </ul>
<b>Technical Team Lead</b>	<ul style="list-style-type: none"> <li>▪ Serve as primary technical point of contact for the team responsible for technical architecture and code deliverables</li> </ul>
<b>Power BI Report Developers</b>	<ul style="list-style-type: none"> <li>▪ Develops data models for priority reports/analytics.</li> <li>▪ Develops all business logic, measures, and calculations.</li> <li>▪ Develops priority report front ends including static reports and dashboards.</li> </ul>
<b>Project Manager</b>	<ul style="list-style-type: none"> <li>▪ Manage and coordinate Rifumo project delivery.</li> <li>▪ Take responsibility for problem and risk management, change management, project priorities, status communications, and status meetings.</li> <li>▪ Coordinate Rifumo and subcontractor resources but not the Customer resources.</li> <li>▪ Serve as a single point of contact for escalations, billing problems, personnel matters, and contract extensions.</li> </ul>
<b>Azure Infrastructure Engineer</b>	<ul style="list-style-type: none"> <li>▪ Assists with the deployment and configuration of Azure services.</li> <li>▪ Ensures the security of the data platform.</li> <li>▪ Validates the security of integrations and system changes.</li> <li>▪ Manages system maintenance, backups, and recovery plans.</li> </ul>
<b>Solution Architect</b>	<ul style="list-style-type: none"> <li>▪ Define the architecture and technical requirements for the solution</li> <li>▪ Design and develop the framework and tools best suited for the Customer environment.</li> </ul>

Table 4: Rifumo Project team Roles and Responsibilities

## 9.2 Customers' Roles and Responsibilities

Role	Responsibilities
<b>Project Sponsor</b>	<ul style="list-style-type: none"> <li>▪ Provides strategic guidance and makes key decisions.</li> <li>▪ Resolves any high-level issues or risks.</li> <li>▪ Approves critical project elements and changes.</li> </ul>
<b>Project Manager</b>	<ul style="list-style-type: none"> <li>▪ Provide the estimated project commitment: part-time.</li> <li>▪ Serve as primary point of contact for the project team.</li> <li>▪ Manage and coordinate the overall project.</li> <li>▪ Take responsibility for resource allocation, risk management, project priorities, and communication with executive management.</li> <li>▪ Manage day-to-day project activities.</li> <li>▪ Coordinate team activities to complete deliverables according to the project schedule.</li> </ul>
<b>Product Lead</b>	<ul style="list-style-type: none"> <li>▪ Identifies and include appropriate stakeholder representatives as needed.</li> <li>▪ Participate in the workshops.</li> <li>▪ Determine a remediation strategy that is based on the findings document and remediation and rationalization guidance.</li> <li>▪ Provide additional information and answer questions regarding the current implementation, if relevant.</li> </ul>

