

Enterprise Development Grant (EDG) Proposal

Evergreen AI — AI-Powered Business Operations & B2B E-Commerce Platform

Submitted by: Evergreen Group Pte Ltd **Date:** February 2026 **Document Reference:** EG-EDG-2026-001

1. Company Profile

1.1 Company Information

Field	Details
Company Name	Evergreen Group Pte Ltd
UEN	197801558C
Date of Incorporation	1978
Industry	Office Supplies Wholesale & Retail
Principal Business Activity	Distribution and retail of office supplies, stationery, and related products
Number of Employees	20
Annual Revenue	SGD 1,500,000
Registered Address	8 New Industrial Road, #01-02/03, LHK3, Singapore 536200
Contact Person	Mrs Wee
Email	mrswee@evergreen.com.sg
Phone	+65 9683 1343 / +65 9424 4633
Website	https://evergreen.com.sg
E-Shop	https://eshop.evergreen.com.sg

1.2 Business Background

Evergreen Group Pte Ltd is a well-established Singapore office supplies company founded in 1978, serving corporate clients, schools, and government organisations for over 45 years. The company distributes a wide range of office products including stationery, paper products, printing supplies, and office equipment through both B2B direct sales and online marketplaces (Shopee.sg, Lazada.sg).

With 20 employees across sales, marketing, and operations, Evergreen manages a product catalogue of over 5,000 SKUs and serves approximately 1,000 corporate customers. The company faces increasing competitive pressure from online retailers and large distributors, making operational efficiency and digital capabilities critical to maintaining market position and enabling growth.

Evergreen currently operates a custom ERP system for inventory and order management but relies heavily on manual processes for document handling, e-commerce content creation, quotation management, and corporate customer ordering — areas where AI and digital automation can deliver significant productivity improvements.

2. Problem Statement

2.1 Industry Context

Singapore's office supplies distribution industry is characterised by thin margins, high transaction volumes, and increasingly demanding corporate customers who expect fast turnaround, accurate pricing, and self-service ordering capabilities. While large distributors have invested in enterprise-grade systems, SMEs like Evergreen operate with legacy tools and manual workflows that limit scalability.

The rise of AI and e-commerce has created both a threat and an opportunity. Companies that fail to digitise risk losing customers to online platforms; those that adopt AI-powered automation can dramatically improve efficiency and customer experience.

2.2 Current Process & Pain Points

Evergreen's daily operations involve several manual, time-consuming processes:

1. **Document Processing** — Sales staff manually process 30–50 incoming documents daily (invoices, purchase orders, delivery orders) arriving via email, WhatsApp, and scanned paper. Each document requires **5–10 minutes** of manual data entry into spreadsheets for ERP import.
2. **E-commerce Listing Creation** — Marketing staff manually create product listings for Shopee and Lazada: photographing products, removing backgrounds, writing descriptions. Each SKU takes **20–30 minutes** to list, with 500+ products in the backlog.
3. **Quotation Preparation** — Sales staff manually prepare quotations for corporate customers by looking up past purchase history, current pricing, and typing out quotation documents. Each quotation takes **30–45 minutes**.
4. **Corporate Customer Ordering** — Corporate customers must call, email, or WhatsApp to place orders. Sales staff manually process these into the ERP system, taking **10–15 minutes per order**. There is no self-service ordering capability.
5. **Price Management** — Maintaining contract pricing for ~1,000 corporate customers is done via spreadsheets. Checking the correct price for a customer-product combination takes **3–5 minutes** and is error-prone.
6. **Customer Support** — Enquiries about pricing, order status, and product availability are handled ad-hoc via phone and WhatsApp, with no centralised tracking or history.

2.3 Key Challenges

Challenge	Impact
Manual document processing	4+ hours/day of repetitive data entry; frequent errors in ERP data
Slow e-commerce listing creation	500+ product backlog; losing online sales to competitors
Manual quotation preparation	Sales team spends 40% of time on admin instead of selling
No self-service ordering for corporates	Customers wait hours for order confirmation; lost orders
Spreadsheet-based pricing	Pricing errors; no audit trail; risk of revenue leakage
No budget visibility for corporate customers	Customer overspending; manual budget tracking

2.4 Business Impact

For Evergreen's current operation with **20 employees**, **1,000 corporate customers**, and **50+ daily documents**:

- **Document processing:** 50 docs × 8 min = **6.7 hours/day**
- **E-commerce listings:** 15 SKUs × 25 min = **6.3 hours/day**
- **Quotation preparation:** 10 quotes × 38 min = **6.3 hours/day**
- **Order processing:** 30 orders × 12 min = **6.0 hours/day**
- **Price checking & management:** 30 lookups × 4 min = **2.0 hours/day**

Total: Over **27 man-hours per day** consumed by manual processes that can be automated with AI. This is equivalent to **3.4 full-time employees** dedicated entirely to administrative tasks, representing approximately **SGD 120,000/year** in labour cost that could be redirected to higher-value activities.

