

# Comprehensive Solo SaaS Development Plan for French E-Invoicing Compliance Software

## Executive Summary

This plan outlines a strategic roadmap for developing a French e-invoicing compliance SaaS targeting SMEs, TPEs, and freelancers ahead of the mandatory 2026-2027 implementation. With a €100/month budget and modern tech stack, this solo venture can capture a share of the €300-800M annual market opportunity driven by regulatory requirements and the critical payment delay problem affecting 82% of French businesses.

## 1. Market Opportunity and Positioning

### Target Market Overview

The French market presents a compelling opportunity with **159,000 SMEs/PMEs** and millions of microenterprises facing mandatory e-invoicing compliance. The recent abandonment of the free PPF platform (October 2024) creates an urgent need for affordable PDP-integrated solutions.

### Competitive Analysis

Competitor	Price/Month	Target	Strengths	Weaknesses
Pennylane	€14-299	SMEs	Full accounting suite	Complex for simple needs
Qonto	€9-249	SMEs	Banking integration	Expensive for just invoicing
Tiime	€19-149	Freelancers	User-friendly	Limited PDP options
Sage	€25-125	Enterprises	Comprehensive	Overkill for TPEs
Factomos	€29-99	All sizes	Factoring option	High pricing

### Our Positioning

- **Ultra-focused:** E-invoicing compliance only (not full accounting)
- **Price leader:** €9/month vs competitors' €14-35/month
- **Speed advantage:** 5-minute setup vs 30+ minutes
- **Compliance-first:** Built specifically for 2026 regulations
- **Micro-enterprise friendly:** Designed for 1-10 person companies

### Competitive Positioning

Position between established players (Pennylane at €14/month) and enterprise solutions by offering:

- **Niche focus:** Simplified compliance for solopreneurs and micro-enterprises
- **Price advantage:** Starting at €9/month vs. competitors' €14-35/month
- **Compliance-first approach:** Lead with regulatory deadline urgency
- **French-native design:** Built specifically for French business culture

## 2. Technical Architecture and Implementation

### Core Tech Stack (Within €100/month)

Frontend: Next.js 14+ App Router

- Hosting: Vercel (€0 hobby tier)
- UI Components: Shadcn/ui + Tailwind CSS
- PDF Generation: react-pdf/renderer
- Forms: React Hook Form + Zod

Backend: Supabase (€25/month)

- PostgreSQL database
- Instant REST & GraphQL APIs
- Row Level Security (RLS)
- Edge Functions for complex logic
- File storage for PDFs (50GB included)
- Built-in authentication
- Real-time subscriptions
- Scheduled jobs via pg\_cron

PDP Integration: €30-40/month

- Partner with certified PDP (e.g., Docaposte, e-Dune, Generix)
- OAuth2 authentication
- REST API integration via Edge Functions

Additional Services:

- Email: Resend (€8/month)
- Monitoring: Sentry (€0 free tier)
- Analytics: Plausible (€9/month)

### PDP Integration Strategy

typescript

*// Key PDP partners to integrate with:*

```
const pdpPartners = {  
  tier1: [  
    {  
      name: "Docaposte",  
      pricing: "€0.15-0.30/invoice",  
      minVolume: 100,  
      apiDocs: "developer.docaposte.io"  
    },  
    {  
      name: "Generix",  
      pricing: "€0.20-0.40/invoice",  
      minVolume: 50,  
      speciality: "EDI expertise"  
    }  
  ],  
  tier2: [  
    {  
      name: "e-Dune",  
      pricing: "€0.10-0.25/invoice",  
      minVolume: 0,  
      speciality: "SME focused"  
    },  
    {  
      name: "Tenor",  
      pricing: "€0.15-0.35/invoice",  
      minVolume: 0,  
      speciality: "Multi-country"  
    }  
  ]  
}
```

*// PDP Selection Logic*

```
const selectPDP = (invoice) => {  
  // Route based on customer preferences, cost, and availability  
  if (customer.preferredPDP) return customer.preferredPDP  
  if (invoice.crossBorder) return 'Tenor'  
  if (volume < 100) return 'e-Dune'  
  return 'Docaposte' // Best rates for high volume  
}
```

