

# DSVI Webapp Monthly Subscription Services Analysis

The following external services will require monthly subscriptions for the webapp to function efficiently:

## Required Monthly Subscription Services

Service	Plan	Monthly Cost	Purpose	Usage in DSVI
Supabase	Pro Plan	\$25/month	Backend Database & Authentication	• PostgreSQL database hosting • User authentication & authorization • Real-time subscriptions • Edge Functions • Row Level Security (RLS) • Storage for files • API auto-generation
Resend	Pro Plan	\$20/month	Transactional Email Service	• Sending transactional emails (50K emails/month) • Password resets • User notifications • System alerts • Email API integration • High deliverability rates
Cloudflare Pages	Workers Paid	\$5/month	Hosting & Edge Functions	• Static site hosting • Serverless functions • Global CDN • DDoS protection • SSL certificates • Edge computing • API endpoints

| **Cloudflare Pages** | Workers Paid | **\$5/month** | Hosting & Edge Functions | • Static site hosting<br>• Serverless functions<br>• Global CDN<br>• DDoS protection<br>• SSL certificates<br>• Edge computing<br>• API endpoints |

## Total Estimated Monthly Cost: \$50/month

## Service Details & Scaling

### Supabase - \$25/month

- **What's Included:**
  - Dedicated PostgreSQL instance
  - 8GB database storage
  - 100GB file storage
  - 250GB bandwidth
  - 2 million Edge Function invocations

- Point-in-time recovery
- Real-time subscriptions
- **Scaling:** Usage-based billing beyond included quotas
- **Alternative:** Self-hosting PostgreSQL (requires server costs + maintenance)

### **Resend - \$20/month**

- **What's Included:**
  - 50,000 emails per month
  - API access
  - Webhooks
  - Analytics
  - 99.99% uptime SLA
- **Scaling:** \$1 per additional 1,000 emails
- **Alternative:** AWS SES (\$0.10 per 1,000 emails, but requires more setup)

### **Cloudflare Pages - \$5/month**

- **What's Included:**
  - Unlimited static hosting
  - 10 million Worker requests
  - Global CDN
  - SSL certificates
  - Analytics
- **Scaling:** \$0.50 per million additional requests
- **Alternative:** Netlify (\$19/month) or Vercel (\$20/month)

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## Cost Optimization Strategies

### **Short-term (MVP/Testing Phase)**

- **Estimated Cost: \$25-30/month**
- Use Supabase Pro (\$25/month) for backend
- Use Cloudflare Pages Free (100K requests/day)
- Use Resend Free (3,000 emails/month)

## **Production Phase**

- **Estimated Cost: \$50/month**
- All paid plans as listed above
- Monitor usage and upgrade as needed

## **High-Traffic Phase**

- **Estimated Cost: \$100-200+/month**
  - Supabase may require compute add-ons
  - Higher email volume costs
  - Additional Cloudflare services (R2 storage, etc.)
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## **Key Considerations**

### **Critical Dependencies**

1. **Supabase** is the backbone - database, auth, and real-time features
2. **Email services** are essential for user communication and notifications
3. **Cloudflare** provides hosting and global performance

### **Email Service Strategy**

- **Resend** handles all email delivery (transactional and notifications)
- Single email provider reduces complexity
- High deliverability and reliability with 99.99% uptime SLA

### **Usage Monitoring**

- All services provide usage dashboards
- Set up billing alerts to avoid surprise costs
- Monitor email bounce rates and deliverability

### **Security & Compliance**

- All services are GDPR compliant
  - SSL/TLS encryption included
  - SOC 2 Type II certified (Supabase, Resend)
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## Alternatives & Comparisons

Current Service	Alternative	Cost Difference	Trade-offs
Supabase	Self-hosted PostgreSQL + Auth0	~\$40-60/month	More complexity, maintenance
Resend	AWS SES	~\$15/month cheaper	More technical setup required
Cloudflare Pages	Netlify	~\$14/month more	Similar features, different ecosystem

**Recommendation:** The current service selection provides excellent value for money with minimal operational overhead.