3. Objective of Proposed Project

3.1 Project Goals

The objective is to develop **Evergreen AI**, an integrated AI-powered business operations and B2B e-commerce platform that automates document processing, e-commerce content generation, quotation management, and corporate customer ordering through a single unified system.

Measurable Targets

Objective	Target	Measurement
Reduce document processing time	From 8 min to 2 min per document	75% reduction
Increase e-commerce listing output	From 15 SKUs/day to 75 SKUs/day	5x increase
Reduce quotation preparation time	From 38 min to 5 min per quote	87% reduction
Enable self-service corporate ordering	From 12 min to 2 min per order	83% reduction
Automate price management	From 4 min to 0 min per lookup	100% automation
Overall admin effort reduction	Across all processes	75%+ reduction

3.2 Strategic Alignment with National Initiatives

Evergreen AI is directly aligned with several Singapore national strategies:

- **Smart Nation Initiative** — Introduces AI/LLM technology to a traditional wholesale distribution company, enabling data-driven operations and automated decision-making.
- **Retail Industry Transformation Map (ITM)** — Supports the ITM's focus on leveraging technology for operational efficiency and omni-channel commerce in the retail and wholesale sector.
- **SME Go Digital** — Provides an integrated AI solution for a long-standing SME, demonstrating that AI adoption is accessible and impactful for traditional businesses.
- **National AI Strategy 2.0** — Exemplifies practical enterprise AI adoption with measurable productivity outcomes, aligned with Singapore's push for broad-based AI utilisation.
- **Productivity Growth** — Delivers 75%+ productivity improvement across multiple business processes, enabling the company to scale without proportional headcount increases.

4. Proposed Solution

4.1 System Overview

Evergreen AI is a unified web-based platform with two integrated portals:

1. **Operations Portal (Internal)** — AI-powered document processing, e-commerce content generation, and quotation management for Evergreen's sales and marketing teams.
2. **B2B Procurement Portal (Customer-Facing)** — Self-service ordering platform for corporate customers with personalised contract pricing, budget controls, and AI-powered quick ordering.

Both portals share a common product catalogue and customer database, enabling seamless data flow between internal operations and customer-facing services.

4.2 Key Modules

#	Module	Description	Key Features
1	AI Document Processing	Automated OCR and data extraction from invoices, POs, and delivery orders	Multi-channel ingestion (email, WhatsApp, folder); AI-powered OCR + structured data extraction; side-by-side review UI; Excel export for ERP import; product catalogue matching
2	AI E-commerce Content Generator	AI-generated marketplace listings for Shopee and Lazada	Product photo enhancement (background removal, lifestyle shots); platform-specific titles, descriptions, and bullet points; content review queue; copy-to-clipboard for marketplace posting
3	AI Quotation System	Smart quotation generation from customer purchase history	Sales history analysis; AI-suggested product lists with historical pricing; professional branded PDF generation; direct email to customers; quotation tracking
4	B2B Procurement Portal	Self-service ordering with contract pricing and budget controls	Personalised catalogue (contract/public pricing); shopping cart with real-time budget display; PO creation; order history; budget enforcement (company + individual)
5	AI Quick Order	AI-powered bulk ordering from free-text input	Paste order list (any format); AI parses and matches to catalogue; one-click add to cart; handles SKUs, product names, and mixed formats
6	Customer Support	In-portal support channel	Customer enquiry submission; admin response queue; conversation history; file attachments
7	Contract Pricing Engine	Complex per-customer pricing management	Per-company contract pricing (permanent — can never increase); 3 visibility modes (contract-only / contract + public / public-only); manager approval workflow; price audit trail
8	Budget Control System	Dual-level budget enforcement	Monthly company budgets; individual user budgets; cost centre tracking; hard block when exceeded; automatic monthly reset

4.3 Key Differentiators

- **AI-First Approach** — Every module leverages AI: LLM for document extraction and content generation, computer vision for OCR and image enhancement, and natural language understanding for quick order parsing.
- **Unified Platform** — Document processing, e-commerce, quotations, and B2B ordering share a single product catalogue and customer database, eliminating data silos.