## Database Schema

sql

*-- Essential tables for MVP*

```
CREATE TABLE companies (  
  id UUID PRIMARY KEY DEFAULT gen_random_uuid(),  
  siren VARCHAR(9) UNIQUE NOT NULL,  
  name TEXT NOT NULL,  
  vat_number VARCHAR(20),  
  pdp_id VARCHAR(50),  
  subscription_tier VARCHAR(20) DEFAULT 'free',  
  created_at TIMESTAMP DEFAULT NOW()  
);
```

```
CREATE TABLE invoices (  
  id UUID PRIMARY KEY DEFAULT gen_random_uuid(),  
  invoice_number VARCHAR(50) NOT NULL,  
  supplier_id UUID REFERENCES companies(id),  
  customer_id UUID REFERENCES companies(id),  
  total_amount DECIMAL(10,2),  
  vat_amount DECIMAL(10,2),  
  status VARCHAR(20) DEFAULT 'draft',  
  facturx_url TEXT,  
  pdp_submission_id VARCHAR(100),  
  created_at TIMESTAMP DEFAULT NOW()  
);
```

```
CREATE TABLE invoice_archive (  
  id UUID PRIMARY KEY DEFAULT gen_random_uuid(),  
  invoice_id UUID REFERENCES invoices(id),  
  file_hash VARCHAR(64),  
  retention_until DATE -- 10 years from archive date  
);
```

*-- Enable Row Level Security*

```
ALTER TABLE companies ENABLE ROW LEVEL SECURITY;  
ALTER TABLE invoices ENABLE ROW LEVEL SECURITY;
```

*-- RLS Policies*

```
CREATE POLICY "Users can only see their own company" ON companies  
  FOR ALL USING (auth.uid() = user_id);
```

```
CREATE POLICY "Users can only see their invoices" ON invoices  
  FOR ALL USING (  
    supplier_id IN (SELECT id FROM companies WHERE user_id = auth.uid())  
    OR customer_id IN (SELECT id FROM companies WHERE user_id = auth.uid())  
  );
```

typescript

*// Supabase Edge Function for invoice generation*

*// supabase/functions/generate-facturx/index.ts*

```
import { serve } from "https://deno.land/std@0.168.0/http/server.ts"
import { createClient } from 'https://esm.sh/@supabase/supabase-js@2'
import { PDFDocument } from 'https://cdn.skypack.dev/pdf-lib'
import { generateFacturXML } from './factur-x-generator.ts'
```

```
serve(async (req) => {
  const { invoice_data, pdf_base64 } = await req.json()
```

*// Initialize Supabase client*

```
const supabase = createClient(
  Deno.env.get('SUPABASE_URL')!,
  Deno.env.get('SUPABASE_SERVICE_ROLE_KEY')!
)
```

*// Generate Factur-X XML*

```
const xml = generateFacturXML(invoice_data)
```

*// Embed XML in PDF*

```
const pdfDoc = await PDFDocument.load(pdf_base64)
pdfDoc.setMetadata({
  title: `Facture ${invoice_data.invoice_number}`
})
```

*// Attach XML as embedded file*

```
await pdfDoc.attach(xml, 'factur-x.xml', {
  mimeType: 'application/xml',
  description: 'Factur-X Invoice Data'
})
```

```
const facturxPdf = await pdfDoc.save()
```

*// Store in Supabase storage*

```
const { data: file, error } = await supabase.storage
  .from('invoices')
  .upload(`${invoice_data.id}.pdf`, facturxPdf)
```

*// Submit to PDP*

```
const pdpResponse = await fetch(Deno.env.get('PDP_API_URL')!, {
  method: 'POST',
  headers: {
    'Authorization': `Bearer ${Deno.env.get('PDP_API_KEY')}`,
    'Content-Type': 'application/pdf'
  },
  body: facturxPdf
})
```

```
    })

    const pdpData = await pdpResponse.json()

    // Update invoice record
    await supabase
      .from('Invoices')
      .update({
        facturx_url: file.path,
        pdp_submission_id: pdpData.submission_id,
        status: 'submitted'
      })
      .eq('id', invoice_data.id)

    return new Response(
      JSON.stringify({
        success: true,
        facturx_url: file.path,
        pdp_submission_id: pdpData.submission_id
      }),
      { headers: { "Content-Type": "application/json" } }
    )
  })
}
```

