Objective

Stand up a **friction-light, compliant** merchant onboarding (KYB + embedded KYC) flow for VybeLocal using Tilled's hosted onboarding + prefill/API, optimized for **sole proprietors and small LLCs** (promoters, studios, venues) with minimal drop-off.

TL;DR (What we're building)

1. **Business-type aware form** (Sole Prop / LLC / Corp) with dynamic required fields.
2. **Prefill** Tilled's hosted application via API + query params; send only what we need.
3. **Five-minute path** for sole props (yoga teachers, DJs, small promoters) with SSN-as-TIN.
4. **Event-risk knobs**: payout delay (24–48h post-event), optional split-settlement of our platform fee.
5. **Security by default**: minimize PII storage; redact logs; idempotent submissions; short retention window for abandoned apps.

Business Types & Required Data

Use the matrix below to drive which inputs render and which are optional. Treat anything marked **Req** as required at the **VybeLocal UI** level (we won't let users advance without it). "UW-Req" means underwriting may ask later; we don't block on it day-one.

1) Sole Proprietor / Individual

- **Legal business name**: *Req* → person's legal name (e.g., "Sarah Lopez").
- **DBA / Trade name**: *Optional* (e.g., "Sarah's Yoga").
- **TIN**: *Req* → **SSN** (or EIN if they have one).
- **Business start date**: *Req if the form shows an "incorporation date" field* → use the **start date** instead.
- **Business address** (no PO boxes): *Req* → street, city, state, ZIP. *Suite/Apt optional.*
- **Website or social URL**: *UW-Req* (strongly recommended for risk/context).
- **Support phone/email**: *Req* (for receipts & dispute notices).
- **Bank account** (ACH credit-enabled): *Req* → account + routing in the legal name or DBA.
- **Control person**: *Req* → the individual themself (name, DOB, SSN, home address).
- **Docs**: *UW-Req* → government ID; local business license **if available** (not required everywhere).

2) LLC / Corporation

- **Legal business name** (IRS-matching): *Req*.
- **DBA / Trade name**: *Optional*.
- **EIN**: *Req* (SSN not accepted here for entity TIN).
- **Date of incorporation** (state-filed): *Req*.
- **Business address**: *Req* → street, city, state, ZIP. *Suite optional.*
- **Website**: *UW-Req*.

- **Support phone/email**: *Req.*
- **Bank account**: *Req* → business or operating account in legal/DBA name.
- **Control person** (officer): *Req.*
- **Beneficial owners ≥25%**: *Req if any exist* → KYC data per owner.
- **Docs**: *UW-Req* → Articles/Operating Agreement, EIN letter; voided check or bank letter.

3) High-risk / Multi-party Promoter (edge)

- Same as LLC/Corp plus **event contract** (venue/promoter), **refund policy**, typical **settlement timing**, and **reserve** settings. Treat as *UW-Req* unless flagged.

Field Dictionary (for UI + mapping)

UI Label	Internal Key	Type	Visibility	Required By	Notes
Business type	`business.type`	enum(SP, LLC, CORP)	always	UI	Drives all conditional logic.
Legal business name	`business.legal_name`	string	always	SP/LLC/CORP	SP = person's legal name.
Doing business as (DBA)	`business.dba`	string	SP/LLC/CORP	Optional	Show only if provided.
Tax ID / EIN / SSN	`business.tax_id`	string	always	SP/LLC/CORP	SP may use **SSN**; display as "SSN (or EIN)". Encrypt at rest; never log full.
Date of incorporation / start	`business.start_or_incorp_date`	date	SP/LLC/CORP	LLC/CORP Req; SP Req **only if field shown**	Label as "Business start date (for sole proprietors)".
Street address	`business.address.line1`	string	always	SP/LLC/CORP	No PO boxes.
Apt/Suite	`business.address.line2`	string	always	Optional	
City	`business.address.city`	string	always	SP/LLC/CORP	