- **Permanent Pricing Guarantee** — Contract prices are enforced at the database level and can never be increased, building trust with corporate customers.
 - **Dual Budget Enforcement** — Both company-level and individual user budgets with database-level locking to prevent overspending, even under concurrent ordering.
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5. Technology Framework

5.1 Technology Stack

Component	Technology	Justification
Frontend	Next.js 14 + Tailwind CSS + shadcn/ui	Modern React framework; great for internal tools and customer portals
Backend	Next.js API Routes / Hono.js	Lightweight, high-performance TypeScript backend
Database	PostgreSQL	Enterprise-grade; strong constraint support for pricing rules and budget enforcement
AI/LLM	Google Gemini + OpenAI GPT-4o	Dual-model: Gemini for cost-effective document extraction; GPT-4o for high-quality content generation
OCR	Google Cloud Vision API	Best-in-class accuracy for mixed English/Chinese documents
Image AI	Remove.bg API + OpenAI DALL-E 3	Background removal + AI-generated lifestyle product shots
WhatsApp	GreenAPI	Document ingestion via WhatsApp Business API
Email	Resend + IMAP	Transactional emails + email document ingestion
File Storage	DigitalOcean Spaces (S3-compatible)	Cost-effective; Singapore region available
Hosting	DigitalOcean App Platform	Singapore region; cost-effective for SME deployment

5.2 Security & Compliance

Requirement	Implementation
Data Encryption	TLS 1.3 in transit; AES-256 at rest
Access Control	Role-based access control (Admin, Sales, Marketing, Customer)
PDPA Compliance	Data minimisation; consent management; retention policies
Pricing Integrity	Database-level constraint: contract prices can never increase
Budget Integrity	Database-level row locking for concurrent budget enforcement
Audit Trail	Complete logging of all pricing changes, orders, and data access
Data Residency	All data hosted in Singapore (DigitalOcean SGP1 region)
Backup	Automated daily backups with 30-day retention

6. Productivity Improvement Analysis

6.1 Before vs After Comparison

Process	Before (Manual)	After (Evergreen AI)	Time Saved	Improvement
Document Processing	8 min/doc	2 min/doc (review only)	6 min/doc	75%
E-commerce Listing	25 min/SKU	5 min/SKU (review only)	20 min/SKU	80%
Quotation Preparation	38 min/quote	5 min/quote (review only)	33 min/quote	87%
Corporate Order Processing	12 min/order	2 min/order (self-service)	10 min/order	83%
Price Checking	4 min/lookup	0 min (automated)	4 min/lookup	100%
Customer Support	15 min/enquiry (scattered)	5 min/enquiry (centralised)	10 min/enquiry	67%

6.2 Projected Impact (Current Operations Scenario)

Metric	Before	After	Savings
Daily admin man-hours	27.3 hours	6.5 hours	20.8 hours/day
Equivalent FTEs on admin work	3.4 staff	0.8 staff	2.6 FTEs freed
Monthly admin cost (at SGD 3,000/FTE)	SGD 10,200	SGD 2,400	SGD 7,800/month
Annual admin cost savings	—	—	SGD 93,600/year
E-commerce listing throughput	15 SKUs/day	75 SKUs/day	5x increase
Quotation turnaround	2–4 hours	15 minutes	90% faster
Corporate order turnaround	1–2 hours (manual)	Instant (self-service)	Immediate

6.3 Expected Outcomes

1. **75%+ reduction in overall administrative effort** — freeing sales and marketing staff to focus on revenue-generating activities.
2. **5x increase in e-commerce listing output** — accelerating the 500+ product backlog and capturing more online sales.
3. **87% faster quotation turnaround** — enabling sales team to respond to customer requests within minutes instead of hours.
4. **Self-service ordering for corporate customers** — eliminating phone/email order bottleneck and improving customer satisfaction.
5. **100% accurate pricing** — contract prices managed systemically with audit trail, eliminating spreadsheet errors and revenue leakage.
6. **Budget compliance** — automated enforcement ensures corporate customers never exceed approved spending limits.