## Next.js Frontend Architecture

typescript

```
// app/invoices/create/page.tsx
```

```
'use client'
```

```
import { createClientComponentClient } from '@supabase/auth-helpers-nextjs'
```

```
import { useForm } from 'react-hook-form'
```

```
import { zodResolver } from '@hookform/resolvers/zod'
```

```
import { invoiceSchema } from '@lib/validations/invoice'
```

```
import { generatePDF } from '@lib/pdf/generator'
```

```
export default function CreateInvoice() {
```

```
  const supabase = createClientComponentClient()
```

```
  const form = useForm({  
    resolver: zodResolver(invoiceSchema)  
  })
```

```
  const onSubmit = async (data) => {
```

```
    // 1. Generate PDF client-side
```

```
    const pdfBase64 = await generatePDF(data)
```

```
    // 2. Save invoice to database
```

```
    const { data: invoice } = await supabase  
      .from('invoices')  
      .insert(data)  
      .select()  
      .single()
```

```
    // 3. Call Edge Function to create Factur-X
```

```
    const { data: facturX } = await supabase.functions.invoke('generate-facturx', {  
      body: {  
        invoice_data: invoice,  
        pdf_base64: pdfBase64  
      }  
    })
```

```
    // 4. Real-time status updates
```

```
    const subscription = supabase  
      .channel('invoice-status')  
      .on('postgres_changes', {  
        event: 'UPDATE',  
        schema: 'public',  
        table: 'invoices',  
        filter: `id=eq.${invoice.id}`  
      }, (payload) => {  
        // Update UI with new status  
        console.log('Invoice status:', payload.new.status)  
      })  
      .subscribe()
```

```
}  
  
return (  
  // Invoice form UI with shadcn/ui components  
)  
}
```

### 3. RGPD Compliance Strategy

#### Data Protection Implementation

- 1. **Data Minimization:** Collect only essential business data
- 2. **Encryption:** TLS for transit, AES-256 for storage
- 3. **Retention Policy:** 10-year archival with automated deletion
- 4. **Access Controls:** Role-based permissions, audit logging
- 5. **DPA Templates:** Automated generation for all customers

#### Legal Documentation

- Privacy policy generator for customers
- Data processing agreements (DPA)
- Cookie policy and consent management
- GDPR-compliant terms of service

#### Security Measures

- ISO 27001 certification roadmap (Year 2)
- Regular security audits
- Automated backup with encryption
- Incident response procedures

### 4. Product Development Roadmap

#### MVP Feature Prioritization Matrix



Feature	Impact	Effort	Priority	Sprint
User auth + onboarding	High	Low	P0	1
Basic invoice creation	High	Medium	P0	1-2
PDF generation	High	Low	P0	2
Factur-X conversion	Critical	High	P0	3-4
Single PDP integration	Critical	High	P0	5-6
Customer management	Medium	Low	P1	2
Invoice templates	Medium	Low	P1	3
Email delivery	High	Low	P1	4
Payment tracking	Medium	Medium	P2	7
VAT calculations	Medium	Medium	P2	7
Reminders	High	Medium	P2	8
Analytics dashboard	Low	High	P3	9+

## Sprint Plan (2-week sprints)

### Sprint 1: Foundation

typescript

```
// Core authentication setup
- [] Supabase project setup
- [] Next.js app with auth pages
- [] Company registration flow
- [] SIREN validation against API
- [] Basic dashboard layout

// Key deliverable: Users can sign up with company info
```

### Sprint 2: Invoice Builder

typescript

```
// Invoice creation flow
- [] Invoice form with validation
- [] Customer selection/creation
- [] Line items with VAT calculation
- [] PDF preview (react-pdf)
- [] Save draft functionality

// Key deliverable: Create and preview invoices
```

### Sprint 3: Factur-X Core

typescript

*// Factur-X implementation*

- [] XML schema implementation
- [] PDF/A-3 conversion
- [] XML embedding logic
- [] Validation against XSD
- [] Error handling

*// Key deliverable: Generate compliant Factur-X files*

## Sprint 4: PDP Integration

typescript

*// PDP connectivity*

- [] PDP partner agreement
- [] OAuth implementation
- [] API client development
- [] Submission workflow
- [] Status webhook handling

*// Key deliverable: Submit invoices to PDP*

## Phase 1: MVP (Weeks 1-12)

### Core Features:

- User authentication via Supabase
- Basic invoice creation and PDF generation
- Factur-X format compliance
- Customer/supplier management
- Single PDP integration
- Email invoice delivery

## Phase 2: Market Entry (Weeks 13-20)

### Enhanced Features:

- Automated payment reminders
- VAT calculations and reporting
- Invoice templates library
- Basic analytics dashboard
- Freemium tier implementation
- RGPD compliance tools

### **Phase 3: Growth Features (Months 6-9)**

#### **Advanced Capabilities:**

- Multi-PDP support
- Recurring invoices
- Bank reconciliation
- API access
- Mobile app (PWA)
- Advanced reporting

### **Phase 4: Scale (Months 10-12)**

#### **Enterprise Features:**

- Multi-user support
- White-label options
- Accounting software integrations
- AI-powered data extraction
- Workflow automation