Table 5: Customer Project Team Roles and Responsibilities

# 10 Pricing Summary

<b>E-Commerce Proposed Implementation Plan</b>				
<b>WBS</b>	<b>Phases/Tasks</b>	<b>Resources</b>	<b>Hours/Resource</b>	<b>Project Cost</b>
<b>1</b>	<b>Analysis</b>		<b>1744</b>	<b>R4 572 500,00</b>
1,1	JAD Sessions	BA, FC	189	R557 550,00
1,2	Review Business Process Analysis	BA, FC	128	R377 600,00
1,3	Gap/Fit Analysis	FC, BA	156	R460 200,00
1,4	Gap Resolutions	FC	210	R304 500,00
1,5	Description of Interfaces	SD, FC	228	R672 600,00
1,6	Data Migration Plan	PM/FC	325	R991 250,00
1,7	Detailed Project Plan	PM	78	R124 800,00
1,8	Functional Requirements Document	BA, FC	120	R354 000,00
1,9	Change Management	PM	180	R288 000,00
1,10	Peer Review	TL, FC, BA	78	R358 800,00
1,11	Sign Off	PM	52	R83 200,00
<b>2</b>	<b>Design Phase</b>		<b>1568</b>	<b>R2 985 600,00</b>
2,1	Design Specifications	FC, BA, SD	206	R916 700,00
2,2	Technical Design & Solution Architecture	SA	306	R504 900,00
2,3	Data Migration Design and Mapping	FC	580	R841 000,00
2,4	Test Cases, Scenarios and Plan	FC	308	R446 600,00
2,5	Peer Review	TL	152	R250 800,00
2,6	Sign Off	PM	16	R25 600,00
<b>3</b>	<b>Development Phase</b>		<b>3602</b>	<b>R5 850 400,00</b>
3,1	Application Set Up, Security, Company, Workflow, Modules, Reports & BI Configuration	FC	365	R529 250,00
3,2	Code Development & Customization	SD	768	R1 152 000,00
3,3	Components Integration	SD	980	R1 470 000,00
3,4	Data Migration	FC	820	R1 189 000,00
3,5	System Testing - Unit, Integration, System, Acceptance	FC, SD	350	R1 032 500,00
3,6	Super User Training and Manuals	FC	240	R348 000,00
3,7	Peer Review	TL	65	R107 250,00
3,8	Sign Off	PM	14	R22 400,00
<b>4</b>	<b>Deployment Phase</b>		<b>1237</b>	<b>R3 320 455,00</b>
4,1	Deployment Plan and Change Request	PM	206	R329 600,00
4,2	Test Plan & Cases	LT, JT, FC	253	R919 655,00
4,3	End User Training Plan and Training Documentation, (User, Training Manuals etc)	FC	156	R226 200,00

4,4	User Training	FC	130	R188 500,00
4,5	Go Live (Production) System	FC, SD,PM	140	R637 000,00
4,6	Hand Holding Support	FC, SD	338	R997 100,00
4,7	Sign Off	PM	14	R22 400,00
<b>5</b>	<b>Operation Phase</b>		<b>406</b>	<b>R649 600,00</b>
5,1	Change Management	PM	102	R163 200,00
5,2	Project Review Documentation	PM	154	R246 400,00
5,3	Project Closure Report & Meeting	PM	150	R240 000,00
5,4	Support under SLA	FC		
<b>Total Implementation Cost Exclusive of VAT</b>				<b>R17 378 555,00</b>
<b>VAT @15%</b>				<b>R2 606 783,25</b>
<b>Total Project Cost Inclusive of VAT</b>				<b>R19 985 338,25</b>

## Resource Legend

Roles Legend		
Code	Description	Cost
PM	Project Manager	1600
BA	Business Analyst	1500
FC	Functional Consultant	1450
TL	Technical Lead	1650
LT	Lead Tester	1100
SD	Senior Developer	1500
SE	Support Engineer	1100
JT	Junior Tester	1085
SA	Solution Architecture	1650

## 10.1 Validity Period

Unless otherwise stated in this document, the indicated costs and efforts are valid for a period of sixty (60) calendar days based on the proposal date. Beyond the indicated expiry date, the estimates will require confirmation or adjustment by Rifumo and Microsoft.

## 10.2 Warranty Period

Rifumo warrants the work governed under this Agreement and corresponding Work Order/s for a period of thirty (30) days from Sign-off and Acceptance by Customer, of the work completed for Customer or on go-live date.

## 10.2.1 Warranty Conditions

The warranty provided is specifically for any work completed (under the requirements defined within the Work Order), and that does not comply with:

- Approved specifications, or
- Approved change requests, or
- Written agreement between Customer and Rifumo.

## 10.2.2 Warranty Outcomes

Items covered under the warranty conditions outlined above will be fixed, changed, amended, or completed at Rifumo's cost.

*Rifumo currently has several applications available for purchase via the Azure Marketplace. To learn more about these Solutions and the Azure Marketplace, please click on the link below.*

<https://appssource.microsoft.com/en-us/marketplace/apps?search=rifumo&page=1>

<https://azuremarketplace.microsoft.com/en-s/marketplace/apps?search=rifumo&page=1>