7. Implementation Plan

7.1 Project Timeline

The project follows an Agile methodology over 3 months:

Phase	Duration	Deliverables
Phase 1: Foundation & Document Processing	Month 1 (Weeks 1–4)	Project setup, database schema, user auth, document ingestion (email/WhatsApp/folder), OCR integration, AI data extraction, document review UI, Excel export, product catalogue import
Phase 2: E-commerce, Quotations & B2B Portal	Month 2 (Weeks 5–8)	E-commerce content generation (text + images), content review queue, AI quotation builder, PDF generation, B2B portal (catalogue, cart, checkout, PO creation), contract pricing engine
Phase 3: Budget Controls, Integration & Launch	Month 3 (Weeks 9–12)	Budget enforcement system, AI quick order, customer support module, spending reports, end-to-end integration testing, UAT with Evergreen staff, production deployment

7.2 Milestones

Week	Milestone	Deliverable
Week 4	Document processing operational	OCR + AI extraction + review + Excel export working end-to-end
Week 6	E-commerce content live	AI-generated listings for Shopee/Lazada with photo enhancement
Week 8	B2B portal operational	Corporate customers can browse, order, and view budgets
Week 10	Full integration complete	All modules connected; pricing + budget enforcement verified
Week 12	Production launch	UAT complete; deployed to production; staff trained

8. Project Cost Breakdown

8.1 Development Costs

#	Component	Description	Cost (SGD)
1	AI Document Processing Module	OCR integration, LLM data extraction, multi-channel ingestion, review UI, Excel export	20,000
2	AI E-commerce Content Module	Product photo enhancement, listing generation (Shopee/Lazada), content review queue	16,000
3	AI Quotation System	Sales history analysis, AI quotation builder, PDF generation, email delivery	12,000
4	B2B Procurement Portal	Customer catalogue, shopping cart, checkout, PO creation, order management	22,000
5	Contract Pricing Engine	Per-company pricing, 3 visibility modes, approval workflow, price audit trail	8,000
6	Budget Control System	Company + individual budgets, cost centres, monthly reset, race condition handling	6,000
7	AI Quick Order & Customer Support	Paste-order AI parsing, support messaging system	5,000
8	Product Catalogue & Integration	Shared catalogue, CSV/Excel import, search, category management	3,000
9	Infrastructure & DevOps	Cloud setup, CI/CD, monitoring, security configuration	3,000
10	Testing & Quality Assurance	Integration testing, UAT, performance testing, pricing/budget validation	2,000

#	Component	Description	Cost (SGD)
11	Project Management	Sprint planning, coordination, documentation, training	1,000
	Total		98,000

8.2 Cost Justification

- **Modules 1 & 4** receive the highest allocation as they represent the most complex technical work: AI document processing requires OCR + LLM integration with multi-channel ingestion, while the B2B portal requires complex pricing logic, budget enforcement with database-level locking, and multi-tenant customer management.
- **Module 2** (E-commerce) involves AI image processing and dual-platform content generation with distinct format requirements.
- **Module 5** (Contract Pricing) is architecturally critical — the "price can never increase" constraint must be enforced at the database level with full audit trail.
- The total budget of **SGD 98,000** covers a comprehensive AI-powered platform that replaces 6+ manual processes with automated, intelligent workflows.

8.3 Annual Operating Costs (Post-Launch)

Item	Annual Cost (SGD)
Cloud Hosting (DigitalOcean)	4,800
AI/LLM API Usage (Gemini + OpenAI)	6,000
OCR API (Google Cloud Vision)	2,400
Image Processing API (Remove.bg)	1,200
WhatsApp API (GreenAPI)	2,400
Email Service (Resend)	600
SSL & Domain	200
Total Annual Operating Cost	17,600

9. Maintenance & Support

9.1 Annual Maintenance Plan

NexStack Pte Ltd (the development vendor) will provide **1 year of free maintenance and support** post-launch, including:

- **Software Updates:** Monthly feature updates and security patches
- **System Monitoring:** 24/7 automated monitoring with alerting
- **Database Maintenance:** Weekly optimisation and daily automated backups
- **API Management:** Monitoring and updating third-party API integrations (LLM, OCR, image processing)
- **User Support:** Dedicated support channel for Evergreen staff and technical issues

9.2 Service Level Agreement (SLA)

Priority	Description	Response Time	Resolution Time
P1 — Critical	System down; orders or document processing unavailable	30 minutes	4 hours
P2 — High	Major feature unavailable (e.g., AI extraction failing)	2 hours	8 hours
P3 — Medium	Minor issue; workaround available	4 hours	24 hours
P4 — Low	Enhancement request or cosmetic issue	24 hours	5 business days

