# **Cost Tracking & Profit Estimation Guide**

## **Overview**

Gist List now includes comprehensive cost tracking and profit estimation features to help you understand your expenses and maximize profitability.

## **Features Implemented**

# 1. 💰 Cost Tracking

### What's Tracked:

- LLM API Usage: Token consumption for AI analysis (input + output tokens)
- S3 Storage: Photo storage costs (per GB/month + data transfer)
- Per-Listing Costs: Individual breakdown for each item
- User-Level Aggregation: Total costs across all listings

#### **Database Fields Added:**

- User.totalTokensUsed , totalApiCost , totalStorageCost , totalStorageBytes
- Listing.tokensUsed , apiCost , storageCost , storageBytes
- Photo.originalSizeBytes , compressedSizeBytes

#### **Cost Dashboard:**

- Access at /costs
- View total costs, avg per listing, AI vs storage breakdown
- See recent listings with individual costs

# 2. Mage Compression

#### **Automatic Compression:**

- All uploaded photos are automatically compressed using Sharp
- Default settings: Max 1920x1920px, 85% quality, JPEG format
- Typical savings: 60-80% file size reduction

### **Benefits:**

- Lower storage costs
- Faster uploads/downloads
- Better user experience

#### Implementation:

- lib/image-compression.ts: Compression utilities
- lib/s3.ts: Updated with uploadFileWithCompression()
- Tracks both original and compressed sizes

# 3. Profit Calculator

### Features:

- Platform-Specific Calculations: Different fee structures for each marketplace
- Comprehensive Breakdown: Platform fees, payment processing, shipping, GistList costs
- ROI & Margin: Return on investment and profit margin percentages
- Best Platform Recommendation: Automatically suggests the most profitable platform

### Platform Fees (Built-in):

- eBay: 12.9% + 2.9% + \$0.30
- Mercari: 12.9% + 2.9% + \$0.30
- Poshmark: 20% (includes processing)
- Facebook Marketplace: FREE
- OfferUp: 12.9% + 2.9% + \$0.30
- Craigslist: FREENextdoor: FREE
- Reverb: 5% + 2.7% + \$0.30
- Vinted: FREE (buyer pays)

#### How to Use:

- 1. Go to any listing detail page
- 2. Scroll to "Profit Calculator" section
- 3. Enter your purchase price
- 4. Click "Calculate"
- 5. View profit breakdown by platform

## 4. **Stripe Integration (Optional)**

### **Subscription Management:**

- Free Tier: Unlimited posts, 4 free premium analyses
- Basic (\$9.99/mo): 20 premium posts/month
- Pro (\$19.99/mo): Unlimited premium posts + API access

#### **Setup Required:**

- 1. Create Stripe account at https://stripe.com
- 2. Get API keys from Dashboard
- 3. Create products & prices
- 4. Add to .env:

```
STRIPE_SECRET_KEY=sk_...
```

- STRIPE PUBLISHABLE KEY=pk ...
- STRIPE WEBHOOK SECRET=whsec ...
- STRIPE BASIC PRICE ID=price ...
- STRIPE\_PRO\_PRICE\_ID=price\_...

#### **API Routes:**

- /api/stripe/checkout Create checkout session
- /api/stripe/portal Customer portal access
- /api/stripe/webhook Handle Stripe events

# 5. Table External API Integrations (Placeholders)

### eBay API ( lib/ebay-api.ts ):

- Market data from completed listings
- Auto-listing capability (placeholder)
- Requires eBay developer account

### Facebook Marketplace ( lib/facebook-api.ts ):

- Auto-listing via Graph API (placeholder)
- Requires Facebook Business account + OAuth

## **API Endpoints**

## **Cost Tracking**

GET /api/user/costs

Returns user's cost summary and recent listings.

### **Profit Calculation**

GET /api/listings/[id]/profit

Calculate profit for all platforms.

POST /api/listings/[id]/profit
Body: [ "purchasePrice": 50.00 ]

Update purchase price and recalculate profit.

## **Cost Calculation Details**

## **LLM API Pricing**

Based on Gemini 2.5 Flash via Abacus.AI:

- Input: \$0.075 per 1M tokens

- Output: \$0.30 per 1M tokens

## S3 Storage Pricing

• Storage: \$0.023 per GB/month

• PUT requests: \$0.005 per 1000

• GET requests: \$0.0004 per 1000

• Data transfer: \$0.09 per GB

### **Token Estimation**

• Text:  $\sim$ 1 token per 4 characters

• Images: 85-258 tokens depending on resolution

## **Profit Calculation Formula**

Net Profit = Selling Price

- Purchase Price
- Platform Fee
- Payment Processing Fee
- Shipping Cost
- GistList Cost

Profit Margin = (Net Profit / Selling Price) × 100%

ROI = (Net Profit / Purchase Price) × 100%

## **UI Components**

### <CostDashboard />

Full-page dashboard showing all cost metrics.

### <ProfitCalculator />

Interactive calculator for profit estimation. Integrated into listing detail pages.

## **Future Enhancements**

- [ ] Real-time eBay market data integration
- [ ] Auto-listing to multiple platforms
- [ ] Cost alerts and budgets
- [ ] Profit trend analytics
- [ ] Bulk profit calculation
- [ ] Export cost reports (CSV/PDF)
- [ ] Tax estimation

## **Notes**

- · All costs are tracked automatically
- Image compression saves ~70% storage costs
- Profit calculator works for all qualified platforms
- Free tier users get full cost tracking
- Stripe integration is optional

# **Support**

For questions about cost tracking:

- 1. Check the Cost Dashboard at /costs
- 2. Review individual listing costs in listing detail
- 3. Contact support@abacus.ai for billing questions