## **5. Pricing Strategy**

### **Tiered Pricing Model**

#### **Free Tier** (Customer Acquisition)

- 5 invoices/month
- 3 clients maximum
- Basic templates
- "Powered by" branding

#### **Starter - €9/month**

- 50 invoices/month
- Unlimited clients
- Custom branding
- Email support

#### **Professional - €19/month**

- Unlimited invoices
- Recurring invoices
- Payment tracking
- Priority support
- API access (limited)

### **Business - €39/month**

- All features
- Advanced analytics
- Multi-currency
- Phone support
- Full API access
- Custom integrations

## **6. Customer Acquisition Strategy**

### **Legal B2B Lead Generation Plan**

#### **Phase 1: Foundation (Month 1)**

##### **1. Landing Page Creation**

- Compliance countdown timer
- Lead magnet: "Guide to French E-invoicing Compliance"
- Email capture with clear opt-in

##### **2. Content Marketing**

- SEO-optimized blog posts about compliance deadlines
- Case studies on payment delay solutions
- French-language content only

##### **3. Legal Data Sources**

- Scrape societe.com for company data
- Use annuaire-entreprises.data.gouv.fr
- Build prospect database legally

#### **Phase 2: Outreach (Months 2-3)**

## 1. RGPD-Compliant Cold Email Strategy

javascript

```
// Scraping script for legal sources
const scrapeCompanies = async () => {
  // 1. Use public API from data.gouv.fr
  const response = await fetch(
    'https://entreprise.data.gouv.fr/api/sirene/v3/etablissements'
  )

  // 2. Filter for target companies
  const companies = data.etablissements.filter(company => {
    return company.tranche_effectifs === '00' // Solo entrepreneurs
    || company.tranche_effectifs === '01' // 1-5 employees
  })

  // 3. Enrich with LinkedIn Sales Navigator (manual)
  // 4. Store with consent tracking
}
```

### • Email Template Example:

Objet: Facturation électronique obligatoire en 2026 - Êtes-vous prêt?

Bonjour [Prénom],

En septembre 2026, votre entreprise [Nom] devra obligatoirement recevoir ses factures au format électronique.

82% des entreprises françaises subissent des retards de paiement.  
Notre solution résout ces deux problèmes.

- Essai gratuit de 30 jours
- Mise en conformité en 15 minutes
- Réduction des retards de paiement de 40%

[CTA: Découvrir la solution]

PS: Conformément au RGPD, vous pouvez vous désinscrire ici.

## 2. LinkedIn Strategy

- Manual connection requests (20/day max)
- Target: DAF, comptables, dirigeants TPE
- Share compliance insights
- Join groups: "Entrepreneurs France", "TPE PME France"

## 3. Partnership Development

- Contact accounting firms (experts-comptables)

- Offer 20% lifetime commission
- Create partner portal with co-branded materials

### **Phase 3: Growth Hacking (Months 4-6)**

## 1. Viral Features

- "Compliance Score" tool (free, shareable)
- Invoice template generator (email-gated)
- ROI calculator for payment delays

## 2. SEO Domination

- Target keywords:
  - "facturation électronique obligatoire 2026"
  - "factur-x gratuit"
  - "PDP facturation France"
- Create comparison pages vs competitors
- Local SEO: "[Ville] expert facturation électronique"

## 3. Referral Program Implementation

typescript

```
// In-app referral tracking
const referralProgram = {
  reward: {
    referrer: 2, // months free
    referee: 2 // months free
  },
  tracking: {
    unique_link: true,
    email_sharing: true,
    social_sharing: true
  },
  gamification: {
    leaderboard: true,
    badges: ['First Referral', '5 Referrals', 'Top Referrer'],
    milestone_bonuses: true
  }
}
```

## 4. Community Building

- Create Slack community for users
- Weekly webinars on compliance
- User-generated content contests

## 5. Strategic Integrations

- Build free Zapier integration
- Create WordPress plugin for invoicing
- Partner with French accounting software

Acquisition Channels Breakdown

1. Organic (60% of acquisition)

- SEO: 30%
- Referrals: 20%
- Partnerships: 10%

2. Direct Outreach (30%)

- Cold email: 20%
- LinkedIn: 10%

3. Content Marketing (10%)

- Blog: 5%
- Free tools: 5%

Expected Metrics

- Month 1: 100 signups, 5 paying customers
- Month 3: 500 signups, 25 paying customers
- Month 6: 2,000 signups, 80 paying customers
- Month 12: 10,000 signups, 400 paying customers

7. Budget Management

Monthly Budget Allocation (€100)

