TSI Coop

TSI Tech Solutions Cooperative Foundation

A Section 8 Company

Boosting digital adoption of MSME ecosystem; Creating high quality pathways for tech professionals

FOSS for boosting digital adoption in MSMEs

Key Discussion Points:

- **Premise:** Digital adoption gap in MSMEs - An illustration
- **The Problem:** Why MSMEs are hesitant to adopt digital tools, focusing on the barriers of cost, mistrust, and vendor lock-in.
- **The Solution:** How FOSS directly addresses these challenges by offering cost-effective, flexible, and transparent alternatives.
- **TSI Coop R&D:** A brief introduction to our Enabler R&D initiatives, including our open-source projects like the TSI DPDP Consent Management System and TSI Digital ID Vault.

Digital Adoption Gap in MSMEs - An illustration

Indian MSMES: Early Adoption

German MSMES: Advanced Digitalization

35%

80%

Digital Adoption Gap in MSMEs

Feature	India: **Foundational Digitization**	Germany: **Advanced Digital Transformation**
Primary Goal	Efficiency & Market Access	Optimization & Innovation
Key Tech	ERP, E-commerce, Digital Payments	IIoT, Robotics, Digital Twins
Main Challenge	Capital & Skills Gap	Cybersecurity & Talent Shortage
Maturity	Early Stage	Highly Advanced (Industry 4.0)

The MSME Digital Dilemma

Aspiration: Every MSME owner wants to grow and compete, and they know digital is the key. They aspire to be a "smart" business. .

Reality: Despite this desire, adoption rates remain low. The journey is often perceived as too expensive, too risky, and too complex.

The Three Barriers:

- **The Cost Trap:** Digital tools are seen as expensive, with unclear and slow returns.
- **The Trust Deficit:** Businesses fear vendor lock-in, data misuse, and unreliable support.
- **The Complexity Barrier:** The digital landscape is overwhelming, and they don't know where to start.

The ingredients for success

- **Sound Tech Strategy:** Every MSME needs a trustworthy guide to navigate a complex and often intimidating digital landscape. The advisor should help in putting together a sound IT strategy.
- **Trustworthy & Knowledgable Local Partners:** Local service providers who offer ready-to-deploy solutions and niche skills are essential for on-the-ground support and long-term success.
- **Lean Inhouse Team:** A small, focused team with experience in applications, data infrastructure, and security is crucial for successful implementation and maintenance.
- **FOSS & Customization:** Open-source software provides a flexible and affordable foundation that can be customized to fit unique business needs without vendor lock-in.

FOSS Advantage

- **Cost-Effective:** FOSS eliminates licensing fees, making advanced tools accessible even for businesses with a tight budget.
- **Flexible & Transparent:** The source code is open, which means no vendor lock-in. Businesses can customize solutions and audit the code for security.
- **Community-Driven:** FOSS is built and supported by a global community of developers, ensuring continuous improvement and robust alternatives to proprietary software.

"**Frappe / ERPNext:** A powerful, open-source ERP that helps MSMEs manage everything from sales to accounting, offering an alternative to expensive legacy systems."

TSI Coop: Enabler R&D

We don't build final products. We build the foundational tools, systems, and knowledge that enable the ecosystem to create solutions.

Focus Areas:

<u>For Associations & Enablers</u>**:** An open source solution, TSI Digital Hub, that <u>[A]</u> Aggregate solutions, services & talent <u>[B]</u>. Engage via Enquiries, RFPs, Job Postings etc <u>[C]</u> Facilitate Digital Maturity & Capability Assessments <u>[D]</u> Offer community support

<u>For Small & Medium Enterprises</u>**:** Open-source solutions like the TSI DPDP Consent Management System and TSI Digital ID Vault to address major pain points and compliance needs.

<u>For Nano & Micro Enterprises</u>**:** We will create simple utility apps that seamlessly power their day-to-day workflows, making their first digital steps easy and effective.

TSI Digital Hub

A ready-to-deploy, open-source digital hub for industry associations to drive digital transformation

Boosting digital adoption via ecosystem enablers

Aggregate solutions, services & talent

Engage via Enquiries, RFPs & Job Postings

Facilitate Digital Maturity & Capability Assessments

Offer community support

TSI Digital ID Vault

Secure Vault for Personal Identifiers such as Aadhaar ID, Voter ID and Abha ID

A robust, secure and compliant ID vault

Free and Open
Source Software
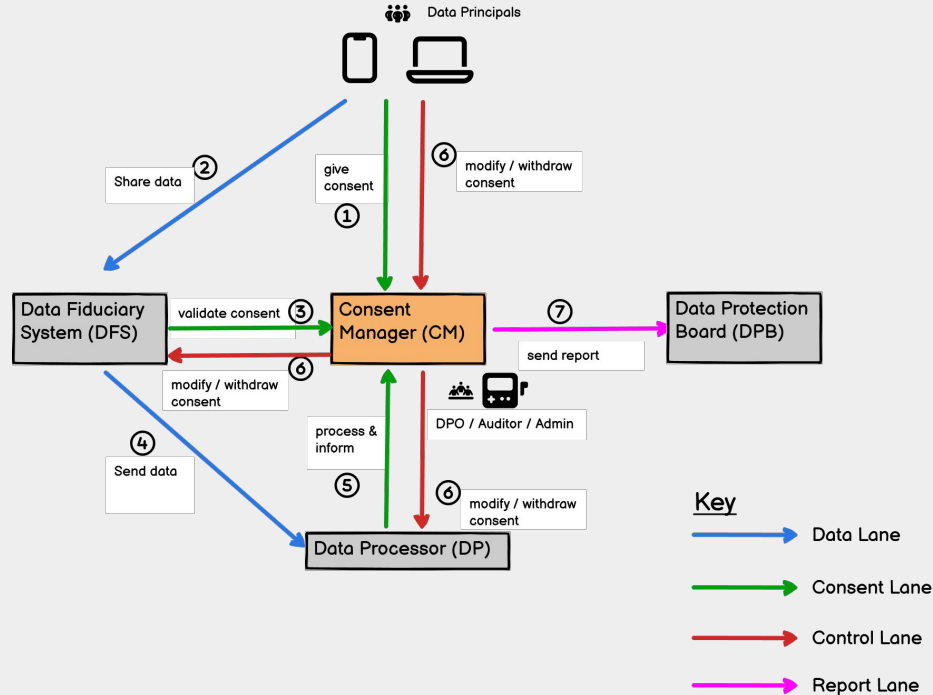(FOSS) library

API first

Customizable to
your needs

TSI DPDP Consent Management System

Our solution is developed as a simpler open source reference implementation under MIT License that can be deployed out-of-the-box by a smaller Consent Manager or Consent Aggregator serving the Indian MSME ecosystem.

We're looking for help with our MSME needs mapping, Digital Maturity Assessment & Technical support (bug fixes and feature development). Your contributions would make a big difference!

Contact Us

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MSME FOSS Stack from MSME Capital of India