UI Label	Internal Key	Type	Visibility	Required By	Notes
State	`business.address.state`	string	always	SP/LLC/CORP	
ZIP	`business.address.postal_code`	string	always	SP/LLC/CORP	
Website / Social URL	`business.website`	url	always	UW-Req	Accept Instagram/ Linktree if no site.
Support email	`business.support.email`	email	always	SP/LLC/CORP	Used on receipts.
Support phone	`business.support.phone`	phone	always	SP/LLC/CORP	SMS-capable preferred.
Avg ticket	`underwriting.avg_ticket`	number	SP/LLC/CORP	UW-Req	e.g., 20–75.
Max ticket	`underwriting.max_ticket`	number	SP/LLC/CORP	UW-Req	Hard cap in early months.
Monthly volume	`underwriting.monthly_volume`	number	SP/LLC/CORP	UW-Req	Start conservative.
Refund policy URL/text	`underwriting.refund_policy`	text	ticketing only	UW-Req	
Event timing payout delay	`settlement.delay_days`	number	ticketing only	UI Req	0–2 days post-event for start.
Split platform fee	`settlement.split_fee`	boolean	ticketing only	UI Req	True to receive fee daily.
Bank routing	`bank.routing`	string	always	SP/LLC/CORP	Validate checksum.
Bank account number	`bank.account`	string	always	SP/LLC/CORP	Tokenize at capture.
Account holder name	`bank.holder`	string	always	SP/LLC/CORP	Must match legal/DBA; warn on mismatch.

UI Label	Internal Key	Type	Visibility	Required By	Notes
Control person (PII)	`control.*`	object	SP/LLC/CORP	Req	name, title, DOB, SSN, home address.
Beneficial owners	`ubo[]`	array<object>	LLC/CORP	Req if any ≥25%	KYC per owner.

UX Flow (happy path)

1. **Chooser:** Business Type + "What you'll need" checklist (approx. 5 minutes for Sole Prop).
2. **Business profile:** legal name, DBA (optional), TIN, start/inc date (type-aware), address, website/social, support contacts.
3. **Banking:** account holder name, routing, account. Optionally offer Plaid for instant verification.
4. **People:** control person (always). For LLC/Corp, add UBOs (≥25%).
5. **Ticketing specifics:** refund policy, average/max ticket, monthly volume; **payout delay days** and **split fee** toggles.
6. **Review & attest:** e-signature that information is accurate; permissions for ACH debits/credits (fees/chargebacks).
7. **Submit to Tilled:** Prefill payload → Tilled hosted step (if any) → return URL.
8. **Post-submit state:**
9. **Approved instantly:** show "Bank-grade payments enabled" + next steps.
10. **Action required:** show **exact missing items** and a secure upload widget (ID, license, voided check).

API Integration (pseudocode)

Names are illustrative—replace with Tilled's actual endpoint/field names when wiring. Always include an **Idempotency-Key** header.

```
POST /tilled/onboarding/applications
Headers:
  Authorization: Bearer <server_token>
  Idempotency-Key: <uuid>
Body (JSON):
{
  "business": {
    "type": "sole_prop|llc|corp",
    "legal_name": "Sarah Lopez",
    "dba": "Sarah's Yoga",
```

```
    "tax_id": "***-**-1234",              // SSN for SP, EIN for entity (send via
secure field)
    "start_or_incorp_date": "2022-06-01",
    "address": {"line1":"123 Mesa St","city":"El
Paso","state":"TX","postal_code":"79901"},
    "website": "https://instagram.com/sarahsyoga",
    "support": {"email":"hello@sarahsyoga.com","phone":"915-555-0100"}
  },
  "bank": {
    "holder": "Sarah Lopez",
    "routing": "111000025",
    "account": "*****6789"                // tokenized before hitting our servers
when possible
  },
  "control_person": {
    "first_name":"Sarah","last_name":"Lopez","dob":"1992-03-12",
    "ssn": "***-**-1234",                 // capture via hosted field if available
    "address": {"line1":"…","city":"…","state":"TX","postal_code":"…"}
  },
  "ubos": [],                             // add ≥25% owners for LLC/Corp
  "underwriting": {
    "avg_ticket": 25,
    "max_ticket": 75,
    "monthly_volume": 8000,
    "refund_policy": "24h cutoff"
  },
  "settlement": {"delay_days": 1, "split_fee": true},
  "pricing_template_id": "ticketing_v1",
  "return_url": "https://vybelocal.com/onboarding/return"
}
```