Infrastructure (€25)

└─ Supabase Pro: €25

PDP Services (€35)

└─ Certified PDP access: €35

Marketing & Tools (€40)

└─ Domain & SSL: €2

└─ Email service (Resend): €8

└─ Analytics (Plausible): €9

└─ SEO tools: €5

└─ Content/Ads: €10

└─ Reserve/Buffer: €6

Revenue Milestones



- Month 3: €225 MRR (25 customers × €9)
- Month 6: €720 MRR (80 customers × €9 average)
- Month 12: €4,800 MRR (400 customers × €12 average)
- Break-even: Month 2 (12 paying customers)

## 8. Risk Management

### Regulatory Risks

- **Mitigation:** Partner with certified PDP early
- **Contingency:** Multiple PDP relationships
- **Monitoring:** Regular compliance audits

### Technical Risks

- **Mitigation:** Use proven open-source libraries
- **Contingency:** Consultant budget for complex issues
- **Monitoring:** Automated testing and monitoring

### Market Risks

- **Mitigation:** Focus on underserved micro-enterprises
- **Contingency:** Pivot to specific niches
- **Monitoring:** Weekly cohort analysis

### Financial Risks

- **Mitigation:** Conservative growth projections
- **Contingency:** Personal savings buffer
- **Monitoring:** Daily financial dashboards

## 9. Success Metrics and KPIs

### Primary Metrics

- **MRR Growth:** Target 25% month-over-month
- **Churn Rate:** Maintain below 5% monthly
- **CAC Payback:** Under 3 months
- **NPS Score:** Above 50

### Secondary Metrics

- **Feature Adoption:** Track usage patterns
- **Support Tickets:** Under 10% of active users
- **Compliance Rate:** 100% successful PDP submissions
- **Payment Delays:** Measure customer improvement

## 10. 12-Month Action Plan

### Months 1-3: Foundation

- Complete MVP development
- Secure PDP partnership
- Launch beta with 20 users
- Create compliance content library

### Months 4-6: Market Entry

- Public launch
- Implement freemium model
- Scale to 100 paying customers
- Establish accounting firm partnerships

### Months 7-9: Growth

- Add advanced features
- Launch referral program
- Expand PDP integrations
- Target 300 paying customers

### Months 10-12: Scale

- Introduce API marketplace
- White-label offerings
- Hire first support person
- Target 500+ customers

## 11. Solo Developer Productivity Hacks

### Development Automation

```
bash
```

```
# Setup script for new features  
#!/bin/bash  
# create-feature.sh  
npx scaffdog generate feature $1  
git checkout -b feature/$1  
code .
```

## AI-Powered Development

### 1. Code Generation

- Use Cursor/GitHub Copilot for boilerplate
- Claude for complex business logic
- v0.dev for UI components

### 2. Documentation

- Auto-generate API docs from TypeScript
- Use AI for user documentation
- Record Loom videos for complex features

## Customer Support Automation

```
typescript
```

```
// Implement AI chatbot for common questions  
const supportBot = {  
  triggers: [  
    {  
      keywords: ['factur-x', 'format'],  
      response: 'Factur-X guide link...'  
    },  
    {  
      keywords: ['pdp', 'error'],  
      action: 'createTicket'  
    }  
  ],  
  escalation: {  
    afterMinutes: 5,  
    toEmail: true  
  }  
}
```

## Growth Automation Tools

## 1. Lead Generation

- Apollo.io for enrichment (€39/month when profitable)
- Hunter.io for email finding (free tier)
- PhantomBuster for LinkedIn (€56/month later)

## 2. Email Automation

- Loops.so for lifecycle emails
- Cal.com for demo scheduling
- Typeform for onboarding surveys

## Monitoring & Analytics

typescript

```
// Single dashboard for everything  
const monitoringStack = {  
  errors: 'Sentry',  
  uptime: 'Better Uptime (free)',  
  analytics: 'Plausible',  
  revenue: 'Supabase dashboard',  
  support: 'Crisp chat'  
}
```

## Conclusion

This comprehensive plan positions the SaaS for success in the French e-invoicing market by:

1. **Leveraging regulatory urgency** as primary growth driver
2. **Maintaining strict RGPD compliance** for market credibility
3. **Using proven technical solutions** to minimize development risk
4. **Implementing legal growth strategies** for sustainable acquisition
5. **Focusing on underserved micro-enterprises** to avoid direct competition

The combination of mandatory compliance deadlines, significant market pain points (payment delays), and a well-executed product strategy creates a compelling opportunity for a solo founder to build a successful SaaS business within budget constraints.