9.3 System Uptime Target

- **99.5% monthly uptime** for core services (portals, ordering, document processing)
- Planned maintenance windows: Sunday 02:00–06:00 SGT

10. Expected Business Impact

10.1 For Evergreen Group Pte Ltd

Impact Area	Expected Outcome
Productivity	75%+ reduction in admin effort; 2.6 FTEs redirected to sales and customer service
Cost Savings	Estimated SGD 93,600/year in admin cost savings
Revenue Growth	5x faster e-commerce listings → capture online sales from 500+ product backlog
Customer Experience	Self-service ordering portal; instant quotations; real-time budget visibility
Pricing Accuracy	Elimination of spreadsheet pricing errors; systematic contract management
Scalability	Handle 2–3x order volume without additional headcount

10.2 For Corporate Customers

Impact Area	Expected Outcome
Self-Service	24/7 ordering capability without waiting for sales staff
Budget Control	Real-time budget visibility and automatic enforcement
Faster Quotations	AI-generated quotations delivered in minutes, not hours
Order Accuracy	AI-powered quick order reduces ordering errors
Transparency	Full order history, pricing visibility, and spending reports

10.3 Long-Term Sustainability

Evergreen AI is designed to sustain itself beyond the grant period:

1. **Operational Savings** — The SGD 93,600/year in admin cost savings alone covers the annual operating cost (SGD 17,600) by 5x, making the system self-funding from Year 1.

2. **Revenue Uplift** — Faster e-commerce listings and self-service ordering are expected to grow revenue by 10–15% through increased online presence and improved customer retention.
 3. **Competitive Advantage** — AI-powered operations and a modern B2B portal differentiate Evergreen from competitors still relying on manual processes.
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11. Justification for Government Support

11.1 SME Constraints

Evergreen Group is a 20-person SME with SGD 1.5M annual revenue operating in a low-margin industry:

- **Capital Constraints** — The SGD 98,000 development cost represents 6.5% of annual revenue, a significant investment for a traditional wholesale business. Government co-funding would de-risk the digital transformation.
- **Technology Gap** — As a 45-year-old company, Evergreen has deep industry expertise but limited in-house technology capability. External vendor development is necessary.
- **Competitive Pressure** — Larger distributors and online platforms are capturing market share. Without AI adoption, Evergreen risks being left behind.

11.2 National Strategic Alignment

National Initiative	Evergreen AI Alignment
Smart Nation	Brings AI/LLM technology to a traditional wholesale SME; demonstrates accessible AI adoption
Retail ITM	Leverages AI for operational efficiency and omni-channel commerce (marketplace + B2B portal)
National AI Strategy 2.0	Practical enterprise AI with measurable outcomes across document processing, content generation, and pricing
SME Go Digital	Comprehensive digitalisation of a long-standing SME — from manual to AI-powered operations
Productivity Drive	75%+ productivity improvement with annual savings exceeding SGD 93,000

11.3 Multiplier Effect

- **Industry-wide example** — Demonstrates that AI adoption is feasible and profitable for traditional wholesale/distribution SMEs across Singapore.
- **Customer ecosystem** — 1,000 corporate customers benefit from self-service ordering, budget tools, and faster service.
- **Job quality improvement** — Staff are freed from repetitive data entry to focus on sales, customer relationships, and business development.

11.4 Distinction from Existing Projects

This project is a **completely new, independent initiative** that does not overlap with any existing grant-funded projects. The Evergreen AI platform is being built from scratch with new AI capabilities and a new B2B customer portal that do not exist in Evergreen's current systems.

12. Declaration & Approval

12.1 Declaration

We, Evergreen Group Pte Ltd, hereby declare that:

1. All information provided in this proposal is true, accurate, and complete to the best of our knowledge.
2. The proposed project has not received and is not currently receiving funding from any other government grant for the same scope of work.
3. This project is a new, independent initiative with no overlap with any existing grant-funded projects.
4. We undertake to comply with all terms and conditions of the Enterprise Development Grant.
5. We will maintain proper records and documentation of all project expenditures.
6. We acknowledge that any misrepresentation may result in the revocation of the grant and recovery of disbursed funds.

12.2 Authorised Signatory

Name:	<hr/>
Designation:	<hr/>
NRIC (last 4 digits):	<hr/>
Date:	<hr/>
Signature:	<hr/>

Company Stamp:	<hr/>
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End of Proposal

Evergreen Group Pte Ltd — EDG Proposal — Evergreen AI

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