Webhooks to subscribe & handle

- `application.status.updated` → states: submitted, approved, action_required, declined.
- `document.requested` / `document.received`.
- `payout.created|failed|reversed`.
- `dispute.opened|won|lost`.
- `reserve.created|released`.

Retry on 5xx with exponential backoff; all endpoints idempotent.

Validation Rules (frontend)

- **TIN/SSN**: Luhn/format check; mask on entry; paste-blocked into plain logs.
- **Routing**: ABA checksum.
- **Address**: USPS/Google suggest; deny PO Boxes for business address.

- **Name matching**: warn if bank account holder ≠ legal/DBA.
- **Tickets/volume**: enforce safe caps for month 0 (e.g., max_ticket ≤ $100; monthly_volume ≤ $15k) to reduce early risk.

Security & Compliance

- **Data minimization**: Do not persist full SSN or bank account where avoidable. Store **token/last4**. If Tilled provides hosted fields, prefer them.
- **At rest**: Encrypt PII columns (KMS-backed). Separate secrets from data; rotate keys.
- **In transit**: TLS 1.2+; HSTS; no PII via query strings; CSRF on forms.
- **Logging**: Structured logs with **redaction** (SSN/account/routing masked). No PII in client-side error reporting.
- **Access control**: RLS on org/merchant tables; least-privileged service roles; short-lived signed URLs for doc upload.
- **Retention**: purge abandoned applications and raw uploads after **30 days**; keep minimal audit of state changes (who/when) without PII values.

Microcopy (drop-in)

- **Legal business name**
  Sole proprietors: use your personal legal name. You can add a trade name (DBA) below.
- **Tax ID (EIN or SSN)**
  Sole proprietors may use an SSN. We encrypt this and never store the full number.
- **Business start date**
  If you're not incorporated, enter the date you started operating.
- **Business address**
  Home address is okay. P.O. boxes aren't accepted for banking.
- **Bank account**
  Deposits arrive here. The name should match your legal or DBA name.

Acceptance Criteria

- ≤ **5 minutes** median completion time for Sole Prop.
- ≥ **90%** of Sole Prop apps pass instant underwriting; ≤ **10%** require docs.
- < **2%** abandonment after "Banking" step.
- End-to-end errors < **0.5%** with full idempotency and webhook retries.

Open Questions for Matt (to finalize Schedule A & UX)

1. Confirm **sole prop SSN-as-TIN** accepted via hosted field; any exceptions?
2. Preferred value for **"Date of incorporation"** when SP: business start date okay?

3. Any constraints on **personal** bank accounts for sole props?
4. Allowed ranges for **avg/max ticket** and **initial monthly volume** for ticketing.
5. Standard **reserve** patterns for new ticketing merchants; what triggers increases?
6. Final **MCC** and any restricted sub-verticals (clubs, festivals, nightlife).
7. Availability + params for **split settlement** and **payout delay**.

Implementation Notes (Cursor tasks)

- Scaffold `onboarding` route with **Zod** schemas per business type.
- Abstract a `TilledClient` with `createApplication()`, `getStatus()`, `webhookHandler()`.
- Use **server actions** or API routes to keep secrets off the client.
- Wrap submission with `Idempotency-Key` and store mapping in `onboarding_sessions` table.
- Add `secureUpload` component for doc requests (short-lived signed URLs).
- Feature flag **card-present** when ready; unify MID for CP/CNP if allowed.