

1. Email Provider Options

- **Nodemailer (SMTP-based, free)**
 - Works with Gmail, Outlook, or any custom SMTP server.
 - Great for **development** or **small-scale projects**.
- **Third-party email services (better for production)**
 - **SendGrid**
 - **Resend** (modern, works really well with Next.js)
 - **Postmark**
 - **AWS SES**

For production: It's best to create an account with **Resend, SendGrid, or AWS SES** for reliable email delivery.

2. WhatsApp Notifications

- **Twilio WhatsApp API**
- **Meta WhatsApp Cloud API**
- **Growby (Sprouto) WhatsApp API**
 - Business-initiated messages → **₹0.49 per message**
 - User-initiated messages → **₹0.29 per message**

Messaging & Notification Provider Options with Pricing

- **Gupshup**

Cost per template message:

- WhatsApp fee \approx US\$0.0042
- Gupshup platform fee \approx US\$0.001
- Total \approx US\$0.0052/message

If you send 1,000 template messages:

$1,000 \times 0.0052 \approx$ US\$5.20 total

2. WATI (Growth Plan)

- Monthly subscription: ₹2,499 (~US\$30)
- Message costs: Charged separately (WhatsApp's official rates apply).
 - Light usage \rightarrow mostly covered by the base subscription.
 - Heavy usage \rightarrow extra per conversation/message charges get added.

3. SMS Notifications

- **Providers:** Twilio, Nexmo (Vonage), AWS SNS.
- **Pricing Example (Twilio):**
 - Around \$0.005 (~₹0.40) per SMS (Twilio fee only).
 - If it's a **WhatsApp templated message**, Meta also adds a template fee.
 - So, sending a business-initiated WhatsApp message in India could cost about ₹0.50–₹1+ per message.

Messaging & Notification Provider Options with Pricing

For production: AWS SNS

⇒AWS SES (Simple Email Service)

- >A scalable, reliable, and low-cost email service from AWS.
- >Great for transactional emails (like OTPs, password resets, notifications) and marketing emails (like newsletters).
- >Can be integrated directly into a Next.js app or through AWS SDKs.

Pricing (India region example)

- Outbound emails:
 - \$0.10 per 1,000 emails (~₹8 for 1,000 emails).
- Inbound emails (receiving):
 - \$0.10 per 1,000 emails received.
- Attachments:
 - Additional charge of \$0.12 per GB of attachments sent.
- Extra (if sending outside EC2/Lambda):
 - You pay normal AWS data transfer fees.

Free Tier:

- First 62,000 emails per month free (when you send from an Amazon EC2 instance or Lambda).

➤ *Pricing (India)*

- Email (AWS SES): ~₹8 per 1,000 emails (62k/month free via EC2).
 - SMS (Twilio/AWS SNS): ~₹400 per 1,000 SMS.
 - WhatsApp (Gupshup): ~₹430 per 1,000 msgs (no subscription).
 - WhatsApp (WATI): ₹2,499/month base + ₹0.49/msg → ~₹2,989 per 1,000 msgs.
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Best combo for production:

- Email → AWS SES (cheapest).
- WhatsApp → Gupshup (usage-based, no fixed fee).
- SMS fallback → AWS SNS/Twilio.